

An investigation of knowledge
part four of eight

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Knowledge is a difficult thing.

Newton writes: as in mathematics so in natural philosophy the investigation of difficult things by the method of analysis ought always to precede the method of synthesis.

The investigation of knowledge by the method of analysis ought always to precede the method of synthesis.

Newton continues: in analysis we proceed from effects to their causes, and from particular causes to more general, until the argument ends in the most general; synthesis consists in assuming the causes discovered and established as principles, and explaining the phenomena from them, and proving the explanations.

Parts one, two, and three of the investigation have been the attempt to proceed from effects to their causes, and from particular causes to more general, until the argument ends in the most general.

Parts four through eight are the attempt to assume the causes discovered and established as principles, and explain the phenomena from them, and prove the explanations.

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And the analytic part of the argument can be reviewed, and its synthetic part introduced, in this way.

The 3 oldest calculations of area are from the century around *c.* 3080^{BC}. This is the first mathematician, and *ipso facto* the beginning of mathematics.

The first prince is Narmer, prince *c.* 3000^{BC}. This is the beginning of the state, and *ipso facto* of politics.

The Sumerian prince list was compiled under Ib-bi-Sin, prince *c.* 2037-13^{BC}. The Sumerian prince list is the first historian, and *ipso facto* the beginning of history.

The Venus tablet of Ammisaduqa is from the reign of Ammisaduqa, prince *c.* 1646-25^{BC}. The Venus tablet of Ammisaduqa is the first physicist,

and *ipso facto* the beginning of physics.

The date of Thales is *c.* 585^{BC}. And Thales is the first philosopher, and *ipso facto* the beginning of philosophy.

Tabulating,	
mathematics begins	<i>c.</i> 3080 ^{BC} ,
the state begins	<i>c.</i> 3000 ^{BC} ,
history begins	<i>c.</i> 2037 ^{BC} ,
physics begins	<i>c.</i> 1646 ^{BC} ,
philosophy begins	<i>c.</i> 585 ^{BC} .

All five facts have been presented in some detail above, in the analytic part of the argument, and will be in more detail below, in its synthetic part.

The fact that Thales is the first philosopher Aristotle established, two and a half centuries after the fact. The other four facts, that the 3 calculations of area are the first mathematician, Narmer is the first prince, the Sumerian prince list is the first historian, and the Venus tablet of Ammisaduqa is the first physicist, have come to light in the last one and a half centuries, with the recovery of the Mesopotamian and the Egyptian record, three and a half to five millennia after the facts. The integrity of all five facts depends on the integrity of the record, their certainty depends on the certainty of chronology. And the integrity and the certainty of these five facts, in particular, and the integrity of the record and the certainty of chronology, in general, is shown early in this part four of the investigation. It is shown that the record has lost nothing important, not 1 thing. And chronology is fixed explicitly, and its certainty in all cases shown.

The importance of the beginning cannot be overstated. What mathematics is, what the state is, what history is, what physics is, what philosophy is, depends unconditionally on where, when, how, and why mathematics begins, the state begins, history begins, physics begins, philosophy begins, and conversely, where, when, how, and why mathematics begins, the state begins, history begins, physics begins, philosophy begins, depends unconditionally on what mathematics is, what the state is, what history is, what physics is,

what philosophy is.

And mathematics – the state – history – physics – philosophy – it is all one development.

It is all one development spatially and temporally.

Mathematics begins, with the 3 calculations of area, in the valley of the two rivers. The state begins, with Narmer, further west, in the valley of the Nile. History then, with the Sumerian prince list, begins east again, in the valley of the two rivers. Physics then, with the Venus tablet of Ammisaduqa, begins also in the valley of the two rivers. Philosophy then, with Thales, begins further northwest, in Asia Minor.

And not only are the two valleys, of the two rivers and of the Nile, close to one another, and Asia Minor borders on the valley of the two rivers, and the entire domain of the two valleys and Asia Minor is unified by the eastern Mediterranean littoral.

The state has developed by unifying this domain.

The first prince is Narmer, prince *c.* 3000^{BC}, in the valley of the Nile. Three-odd centuries later, the first prince in the valley of the two rivers is Enmebaragesi, prince *c.* 2680^{BC}. And for eleven and a half centuries, counting the succession of princes in the valley of the Nile, for eight-odd centuries, counting the succession of princes in the valley of the two rivers, the development of the state in the valley of the Nile and the development of the state in the valley of the two rivers are independent of one another. Then the princes of the valley of the Nile venture into the other valley. Senwosret III, prince *c.* 1876-45^{BC}, first campaigns in Asia beyond Sinai. In the following twelve centuries the two developments converge. Then the princes of the valley of the two rivers conquer the other valley. Esarhaddon, prince 680-68^{BC}, conquers the valley of the Nile. The two developments become one joint development, and remain, in the twenty-seven centuries since, as the state continues to expand, and until it has brought the entire surface of the earth under itself, one joint development.

And not only has the state developed by unifying the two valleys, and expanding, and until it has brought the entire surface of the earth under itself.

The development of mathematics, history, physics, and philosophy has occurred in its entirety within the domain which the state has brought under itself. It has occurred nowhere but under the state. For two millennia nowhere but in the two valleys, of the two rivers and of the Nile, and in the following three millennia still nowhere but under the expanding state.

And it is a very small domain.

For two millennia the development is confined to the two valleys. The distance from the mouth of the Nile in the Mediterranean to the mouth of the two rivers in the Persian Gulf is 1 600 km along the great circle. And it is still confined to the surface of the earth. The circumference of the earth is 40 000 km along the equator. The domain beyond the solar system has not been explored sufficiently, but the solar system has been explored sufficiently to warrant the judgment that the development of mathematics, the state, history, physics, and philosophy has occurred nowhere in the solar system but on the earth. Counting the aphelion of Eris its radius, the circumference of the solar system is 200 000 000 000 km.

Life in the solar system has evolved for some 40 000 000 centuries. Man, in particular, is some 26 000 centuries old. The development of mathematics, the state, history, physics, and philosophy has occurred in the last 51 of those centuries.

And it is all one development in kind.

Counting back to the Sumerian prince list, history has developed for forty and a half centuries now. And the development of history has been inseparable from the development of the state. Its beginning is grounded explicitly in the development of the state, it is a list of princes and their states. Its subsequent advances are grounded explicitly in the development of the state, the Abydos prince list, the Assyrian prince list, Herodotus, Thucydides, Manetho, Polybius, Livy, Eusebius, Otto of Freising, ibn Khaldun, Bruni, Guicciardini, Bacon, Spinoza, Voltaire, Hume, Gibbon are one and all explicitly researches of the state. And if the advances of history have not been too many, and history has always been prone to devote itself: to the utterly useless, or in any case to the least important, this devotion of history has also been grounded, even if in this case unawares, in the development of the state.

Counting back to the Venus tablet of Ammisaduqa, physics has developed for thirty-six and a half centuries now. And the development of physics has been inseparable from the development of mathematics. Its beginning, the discovery of a planet, is part of the first great flourishing of mathematics, and it is the solution of a mathematical problem not less than it is of a physical. Its subsequent advances are the solutions of mathematical problems not less than they are of physical, Thales, Pythagoras, Anaxagoras, Democritus, Eudoxus, Euclid, Archimedes, Hipparchus, Ptolemy, Galileo, Kepler, Descartes, Fermat, Huygens, Newton, Leibniz, Euler, Lagrange, Laplace, Fourier, Gauss, Hamilton, Riemann, Maxwell, Einstein, Heisenberg are one and all mathematicians and physicists *par excellence*, both. The development of astronomy has been mathematical from the first, the development of geography has been mathematical from the first, the development of chemistry has been increasingly formal and quantitative, the development of biology has been increasingly formal and quantitative, thermodynamics, electrodynamics, relativity, quantum theory are all mathematical theories.

Counting back to Thales, philosophy has developed for twenty-six centuries now. And philosophy has been substantially and essentially physics and mathematics. Thales is the first philosopher, because he first solved the two physical problems, of the earth, and of the elements. Pythagoras is the fourth philosopher, and Pythagoras discovered proof, he proved that the sum of the angles of the triangle is two right angles, and that the side and diagonal of the square are incommensurable. Two and a half centuries into the development of philosophy Aristotle writes: philosophy is theoretical and practical, and theoretical philosophy is physics and mathematics. The greatest flourishing of philosophy, in the three generations of Bacon, Galileo, and Kepler, Descartes, Huygens and Spinoza, and Newton and Leibniz, is the greatest flourishing of physics and mathematics. In the nineteenth century Dalton wrote the *Chemical philosophy*, Lamarck wrote the *Zoological philosophy*, Faraday wrote the *Magnetic philosophy*. It was at that time that spirit was restored to the substantiality and purity of its being, and philoso-

phy quit being physics and mathematics. And its subsequent degeneration, of philosophy such as it will not be physics and mathematics, cannot have shown more clearly and distinctly that philosophy is physics and mathematics substantially and essentially.

With the state the philosophers begin concerning themselves one and a half centuries into the development of philosophy, with Protagoras. The state becomes a central concern of the philosophers two generations later, with Plato. Counting back to Protagoras, the development of philosophy has entangled itself with the development of the state for twenty-four and a half centuries now. And twofold. The philosophers have explained the state. Aristotle, Hobbes, and Rousseau have. And beginning with the *Republic*, the philosophers have kept building the state in speech. Because: until the philosophers become kings or the kings become philosophers, the states will have no respite from evil. After Plato, to provide the respite, Aristotle, Zeno of Citium, Cicero, Augustine, al-Farabi, Aquinas, Marsilius, Occam, More, Grotius, Hobbes, Spinoza, Locke, Montesquieu, Rousseau, Godwin, Hegel, Marx have each built the state in speech. And recently, conversely, the development of the state has entangled itself with the development of philosophy as well. As the building of the United States, the rebuilding of the state in the revolution, the building of the Soviet Union suffice to show, the real state has begun paying heed to the philosophers. The evil has thus been in some ways mitigated, in more ways exacerbated.

One and a half-odd centuries into its development philosophy becomes also ethics. This begins with Socrates. Ethics has developed for twenty-four-odd centuries now. And that the development of ethics, too, has entangled itself with the development of the state from the first, if the drinking of the hemlock, ordered by the state, does not show dramatically enough, Plato's *Republic* does. That, conversely, the development of the state has been forced to entangle itself with the development of ethics, Plato's *Republic* does not show, but the development of Christianity and of Islam cannot have shown more clearly and distinctly as well as dramatically.

Philosophy – physics – history – the state –

mathematics – it is all one development.

The most important part of this development is the acquisition of knowledge.

And to show this, that it is all one development, and its most important part is the acquisition of knowledge, has been a central concern of the analytic part of the argument, parts one, two, and three of the investigation, and is a central concern of its synthetic part, parts four through eight of the investigation.

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In part one the barriers before the acquisition of knowledge and the investigation of knowledge have been surveyed. The problems which knowledge poses have been collected into one problem. In part two the method has been presented. In part three the ground has been established on which the acquisition of knowledge can be collected in its entirety. How firm the ground is has been shown by the collection of the development of five problems.

A fundamental part of the problem of knowledge is to distinguish the acquisition of knowledge and knowledge. There can be no access to knowledge but through its acquisition, and the problem of knowledge cannot be solved, if the problem of the acquisition of knowledge is not solved first. A fundamental part of the problem of the acquisition of knowledge is to collect the acquisition of knowledge in its entirety. And the problem of the acquisition of knowledge cannot be solved, if the problem of collecting the acquisition of knowledge in its entirety is not solved first.

Little is to be hoped for unless all particulars are collected, and marshaled in their series and order.

The particulars are the predecessors of the philosophers and philosophers, the mathematicians, the historians, more generally the physicists, the politicians, and the ethicists, too. The predecessors of the philosophers and philosophers are propositions. These are the particulars. And some of them are the important. And some of these are the steps of advance in the acquisition of knowledge.

In part three collected have been the development of the problem of the earth from its remotest

beginning through Bessel. The development of the problem of the soul, and both the physical problem of the soul and the ethical problem of the soul, from its remotest beginning through Darwin. The development of the problem of the best state, and both the historical problem of the best state and the political problem of the best state, in the four-odd centuries from Tiglath-pileser III through Alexander. The development of the problem of the sum of the angles of the triangle and the assumptions on which the sum depends from its remotest beginning through Riemann. The development of the problem of the principles of all things, and all three, the elements, the causes, and the formal principles, from its remotest beginning through Clausius. And to collect the development of all five problems, some 1 500 predecessors of the philosophers and philosophers have been collected. The important among them with respect to the five problems are 377, the steps of advance in the acquisition of knowledge among these 195.

All in all, in parts one, two, and three, some 2 300 particulars have been collected, 1 158 important among them.

Parts four, five, six, seven, and eight are the systematic collection of the acquisition of knowledge in its entirety, and on this ground now the formulation and solution of the problem of knowledge. The particulars, all important among them, and all steps of advance in the acquisition of knowledge among them, are collected in their series and order, and on this ground the problem of knowledge is formulated explicitly and the formulated problem solved.

Part four begins with the resolution of the two difficulties, the integrity of the record is shown, and chronology is fixed explicitly and its certainty shown.

Then the development of the state, and the development of history, and in their dependance on one another, is collected. Particular after particular after particular, all important among them, and all steps of advance in the acquisition of knowledge among them, Narmer through the time of writing.

Part five begins with a final calibration. The units of the acquisition of knowledge are the predecessors of the philosophers and philoso-

phers, the predecessors of the philosophers and philosophers are propositions, the acquisition of knowledge is the winning of propositions, and the whole thing is done by machinery.

Then the development of physics, inclusive of the development of mathematics and the development of history, and more generally the development of philosophy, inclusive of the development of physics as well as of the development of ethics, and in its dependance on the development of the state, and conversely, in the dependance of the development of the state on the development of philosophy, is collected. Particular after particular, all important among them, and all steps of advance in the acquisition of knowledge among them, the 3 calculations of area through the time of writing.

Part six is an assessment of the completeness of the argument.

Part seven is an assessment of its generality.

And on the ground of the collection of the acquisition of knowledge in its entirety the problem of knowledge with all its parts is formulated explicitly, and the formulated problem solved. The beginning of the acquisition of knowledge. The collection of the acquisition of knowledge in its entirety. The relation of the acquisition of knowledge and the development of philosophy. The kinds of the acquisition of knowledge. The relation of knowledge and truth. The relation of knowledge and the world.

Part eight is the enumeration and review of the particulars collected in the course of the argument.

There are and can only be two ways to search for truth, the false and the true	11
It is much better never to search for truth than to search without the method, the method must be followed as staunchly in the search for truth as the thread of Theseus in the labyrinth	331
In order to formulate the problems we are to solve we call the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous	595
The method of history does not differ from the method of physics at all, but agrees with it entirely.	1341
The entire difficulty in philosophy is this, from the phenomena of motion to discover the forces of nature, then from these forces to demonstrate the other phenomena	
There will be no more need for disputes between philosophers, it will suffice to take their pens, sit down to their abaci, and say to one another, let us calculate	
That the inhabitants of Mars, if they have the necessary intelligence, recognize the law of gravity and the principle of conservation of energy, should be self-evident, to anyone to whom this is not self-evident, on the other hand, it will forever remain an unresolved mystery that the same physics is made in the United States as in Germany	
enumeration and review	

**The method of history does not differ from the method of physics at all,
but agrees with it entirely**

The integrity of the record 1341
The certainty of chronology 1402
The development of the state, and of history 1461

enumeration and review after

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The task of this part of the investigation, then, is to collect the development of the state, and of history, and in their dependance on one another. And on this ground now to formulate the problem of knowledge and solve the formulated problem. And before turning to the task, and in order to turn to it, the integrity of the record has to be shown, and the certainty of chronology.

The state begins with Narmer, prince c. 3000^{BC}. History begins with the Sumerian prince list, compiled under Ib-bi-Sin, prince 2037-13^{BC}. The truth of these propositions, both, depends on the integrity of the record and the certainty of chronology. The state has developed for fifty-odd centuries. History has developed for forty and a

half-odd centuries. And the description of all of the development of the state, and the description of all of the development of history, both, depends on the integrity of the record and the certainty of chronology.
First, then, it is shown that the record has lost nothing important, not 1 thing. Then chronology is fixed explicitly, and its certainty in all cases shown.
Then the task is addressed, the collection of the development of the state, and of history, and in their dependance on one another, particular after particular after particular, all important among them, and all steps of advance in the acquisition of knowledge among them, and on this ground the problem of knowledge is formulated and the formulated problem solved.

The integrity of the record

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To suspect the record has long become normative. What survives is but a fraction of what there was. Accidents, decay and fires, rodents and mildew, have decimated the record. Worse, neglect and ignorance, the utility of clay tablets for building and of parchment for kindling, the doctrine that unholy books are best burned or thrown in the water and their erasure to reuse the parchments for holier purposes, have decimated what was not decimated by accidents. Worse yet, the little that has survived the decimation is the

outcome of the deliberate choices of those who have decided what to study and what not to study, what to quote and what not to quote, what to copy and what not to copy. Thus, there is no knowing what is lost. Worse, there is knowing that very much is lost. Worse yet, there is knowing that the little that survives is the outcome of prejudice and bias.
This part of the difficulty besets, or appears to beset, the older record.
More recently, at least since the beginning of printing, the record has lost, or appears to have lost, its ability to lose anything. Before printing

already the scholarship of the universities had come into being to prevent anything and everything from perishing. And as the record has kept growing beyond all bounds, the opposite suspicion has joined the older and has itself kept growing stronger. The older is that the record is too little. The newer is that the record is too much. It is impossible to examine even a small part of it, let alone a substantial part, let alone all of it. Needless to add, any examination, such as it may be, is the outcome of the deliberate choices of those who decide what to examine and what not to examine, and thus, clearly, itself the outcome of prejudice and bias. Everything is the outcome of prejudice and bias.

It has to be shown, then, that the record has lost nothing important. Not 1 thing.

To this end, first the future is examined in order to establish how what is lost is lost. Then the nearer past is examined in order to establish what is not lost. And then the remoter past and the yet remoter past are examined in order to establish what is lost. What the Greek record has lost is examined, how many philosophers, how many not philosophers, how many very important, how many important, how many not important, and how many very not important. And what the Egyptian record has lost is examined, how many predecessors of the philosophers, how many not predecessors of the philosophers, how many very important, how many important, how many not important, and how many very not important.

In the course of the examination it is shown also that the examination of all of the record is not only possible. It is not even very difficult. Because it is of the essence of the record to examine itself, to examine all of itself, and always to examine itself. The council of our predecessors, in permanent session to adopt the sound in what our predecessors have said and avoid the erroneous, is how the record does it, and why. The record does not always examine all of itself. But the record examines all of itself, what is very important, what is very not important, and everything in between. And the record always examines itself, when the acquisition of knowledge is at its brightest, when dark ages are at their darkest, and at all times in between.

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To examine the future Russell should help.

Hardy, in 1940, in *A mathematician's apology*, reports: I remember Russell telling me of a terrible dream; he was in the library, about 2100^{AD}; a library assistant was going round the shelves carrying an enormous bucket, taking down book after book, glancing at them, restoring them to the shelves or dumping them in the bucket; at last he came to what Russell could recognize as the last surviving copy of the *Principia mathematica*; he took it down, turned over a few pages, closed it, and balanced it in his hand (9).

Terrible all right, it is but a dream. The *Principia mathematica* is in no danger of being lost, in 2100^{AD}, or in 21000^{AD}. More generally, Russell is in no danger of being lost, in 2100^{AD}, or in 21000^{AD}, or in 210000^{AD}, or at any later date.

Why not, the library assistant with the bucket, tormenting as he is the philosophers at night, can show. By showing what, more particularly, he has to do in order to lose the *Principia mathematica*, and to lose, more generally, Russell.

As the terror of the dream attests, the *Principia mathematica* is Russell's most important treatise. It attests as well that, had the dream continued, more terrifying still, with the dumping of the last surviving copy of the *Principia* in the enormous bucket, Russell would have been lost. By the time the library assistant balances the last surviving copy of the *Principia* in his hand, he has already, during his earlier inspections of the shelves, dumped in the bucket the last surviving copy of each of Russell's other treatises.

Nevertheless, for all its terror the dream attests also hope. The enormity of the bucket attests that, even if he is a merciless fiend intent on losing Russell, the library assistant has enormous labors to complete before he reaches, if he could ever reach, his fiendish goal.

To examine what, more particularly, the assistant has to do in order to lose Russell, what Russell has done has to be described more particularly.

Russell was a prodigious writer. He published 70-odd books, and not less than 6 times as many smaller titles, for a total of not less than 490. This

ignores, with 1 very important exception, his correspondence, prodigious itself. The numbers suffice to indicate also that the totality of Russell's labors neither can nor need be counted more precisely. All too many of his writings are not distinct from one another in anything more substantial than their titles, and quite a few not even in that.

And Russell's not less than 490 writings can be sorted out.

5 are very important,
letter to Frege, 16 Jun 1902,
The principles of mathematics, in 1903,
On denoting, in 1905,
Mathematical logic as based on the theory of types, in 1908,
Principia mathematica – coauthored with Whitehead – in 1910-3.

13 are important but not very important,
On the logic of relations, with some applications to the theory of series, in 1902,
Knowledge by acquaintance and knowledge by description, in 1911,
The problems of philosophy, in 1912,
Our knowledge of the external world as a field for scientific method in philosophy, in 1914,
On scientific method in philosophy, in 1914,
The philosophy of logical atomism, in 1918,
Introduction to mathematical philosophy, in 1919,
Logical atomism, in 1924,
An inquiry into meaning and truth, in 1940,
How to read and understand history, the past as the key to the future, in 1943,
A history of western philosophy, in 1945,
Is there a god? in 1952,
My philosophical development, in 1959.

The rest are not important.

8 can be separated as the most important among the not important,
An essay on the foundations of geometry, in 1897,
Recent work on the principles of mathematics, in 1901,
On the nature of acquaintance, in 1914,
The Entente policy 1904-1915, a reply to professor Murray, in 1916,
On propositions, what they are and how they mean, in 1919,

The analysis of mind, in 1921,
My mental development, in 1944,
Human knowledge, its scope and limits, in 1948.

The remaining not less than 464 are very not important.

And if there are errors in this enumeration, they can each be only of commission, not omission.

All 5 of the very important, the letter to Frege, *The principles of mathematics*, *On denoting*, *Mathematical logic as based on the theory of types*, and the *Principia mathematica*, have been presented above. 9 of the important but not very important, *Knowledge by acquaintance and knowledge by description*, *The problems of philosophy*, *Our knowledge of the external world*, *The philosophy of logical atomism*, *Introduction to mathematical philosophy*, *How to read and understand history*, *A history of western philosophy*, *Is there a god?* and *My philosophical development*, have been presented or quoted. 1 of the not important, *My mental development*, has been quoted.

The library assistant with the enormous bucket, then, is a merciless fiend intent on losing Russell.

Being a fiend, but not naive, the assistant will begin with Russell's very not important writing.

And, first, in order to lose any one piece of very not important writing, he has to dump in the bucket the last surviving copy of each of its editions, and either in the original or in translation, as well as the last surviving copy of each of the collections in which the piece has been published or excerpted, and again either in the original or in translation. This should not be too hard, not for the library assistant with the enormous bucket, but it cannot be too easy either. Russell's very not important writing, being Russell's, has not stopped being published upon dropping from Russell's pen, as the very not important writing of not important writers has. Russell's very not important writing has been republished, and again, and again.

Next, all that done, in order to lose any one piece of very not important writing, the assistant has to clear the remainder of Russell's corpus of references to that piece of writing. Very not important writing being very not important, this

should not be too hard either. Being Russell's very not important writing, however, it cannot be too easy either. As the number not less than 490, in each case with its editions, translations, collections, excerpts, and again, and again, attests.

Next, all that done, in order to lose any one piece of very not important writing, the assistant has to dump in the bucket the last surviving copy of each of the writings on that piece of writing, and the last surviving copy of each of the writings on each of the writings on that piece of writing, and so on indefinitely. In the bucket has to go all the secondary writing which has attended that piece of Russell's very not important writing, and all the tertiary writing that has attended the secondary, and all the quaternary, and so on indefinitely. For Russell's very not important writing, being Russell's, has not been ignored, as the very not important writing of not important writers has been. And to dump all this writing in the bucket, the assistant will not only have to work very hard. He will have to fight a battle after a battle after a battle. For this writing comes, and it is its *raison d'être* to come, armed with vested interest. In order of decreasing importance, for instance, which can be presumed the order also of increasing vehemence of the resistance, he will be resisted by partisans of Leibniz, for Russell wrote *A critical exposition of the philosophy of Leibniz*, in 1900, by partisans of Wittgenstein, for Russell wrote the introduction to the *Logico-philosophical treatise*, in 1922, by partisans of Meinong, for Russell wrote *Meinong's theory of complexes and assumptions*, in 1904, by partisans of his second wife, for Russell co-authored with her *The prospects of industrial civilization*, in 1923, by partisans of his third wife, for Russell coauthored with her *The Amberley papers, the letters and diaries of Bertrand Russell's parents*, in 1937. Not to mention more general vested interests. Russell wrote a book, also for instance, on German social democracy, and a book on education in early childhood, too.

Next, all that done, the assistant may be proud of what he has accomplished, but he may not rest. For he will not lose any one piece of very not important writing unless he also prevents the production of writing on that piece of writing long enough for the memory of it to lapse. A

generation or two should do.

All that done not less than 464 times, the assistant can next turn to the not important but not very not important writing.

He has to do the same. In each case to lose the piece of not important but not very not important writing itself – and that is, to dump in the bucket the last surviving copy of any of its editions either in the original or in translation, as well as of any of the collections in which it has been published or excerpted either in the original or in translation – clear Russell's corpus of references to that piece, lose all secondary and further derivative writing on it, and prevent the production of such writing long enough for the memory of it to lapse.

The same, but much more of it. For instance, there is the piece *Recent work on the principles of mathematics*, in 1901. It cannot be important. It goes briefly over some, and not much, of what Russell does in *The principles of mathematics*, in 1903. Yet it contains the *bon mot*: mathematics may be defined as the subject in which we never know what we are talking about, nor whether what we are saying is true (*id.*). And to clear the record of this most felicitous of *bons mots* will not only be a pity. It will be very laborious. The *bon mot* has spread through the record and, transcending partisanship, become a cliché. It has been employed by such as approve of it, because they approve of it, such as disapprove of it, because they disapprove of it, and more than either of those by such as, given the *bon mot*, can dispense with either approving or disapproving and do nothing but dwell on the *bon mot*. To clear the record of Russell's *bons mots*, and prevent it from employing and reemploying them long enough for the memory of them to lapse, the assistant will have to lose swaths of the record and fight general, not local, resistance.

All that done, the assistant can next turn to the important but not very important treatises.

He has to do again the same, and again much more of it. And so much more of it now, there is a qualitative difference.

The assistant now has to lose Russell's important results. These pervade his corpus. For instance, in 1905: an interest in the law of identity can hardly be attributed to the first gentleman of

Europe (*Denoting*), in 1911: Miss Jones is mistaken that 'Scott is the author of *Waverley*' asserts identity of denotation between Scott and the author of *Waverley* (*Description*), in 1918: George IV wished to know the truth of 'Scott is the author of *Waverley*' and not of 'Scott is Scott' (*Ph. atomism*, 6), in 1940: for aught we know somebody on Mars may have also written *Waverley* (*Inquiry*, 2), in 1959: you may turn a true proposition into a false one by substituting 'Scott' for 'the author of *Waverley*' (*Ph. development*, 7). It is an illustration of the results of the theory of definite descriptions. To clear Russell's corpus of the theory, its formulation, development, reformulation, grounds, consequences, illustrations, the assistant has to ravage Russell's important treatises. To abolish also the past, present, and future productions of the minor industry of publishing and republishing Russell's important treatises.

More important, and this is the qualitative difference, the assistant has to accomplish now the Herculean task also of ravaging Russell's successors. In the preface to the *Logico-philosophical treatise*, Wittgenstein reports: it is indifferent to me whether what I have thought anyone else has thought before me; I will only mention that I owe a large part of the stimulus for my thoughts to the great works of Frege and the writings of my friend Russell (*id.*). Russell's results pervade Wittgenstein's. Russell's results such as they pervade Wittgenstein's and such as they do not pervade Wittgenstein's, both, pervade Carnap's results and Popper's results, and so on indefinitely. To clear the record of references to Russell's important results the assistant has to abolish much – and it may well be more than half – of what has been philosophy in the last century-odd. The amount of that philosophy is not less terrifying than the assistant himself. And to prevent that much of that philosophy, once abolished, from coming back into being long enough for the memory of Russell's important results to lapse, a generation or two may not do.

Then there is the secondary and further derivative writing which that philosophy has brought into being. It is a major industry, not minor, armed with powerful institutions, themselves armed with many and elaborate professions. And

to abolish as much as needed of this writing on that much of that philosophy, and to prevent it, once abolished, from coming back into being, this cannot be a labor of Hercules, the assistant has to be Zeus. As to the size of his bucket, this cannot be conceived.

Yet, he still has to lose the very important treatises, including the *Principia mathematica*.

And to lose the very important treatises is so much harder, there is again a qualitative difference.

Gödel wrote *On formally undecidable propositions of Principia mathematica and related systems*. The assistant will not succeed in losing the *Principia mathematica* unless he loses also Gödel. And he will not succeed in losing Gödel unless he loses also everything that stands on Gödel and all the derivative writing which has come into being because of Gödel.

Hilbert writes in *The foundations of mathematics*: we must supply the foundations of Russell and Whitehead's axioms of infinity, reducibility, and completeness (*id.*). The assistant will not succeed in losing the *Principia mathematica* unless he loses also Hilbert. And he will not succeed in losing Hilbert unless he loses also everything that stands on Hilbert and all the derivative writing which has come into being because of Hilbert.

Russell's most important result is the paradox of the set of all sets that are not members of themselves. And the assistant will not succeed in losing Russell's paradox unless he loses all logic after 1902, everything that stands on logic after 1902, and all the derivative writing which has come into being because of it.

Unless he prevents it all from coming back into being as well.

Philosophy, mathematics, logic ravaged, industries annihilated, everything ravaged and annihilated abolished forever, the assistant can be justly proud of his work. But he must yet remain vigilant. For Russell may yet be hiding in what has survived.

For instance. Heidegger writes: we must destroy the tradition concealing the primordial experiences in which the first determinations of being were won. The first determinations of being were won by Heraclitus and Parmenides, and we

must destroy everything thereafter.

Suppose it destroyed. Suppose everything but Heidegger destroyed. To be perfectly certain, suppose Heraclitus and Parmenides destroyed as well. Say, by 21000^{AD}. The memory of anything but Heidegger has long lapsed.

And yet, it will be still possible to recover from Heidegger that in remote antiquity, in the time of Heidegger, there was an evil called the theory of relativity of which we had to provide the ontological illumination. It will be possible to recover that that evil was part of a greater evil called science which followed the ruinous path of misinterpreting spirit and depriving it of its power. It will be possible to recover even that the root of the evil was something called mathematical for the fundamental feature of the evil was that it was mathematical. And if Russell's labors have been part of that evil, something of Russell's labors will have survived.

And as the future so the past.

Epimenides said: all Cretans are liars. The source of the fragment is the spurious *Letter to Titus* in the corpus of st Paul: it was a Cretan prophet who said, all Cretans are liars, vicious beasts, lazy gluttons. The identification of the fragment with Epimenides is from Clement of Alexandria: the Cretan of whom the apostle Paul speaks in the letter to Titus is Epimenides. Russell discovered the importance of what Epimenides said.

The dates are,

653^{BC} Epimenides,

6^{AD} - 62 st Paul,

150 - 214 Clement of Alexandria,

1872 - 1970 Russell.

Epimenides said what he said before the first philosopher, not more than one century-odd after Homer, before any Greek writing at all but its first beginnings. Seven-odd centuries later, the writer who chose to enrich the letters of the apostle with the spurious *Letter to Titus*, and more particularly with liars, vicious beasts, lazy gluttons, cannot be suspected of choosing to investigate the philosophers, or to study philosophy, or to search for truth. Never mind choosing to preserve Epimenides. Yet, one century later, with the very first step in the assimilation of pagan philosophy into Christian doctrines, Clem-

ent of Alexandria identified the liar, vicious beast, lazy glutton. Clement of Alexandria cannot be suspected of choosing to perpetuate pagan philosophy, in general, or Epimenides, in particular. Yet, bound inextricably to what the apostle said, by a fabrication, no less, what Epimenides said had become impervious to the enormous bucket of the doctrine that unholy books are best burned or thrown in the water. And seventeen-odd centuries after Clement of Alexandria, not quite nineteen centuries after st Paul, twenty-five-odd centuries after Epimenides, Russell discovered his importance.

cdi

To lose Russell is very nearly impossible. And it is because Russell is very important.

Very nearly, to account for contingencies like the crashing of a large comet into the earth. Impossible, or very nearly impossible, because the record is impervious to accidents, neglect and ignorance, and prejudice and bias. And the record is impervious to all that because importance determines what is lost.

Russell's not important writings, next to the important, are published and republished because he is important.

There is derivative writing on him, on his not important writings and his important, and there is very much more of this than there is of Russell's writings, there is derivative of this derivative writing, and there is very much more of this than that, and so on indefinitely, and all of this because he is important.

His successors wrote much of what they did because he is important. This is published and republished, there is derivative writing on it, derivative of this derivative writing, and so on indefinitely, and there is very very much more of this, and a main reason for all this is again that he is important.

The first volume of the first edition of the *Principia mathematica* was published in 750 copies, the second and third volumes in 500 copies each. Nor has the *Principia* been since published in nearly as many copies as many of Russell's very not important writings. Or nearly as many as all too many very not important writings of very not important writers.

But it is the one book in the title of Gödel's proof of the incompleteness theorems. It is one of the books of whose axioms Hilbert's theory of proof must supply the foundations. It is one of the two books Wittgenstein quotes in his first book. And so much suffices to make it impervious to all future contingencies less calamitous than the destruction of the earth.

The record is impervious to accidents because accidents are accidents. Accidents are random, and indifferent to what they will befall. Accidents will thus tend to destroy the not important so much more than the important as there is not important than important. They will tend to destroy the very not important very much more than the not important but not very not important because there is very much more of it, and the very important very much less than the important but not very important because there is very much less of it.

It is impervious to neglect and ignorance even more than it is to accidents because neglect and ignorance are natural occurrences, like accidents, decay and fires, rodents and mildew, yet natural occurrences more invariable in their operation with respect to books. Thus, what accidents will tend to do, neglect and ignorance will do with constancy. They will destroy the very not important the most, the very important the least.

It is impervious to prejudice and bias even more than it is to neglect and ignorance because prejudice and bias will, in fact, tend strongly to affirm importance, and the stronger the prejudice and bias the more strongly to affirm it. To destroy the important, prejudice and bias will have to expose it as not important, and the exposition of the important as not important cannot not befall the important, not the not important, and befall the most important the most.

And importance is determined in one way only. The council of our predecessors does it, by adopting the sound in what our predecessors have said and avoiding the erroneous. And does it flawlessly.

Russell reports, in 1959: I used to know of only six people who had read the later parts of the *Principia mathematica*; three of these were Poles, subsequently, I believe, liquidated by Hitler; the other three were Texans, subsequently success-

fully assimilated (*Ph. development*, 8).

It can confidently be presumed that after the liquidation and assimilation, respectively, no one has read the later parts of the *Principia*, Poles or Czechs, Texans or Oklahomans, liquidated, assimilated, or otherwise. Wittgenstein, Hilbert, and Gödel, however, have read the earlier parts.

Russell reports: in spite of the great value of Frege's *Concept writing*, I was, I believe, the first person to read it, more than twenty years after its publication (*Introduction*, 3).

The *Concept writing* was published in 1879. Twenty years after its publication is 1899.

In 1884 Cantor published a review of Frege's *Foundations of arithmetic*.

In 1888 Dedekind published *What are and what should the numbers?* He does not note Frege. But a review associated *What are and what should the numbers?* with the work of Frege. In the preface to the second edition, in 1893, Dedekind notes Frege.

In 1889 Peano published *The principles of arithmetic presented by a new method*. He does not note Frege. But in 1896 Frege published *On the concept writing of Mr Peano and my own*. In 1898 Peano published a *Response*.

Before Russell already, the council had begun rendering its judgment. Cantor, Dedekind, and Peano, no less.

In 1910, in the preface to the *Principia mathematica*, Russell and Whitehead write: in all questions of logical analysis our chief debt is to Frege (*id.*).

Hence, to lose Russell is very nearly impossible, but to lose Frege is very much closer to impossible than to lose Russell.

Thus, then, in the future.

And it can be shown that this is, in fact, what has happened in the past.

The council has determined importance.

Accidents, neglect and ignorance, and prejudice and bias have corroborated the decisions of the council.

And if there is anything not important among what survives, it has to be unlikely that much important has been lost. If there is much not important among what survives, it has to be unlikely that anything important has been lost. If there is much too much not important among

what survives, nothing important has been lost. Not 1 thing.

More particularly, the nearer past can be examined in order to show what is not lost, then the remoter past and the yet remoter past can be examined in order to show what is lost.

cdii

Augustine writes: lord, the man who knows other things is not happy unless he knows you, the man who knows you is happy even if he does not know other things, and the man who knows you and other things is happy because he knows you and is not happier because he knows other things (*Confessions*, V, 4).

Light began dispelling the darkest of dark ages seven centuries after Augustine.

Hugh of St Victor, seven and a half centuries after Augustine, is a younger contemporary of Abelard and an older contemporary of Gerard. And Hugh can show how bright the light was which began dispelling the darkness and how intense the darkness had been, both.

Hugh wrote the *Instruction, on the study of reading*. He proposes: to teach the reader about the secular writings as well as the holy scriptures (pr.). About the secular writings, in particular: to enumerate the origins of all the arts, to describe the arts, to describe the division of the arts, which contain which and are contained by which, thus describing the division of philosophy from its pinnacle down to its lowest members, and to enumerate the authors of the arts as well (*id.*).

And that Hugh proposes to do so, and does so in the six books of the *Instruction*, shows how bright the light which began dispelling the darkness was.

How intense the darkness had been, what Hugh knows about Aristotle, Euclid, Ptolemy, and Galen shows.

He notes Aristotle three times.

He writes: knowledge is called art when it comprises precepts, as in the art of writing; knowledge is called discipline when it is complete, as in mathematics; or, again, it is called art when it deals with things which only resemble the true and are matters of opinion, it is called discipline when, by true arguments, it deals with what cannot be otherwise; this last distinction Plato

and Aristotle tried to establish (II, 1). Also: Egypt is the mother of the arts, whence they came to Greece, and whence to Italy; in Egypt grammar was first founded at the time of Osiris, the husband of Isis; in Egypt, too, dialectic was first founded by Parmenides; he fled men and their gatherings, and went to dwell on a rock in the sea; he stayed there a long time and thought up the science; so that rock has since been called the rock of Parmenides; Plato also, on the death of Socrates his master, led by love of learning, went to Egypt, and learned the arts; he then returned to Athens, gathered students at the Academy, his villa, and turned to philosophy; so Plato first taught logic to the Greeks; his student Aristotle then expanded it, perfected it, and made it into an art (III, 2). And: the first to discover magic is believed to have been Zoroaster, king of the Bactrians; some say that he was no other than Ham; Aristotle writes about this man that in his books he left to posterity two million and two hundred thousand verses on the art of magic (*app.*).

One way or another, Hugh knows Aristotle.

He notes Euclid once.

He writes: geometry was also first founded in Egypt; its author among the Greeks was the great Euclid; Boethius passed this man's art to us (*id.*).

Not quite as well as Aristotle, but Hugh knows the great Euclid, too.

He notes Ptolemy once as well.

He writes: astronomy some say Ham first founded, the son of Noah; astrology the Chaldeans first taught; Josephus says also that it was Abraham who first taught astrology to the Egyptians; later on Ptolemy, the king of Egypt, revived astronomy; he also drew the canon by which the courses of the stars can be found (III, 2).

Hugh writes also: Ptolemy Philadelphus ordered the seventy to translate the old testament from Hebrew into Greek (IV, 5). The king of Egypt whom Hugh knows is thus Ptolemy II. As to Ptolemy, he was not the king of Egypt, but he drew the canon by which the courses of the stars can be found. Not quite as clearly as Euclid, but Hugh knows Ptolemy as well.

Galen he does not know.

He writes: the author of medicine among the Greeks was Apollo; his son Aesculapius ennobled

medicine with his praise and deeds, but perished by lightning; medicine then lapsed for five hundred years until the time of king Artaxerxes; Hippocrates brought it forth to light again; he was the son of Asclepius and was born on the island of Cos (III, 2).

Hugh does not know Galen, but he does know Hippocrates.

Lord, the man who knows other things is not happy unless he knows you, the man who knows you is happy even if he does not know other things.

And Hugh, who knew more other things than any other philosopher in Christendom, including Abelard, never mind what any other man knew, attests how many other things the philosophers had quit knowing.

As far as the record is concerned, however, by what he knows, minimal as it is, Hugh attests what the record has not lost. Irresistible prejudice and bias at first, then massive neglect and ignorance, had been at work harder and longer than at any other time before or after. Hence, to judge by what Hugh knows of Aristotle, Euclid, Ptolemy, and Galen, the record had lost each and every one of their treatises. One of the four the record had lost altogether. Nevertheless, the other three, even if they had to share philosophy with the rock of Parmenides, Zoroaster, Ham, Abraham, and Apollo and his son, the other three the record had failed to lose. Moreover, what Hugh knows of the four corresponds rather precisely to their relative importance. He knows nothing of Galen. But he knows a little of Ptolemy and a little of Euclid, and if he does not know very clearly what Ptolemy was, he knows clearly that Euclid was great. And he knows more of Aristotle. Including that Aristotle tried to establish the distinction between art, which deals with things which only resemble the true and are matters of opinion, and discipline, which, by true arguments, deals with what cannot be otherwise.

And although Hugh does not know it, the record had not lost the treatises of Aristotle, Euclid, Ptolemy, and Galen.

Gerard is a younger contemporary of Hugh.

In a brief note appended to Gerard's translation of Galen's *On the art of medicine*, students of Gerard report: master Gerard was trained from

childhood in philosophy; so he learned all the philosophy that the Latins knew; then, for love of the *Almagest*, because he could not find it anywhere among the Latins, he went to Toledo to read it; there, seeing the abundance of books in Arabic and regretting the poverty of the Latins, he learned Arabic in order to translate; and until the end of his life he translated and passed on to the Latins the books he thought the best; he went the way of all flesh in 1187 (*id.*).

Galen concludes *On the art of medicine* with a list of his books. So in the note appended to Gerard's translation the students of Gerard conclude with a list of the books he translated.

Gerard translated 71 books.

They can be sorted out in this way.

22 of the writers of 45 of the books are important, 12 of them very important,

384 - 322 **Aristotle,**

Physics,

On the heaven,

On generation and corruption,

Meteorology,

Posterior analytics,

346 **Autolycus,**

On the moving sphere,

346 **Euclid,**

Elements,

Data,

287 - 212 **Archimedes,**

Measurement of the circle,

257 **Diocles,**

On burning mirrors,

203 **Hypsicles,**

Rising times,

187^{BC} **Theodosius of Bithynia,**

Spherics,

On habitations,

58^{AD} **Menelaus,**

Spherics,

87 **Ptolemy,**

Almagest,

129 - 208 **Galen,**

On the art of medicine,

On the elements according to Hippocrates,

On mixtures,

On uneven imbalance,

On crises,

On critical days,

- On the mixture and action of simple drugs,
 commentary on *On regimen in acute diseases*,
 commentary on the *Prognosis*,
 164 Alexander of Aphrodisias,
 commentary on *On the senses*,
 317 - 388 Themistius,
 commentary on the *Posterior analytics*,
 770 **Jabir ibn Hayyan**,
Seventy,
 773 - 866 **al-Farghani**,
Elements of the science of the motions of stars,
 795 - 852 **al-Khwarizmi**,
Algebra,
 801 - 866 **al-Kindi**,
On the five essences,
Optics,
On compound drugs,
On sleep and dream,
 803 banu Musa,
On the measurement of plane and spherical figures,
 831 - 901 Thabit ibn Qurra,
On the secant figure,
On beam balance,
On the motion of the eighth sphere,
*The things which need exposition before reading the *Almagest**,
 843 - 943 Isaac Israeli,
On definitions and descriptions,
On the elements,
 860 - 930 **al-Razi**,
To Mansur,
 865 - 950 **al-Farabi**,
Survey of the sciences,
On the syllogism,
 commentary on the *Physics*,
 980 - 1037 **ibn Sina**,
Canon.
 7 of the writers of 9 of the books are not important,
 722 Mashaallah,
On the science of the motion of the orb,
 843 - 913 Ahmad ibn Yusuf,
On ratio and proportion,
On similar arcs,
 857 al-Nayrizi,
 commentary on the *Elements*,

- 939 - 1009 al-Zahrawi,
Compendium,
 990 - 1084 al-Jayyani,
Tables,
On the dawn,
 1004 - 1074 ibn Wafid,
On simple medicines and foods,
 1105 Jabir ibn Aflah,
*Correction of the *Almagest**.

The remaining 17 books are very not important. These include derivations from derivations from derivations from Aristotle, Galen, al-Razi.

Until the end of his life master Gerard translated and passed on to the Latins the books he thought the best. And the books master Gerard thought the best are the best. It is most unlikely that a better collection of 71 books could be assembled.

Thus, happy or not, the Latins could now know other things. They could leave Apollo and his son alone, and read Galen. Read 9 treatises of his. They could read also al-Razi and ibn Sina. They could read Euclid and thus find out how great he is, and read not only the *Elements*, but also the *Data*. They could read al-Khwarizmi, too. They could even read Archimedes. They could read the *Physics*, *On the heaven*, *On generation and corruption*, and the *Meteorology*. They could read also al-Farabi. They could leave the rock of Parmenides alone as well, and read the *Posterior analytics*. And they could now find out that Aristotle is the most important philosopher. They could leave even Ham and Abraham alone, and, in preparation for the *Almagest*, read Autolycus, Hypsicles, Theodosius of Bithynia, al-Farghani, and Thabit ibn Qurra. They could then, continuing the preparation, read Menelaus. They could then read the *Almagest*. And find out what the world is.

What master Gerard thought the best is the best. And the excellence of master Gerard's judgment can be explained.

Fifteen centuries separate Gerard from Aristotle, the earliest of the 29 important and not important philosophers in the list. And the distribution of the 29 over time separates them sharply into three groups. The philosophers of the first seven of the fifteen centuries. The philosophers of the next four centuries. And the philosophers of

the last four of the fifteen centuries. The philosophers of the first seven centuries are 12. The philosophers of the next four centuries are 0. The philosophers of the last four centuries are 17.

Tabulating,	important	not important
first seven centuries	12	—,
next four centuries	—	—,
last four centuries	10	7.

A dark age can hardly have been more clearly and distinctly indicated.

The 17 philosophers of the last four centuries are all writers in Arabic. Counting centuries back from the year of birth of Gerard, *c.* 1114, their distribution is, more particularly, this,

714- 813	5	1,
814- 913	4	2,
914-1013	1	3,
1014-1113	—	1.

Importance is determined in one way only. It is determined by the council of our predecessors, rendering its judgment by adopting the sound in what our predecessors have said and avoiding the erroneous. It is determined cumulatively, as the philosophers judge their predecessors, judge their predecessors and their judgment of their predecessors, judge their predecessors, their judgment of their predecessors, and their judgment of their judgment of their predecessors, and over time conclusively.

And this fact is indicated clearly and distinctly by the distribution of the 17 over the four centuries before Gerard. From not important alone in the century before him, to more not important than important in the earlier century, to more important than not important in the earlier century, to a much better ratio of important to not important in the earlier century. The further removed from his own time his predecessors are, the more Gerard's judgment is a judgment of the cumulative judgment of his predecessors.

Gerard, moreover, was in a particularly favorable position to judge his predecessors and their judgment of their predecessors.

In Toledo master Gerard saw the abundance of books in Arabic.

Gerard encountered the abundance of books in Arabic all at once. This abundance had been sorting itself out for four centuries. Encountering

the abundance all at once could be, and in Gerard's case proved to be, a favorable circumstance.

Master Gerard regretted the poverty of the Latins.

Gerard encountered the abundance bringing along with him poverty. This could also be, and in Gerard's case also proved to be, a favorable circumstance. Gerard was not schooled within the abundance, he was thus not schooled in any one part of the abundance, and he was thus not schooled in the routines which any one part of the abundance was likely to impart against the others. This was a circumstance which, one generation before Gerard, proved very favorable in the case of Abelard as well.

Master Gerard was trained from childhood in philosophy, so he learned all the philosophy that the Latins knew.

Poor all the philosophy that the Latins knew was. But it was not as poor as it had been. Two-odd generations before Gerard Anselm proved the existence of god. One generation before him Abelard wrote: god can do and do not only what he does and does not, and only in the way and at the time in which and at which he does it and does it not, and no other. Even if: few or no one will agree with our conclusion, which seems to disagree with what many saints have said as well as with reason. In the same generation Hugh of St Victor wrote the *Instruction*. To teach the reader about the secular writings as well as the holy scriptures. Light was decisively dispelling the darkness, this could be a very favorable circumstance, proved to be in Gerard's case, and light greatly intensified.

Master Gerard went to Toledo for love of the *Almagest*.

Love of the *Almagest*, as Gerard shows, is a most favorable circumstance.

Master Gerard went to Toledo for love of the *Almagest*, because he could not find it among the Latins.

Love of the *Almagest* before reading it, as Gerard also shows, is an irresistible circumstance.

The 12 philosophers of the first seven of the fifteen centuries between Aristotle and Gerard are all writers in Greek. They are also all 12 important. Fifteen to eight centuries into the past by

Gerard's time, these writers had all 12 been judged by the council conclusively. And Gerard forcefully corroborated the council's judgment.

The collection of 71 treatises is built in its entirety on the importance of Aristotle, Euclid, Ptolemy, and Galen. Theirs are 17 of the 71 treatises. The remaining 54 are treatises of preparation for the study of their treatises, of elucidation, and of immediate further development of their results.

The importance of Euclid his immediate successors established, writers in Greek, beginning with Archimedes, two generations after him, by vastly extending the results standing on the *Elements*. And Euclid has remained the model of deduction. The importance of Aristotle, Ptolemy, and Galen their more distant successors, writers in Arabic, established. In the case of Ptolemy, his more immediate successors wrote commentaries on him, Pappus, Theon of Alexandria, Hypatia. Writers in Arabic, beginning with al-Farghani, seven centuries after Ptolemy, established his importance. These writers established the central, broad, and deep presence of Ptolemy's description of the world in the record, such as it remained until and including Copernicus. In the case of Galen, his more immediate successors, writers in Greek, wrote commentaries on him as well. It was again writers in Arabic who established his importance with the rise of medicine culminating in al-Razi, not quite seven and a half centuries after Galen, and ibn Sina, eight and a half centuries after him. These writers established the fundamental authority of Galen in medicine, such as it remained until Vesalius. In the case of Aristotle, writers in Greek began writing commentaries on him in the early Christian centuries, and the first important Aristotelean commentator, Alexander of Aphrodisias, postdates him by five and a half centuries. And again writers in Arabic, beginning with al-Farabi, twelve and a half centuries after Aristotle, established his importance. These writers established the all-pervasive presence of the physics, logic, and all philosophy of the philosopher in the record, such as it remained until Bacon, Galileo, and Kepler.

Gerard corroborated forcefully the judgment of his Muslim predecessors. Then his Christian successors corroborated and kept corroborating

his judgment of the judgment of his Muslim predecessors.

cdiii

Seven and a half-odd centuries separate Augustine and Gerard, and if other centuries can show better how the record examines itself when the acquisition of knowledge is at its brightest, these seven and a half centuries show better than any other how the record examines itself when dark ages are at their darkest.

These seven and a half-odd centuries can be divided into four parts. The two-odd centuries from Augustine to Muhammad. The two centuries from Muhammad to al-Farghani. The two and a half centuries from al-Farghani to Anselm. And the two-odd generations from Anselm to Gerard. The dates are,

354 - 430 Augustine,
570 - 632 Muhammad,
773 - 866 al-Farghani,
1033 - 1109 Anselm,
1114 - 1187 Gerard.

The two-odd centuries from Augustine to Muhammad.

In these two-odd centuries Christianity flourished. Islam was not yet. And this is the time when the last glimmerings of light were extinguished in Christendom.

Augustine had established unshakably that: whatever man learns outside the holy scriptures, if noxious, is to be condemned, if beneficial, is in them contained.

One generation-odd after him, Vincent of Lérins established unshakably that: every care should be taken to hold fast to what is believed everywhere, always, by all.

And every care was taken. The church – for: he cannot have god for his father who does not have the church for his mother – had established its authority unshakably, and this is the time when the papacy established its authority over the church unshakably, with the labors of Leo, pope 440-61, of Gelasius, pope 492-6, and conclusively of Gregory, pope 590-604.

The last glimmerings of light are the following, ordered from brightest to dimmest.

Tribonian. Under Justinian, emperor 527-65, and on his orders, Tribonian reduced all earlier

jurisprudence – the six and a half centuries of its development since Mucius, Servius, Alfenus, and Labeo – to 9 201 excerpts from the treatises of 38 jurists, under 431 heads, in 50 books, divided into 7 parts, in the *Digest*. In all of Christendom, in all the seven and a half-odd centuries from Augustine to Gerard, the analysis of jurisprudence into the *Digest* is the one result which attests the acquisition of knowledge unambiguously.

Proclus, Simplicius, and Eutocius. These are the last important Greek commentators. They wrote commentaries on Plato, Aristotle, Euclid, Archimedes, and Apollonius. Proclus made the second attempt to prove the parallel postulate. Other than that, none of the three advanced the acquisition of knowledge with new results. All three are indispensable sources for the earlier development of physics and mathematics. Most important, because their sources for the earliest development of physics and mathematics are the first histories of physics and mathematics, Theophrastus and Eudemos. Proclus is the source also, for instance, of the first attempt, Ptolemy's, to prove the parallel postulate. Simplicius is the main source, for instance, of the fragments of Parmenides. Eutocius is the source, for instance, of the first proof of great sophistication, Archytas's duplication of the cube.

Zosimus, Procopius, and Gregory of Tours. Zosimus wrote the *New history*, Procopius wrote the *History of the wars*, Gregory wrote the *History of the Franks*. All three are important historians, but none of the three is a very important historian. All three are first of all chroniclers, writing down the events of his own time each.

Capella, Boethius, Cassiodorus, and Isidore. These are the writers who reduced whatever man may learn outside the holy scriptures to the beneficial quality, and corresponding minuscule quantity, which the care to hold fast to what is everywhere, always, by all believed would tolerate. Capella wrote the *Philology*, or *The wedding of Philology and Mercury*. This made the seven-fold division of the arts, the *trivium* and *quadrivium*, normative in the following millennium. Boethius wrote two commentaries on Porphyry. This was where in the following six and a half centuries, until Gerard, if there would be philosophers in Christendom, and they would learn logic,

they would learn their logic. It was where Abelard learned his logic. In Capella's *Philology* rhetoric presents the seven arts. Cassiodorus wrote the *Instructions in divine and secular letters*, Isidore wrote the *Etymologies, or origins*, and this was where the philosophers in Christendom, if there would be philosophers, would learn about the seven arts in depth. It was where Hugh of St Victor gathered both the model for his treatise and the learning.

Among the labors of extinguishing what light was still flickering, Dionysius the Areopagite developed the science of angles, Gregory himself developed the science of hell.

Thus, as the irresistible prejudice and bias of the previous couple of centuries brought about massive neglect and ignorance in these, the record continued to examine itself. Continued to examine itself vigorously, too.

The examination of all earlier jurisprudence, which the *Digest* is, is even quantitative. Of the 9 201 excerpts in the *Digest*, 2 468 are from Ulpian, 2 075 from Paul, 598 from Papinian, 586 from Pomponius, 535 from Gaius, 458 from Julian.

The commentators are explicit. Proclus writes: we must now describe the earlier development of our science (comm. *Elements*, 64). Simplicius writes: the lines, in which Parmenides speaks of the one, are not many, and I will copy them here because his book has become rare (comm. *Physics*, 144). Eutocius writes: we have seen in the books of many famous men solutions of the problem of finding two mean proportionals; and so that they become better known, we will copy them all here (comm. *Sphere*, II).

The historians begin with reviews, cursory as these are, of events before his own time each. Zosimus begins with Augustus, Gregory of Tours begins with Adam.

Capella's seven maids pride themselves on their past, little as they know about it. The commentaries of Boethius are commentaries on Porphyry's commentaries on Aristotle.

Yet monasteries illustrate the best.

The first half of the sixth century is the time of Benedict. Cassiodorus is a younger contemporary of Benedict, he was, like Benedict, the founder of monasteries, and undertook, like Benedict, to

instruct the monks in the monasteries. In the *Instructions in divine and secular letters*, Cassiodorus begins by addressing the monks: I was guided by divine charity to prepare this book for you and give it to you in place of a teacher (I, pr.); it is extremely useful, for you can learn from it both salvation and secular letters (*id.*).

The *Instructions* is thus in two books, book I is the *Divine letters*, book II is the *Secular letters*.

Book I, the *Divine letters*, is in 33 chapters. In chapters 1-14 Cassiodorus presents the holy scriptures. In chapter 15 he instructs the monks: when you copy them, do not profane the customary words of the holy scriptures by any presumption, lest in trying to make the words intelligible to baser minds the purity of the heavenly words – perish the thought! – be destroyed (*id.*). Chapter 16 is *On the excellence of the holy scriptures*. Chapter 17 is *On the Christian historians*, beginning with Eusebius. Cassiodorus then turns to: the fathers, who with their many merits are an extraordinary witness, who shine in the sky of the church like glittering stars (17). He presents: Hilary (18), Cyprian (*id.*), Ambrose (20), Jerome (21), and Augustine: the illustrious teacher, the most blessed Augustine, the subduer of heretics, the defender of the faithful, the victor in famous contests, who, although exceptionally difficult and abstruse in some of his books, is so clear in others that even the children understand him (22). The rest of the book deals with more practical matters, like: the zeal with which the holy scriptures ought to be read (24), where critical notes may be added (26), where the books should be kept (29), and upon the exhortation: every word of the lord copied by a scribe is a wound in the body of Satan (30), ends with a prayer (33).

Book II, the *Secular letters*, deals in its 7 chapters with the seven arts. Cassiodorus presents in chapter 1 grammar, his main source is Aelius Donatus. In chapter 2 he presents rhetoric, his main source is Cicero. In chapter 3, the longest in the book, he presents dialectic, his main source is Boethius. In chapter 4 he presents arithmetic, his source is a derivation from Nicomachus. Chapter 5 is on music, his main source is Gaudentius. Chapters 6 and 7, on geometry and astronomy, are the briefest. No authority is indicated, or needs to be indicated. Still, in chapter 6 Cassio-

dorus mentions Euclid, Archimedes, and Apollonius. In chapter 7 he mentions Ptolemy. He adds: for us it is sufficient to know what the holy scriptures teach (*id.*). Cassiodorus has nevertheless earlier, in book I, recommended the *Geography* to the monks: Ptolemy describes all places so clearly you may think he lived in every one of them; so you, who live in one place, as is seemly for you, can read this book and traverse in your minds the places which others have visited and described with great labor (25).

Cassiodorus attests that, as far as the Latin fathers are concerned, the council of our predecessors was reaching its conclusive verdict. The most important is the illustrious teacher, the most blessed Augustine, the subduer of heretics, the defender of the faithful, the victor in famous contests. Next are the glittering stars Jerome, Ambrose, Cyprian, Hilary. As far as the secular letters are concerned, Cassiodorus attests the great success of the effort to annihilate these letters. He attests also, however, that every word of the lord copied by a scribe is a wound in the body of Satan. And as they inflicted wounds in the body of Satan, the monks were liable to inflict wounds in the body of the doctrine: for us it is sufficient to know what the holy scriptures teach, too. If, for instance, they, who lived in one place, as was seemly for them, traversed in their minds the places which others had visited and described with great labor.

More generally, Cassiodorus attests that the near extinction of all light did not prevent the record from examining itself. On the contrary. The record did not continue to examine all of itself. But parts of itself the record continued to examine. Vigorously, too.

Benedict wrote the *Rule*. By his time, the first half of the sixth century, monasteries flourished. And one century after him, as monasteries flourished ever more, all monasteries had come under the *Rule of st Benedict*.

The *Rule* begins: listen my son, turn the ear of your heart to the precepts of your master; receive readily, and carry out faithfully, the advice of a loving father, so that by your obedience you may return to god, whom you have abandoned by the sloth of your disobedience (pr.).

It is the central concern of the loving father,

your master, the sloth of your disobedience. And part of the remedy is reading, careful reading, too, its carefulness carefully supervised.

Benedict writes: idleness is the enemy of the soul; and because this is so, the brethren ought to be occupied in manual labor at fixed times, and at other fixed times in holy reading (48); from the beginning of October to the beginning of lent the brethren shall be occupied in reading until the end of the seventh hour (*id.*); on the days of lent the brethren shall read from the morning to the end of the third hour (*id.*); during these days let each of them have a book from the library, which he shall carefully read; at these times, when the brethren read, one or two senior brethren shall go about the monastery to see that no one is slothful, given to idleness instead of reading, so that he not only makes no profit for himself but distracts others; if such be found – which god forbid! – let him be corrected once or twice, but if he does not mend his ways, let him be punished so that the others take warning (*id.*).

This is under the head *On daily manual labor*. And even if it had no other virtues, the brethren's reading could not help having the virtues of being daily, manual, and labor.

The record does not always examine all of itself. But it always examines itself.

God gave the Hebrews the torah. Not enough, apparently, he gave them also the neviim. Still not enough, he gave them also the kethuvim. This turned out to be not enough either, so the mishna came into being. This turned out to be not enough either, so the talmud came into being. And even as its holiness continued to decrease, teaching, teaching on the teaching, and teaching on the teaching on the teaching continued to increase.

God sent forth Jesus. Not enough, the apostles had to teach what Jesus taught. This was not enough either, so the fathers had to teach what Jesus and the apostles taught. More fathers had to teach what Jesus, the apostles, and the earlier fathers taught. And more fathers. And when it came to be taught that there was to be no more teaching, monks had to be taught to keep copying the teaching, old testament, Jesus, apostles, fathers, and in any case to keep carefully reading it, carefully supervised.

And it is the work of the council. For, what-

ever else was at issue, truth was at issue. And when truth was conclusively found, and it was everywhere, always, by all believed, and it was taught that the search for truth must stop, it had to be also taught that the preservation, as well as veneration, of truth, and for this very reason, that it was truth, and it was found, must not stop.

The two centuries from Muhammad to al-Farghani.

These are the darkest two centuries. Christendom had sunk into more or less complete ignorance. Islam was still as it was born, in complete ignorance.

Nevertheless, in Christendom the monks carefully read, carefully supervised. They inflicted wounds in the body of Satan, too. And dim as it was, light flickered now and again. Bede is the brightest. Bede wrote the *Ecclesiastical history of the English people*. He wrote also the *Life of the holy father, monk, and bishop Cuthbert* and the *History of the abbots of this monastery in which I rejoice to serve the divine goodness, Benedict, Ceolfrid, and Hwaetbert*. In all three Bede searches for, and finds, nothing more than miracles. In the *Ecclesiastical history*, however, if not so much in the other two, he searches for, and finds, not only miracles, and the *Ecclesiastical history* is a very important history. Also, Paul the Deacon wrote the *History of the Lombards*. In the east, Syncellus wrote the *Chronological collection*, Theophanes wrote the *Chronography*.

Einhard reports: during his meals Charlemagne would listen to the reading of books or some other entertainment; he took great pleasure in the books of st Augustine and especially *The city of god* (24); the emperor applied himself to mathematics and followed the course of the stars with great attention; he tried also to learn to write, and he tried very hard, but having begun too late in life, he made little progress (25). Himself, Einhard learned to write perfectly, and the *Life of Charlemagne* is an important chronicle.

In Islam, Umar wrote to Abi ibn Wakkas: throw them in the water, if they contain right guidance, god has given us better guidance, if they contain error, god has protected us against it.

Nevertheless, Umar had the koran committed to writing. Uthman had it edited into a canonical

version and all other versions in circulation suppressed.

One century later, ibn Ishaq wrote *The life and campaigns of the prophet*.

At this time also the Muslims found out, as the Hebrews had, and the Christians had, that the guidance god had given us was not enough. God's guidance needed guidance. The first teachers of the law appeared, to teach what god taught, including, in the generation of ibn Ishaq, the first important, Abu Hanifah. In the next two generations more teachers of the law appeared, to teach what god taught as well as what the earlier teachers taught, including the most important, al-Shaffi and ibn Hanbal. So the Muslims found out also, again as the Hebrews had, and the Christians had, that god had given us more guidance than it had at first appeared. The divine authority of the koran was joined by the divine authority of the sunnah. Hadith thus had to be collected. The greater thus the need also grew to teach what the koran taught, what the sunnah taught, which hadith were hadith, which were not, what the teachers taught, what they ought to have taught. Nor has Islam since suffered any more than Judaism or Christianity from dearth of teachers teaching what god taught, teaching what the teachers taught, and so on indefinitely.

Thus, in the darkest centuries, too, in Christendom the record kept examining itself, daily, manually, and laboriously, if in no other ways. In Islam the record began examining itself. And very little of it as there still was, the Muslim record began examining itself with increasing vigor, too.

The two and a half centuries from al-Farghani to Anselm.

In these two and a half centuries Christendom remained as it had been, in more or less complete ignorance. Islam did not. The Muslims became philosophers. And these are the centuries of the Muslim philosophers' greatest advances in the acquisition of knowledge.

Ibn Khaldun writes: Muslim rule flourished, the Muslims settled, became versed in the crafts and sciences, and began to desire to study philosophy; so al-Mansur sent envoys to the Roman emperor to ask for books, and the emperor sent him back Euclid's book and some writings on physics.

And the Muslims were in a particularly favorable position to judge their predecessors and their judgment of their predecessors.

They encountered the great abundance of books in Greek all at once. This abundance had been sorting itself out, counting back to Homer, for fifteen and a half centuries. The council of our predecessors had been called into session formally, counting back to Aristotle, for eleven and a half centuries. Encountering this great abundance all at once could be a favorable circumstance, and in this case proved to be a very favorable circumstance.

They encountered the great abundance bringing along with them great poverty. They were not schooled within the abundance, in any one part of it, and in the routines which any one part was likely to impart against the others. This could be a favorable circumstance as well, and it proved to be in this case a very favorable circumstance as well.

They brought along with them great poverty, yet not destitution. The teachers of the law had begun imparting their lessons.

To judge by the fact that al-Farghani kindled the first light, the analogy with Gerard extends to love of the *Almagest*, and as likely as not to love of the *Almagest* before reading it, too.

And yet there were in this case more favorable circumstances still.

Counting from al-Farghani back to st Paul, in these seven and a half-odd centuries the Greek record had amassed apostles, fathers, more fathers, and still more teachers teaching what the apostles, fathers, and teachers taught. God, however, had protected the Muslims against all that. About all that the koran is clear and distinct. From its second sura: as to the unbelievers who say, we believe in god and the last day, but are not true believers, they shall be sternly punished for their lies (*id.*). Through its ninety-eighth sura: the unbelievers among the people of the book and pagans shall burn in hell forever, they are the vilest creatures (*id.*).

Also, Christian doctrines were transformed into philosophy in the course of relentless extermination of infidelity and heresy. Christian philosophy remained philosophy in the same way. And when light was rekindled in Christendom,

Anselm was informally condemned by his brethren, Roscelin and Abelard were formally condemned for heresy. It was in Toledo, not in Christendom, that Gerard kindled the brightest light. In Islam, at the time of al-Farghani, al-Ghazali's question: do you then say that the philosophers are infidels and those who hold their beliefs must be killed? and his answer: the errors of the philosophers are of twenty kinds, and on account of three they must be pronounced infidels, on account of the other seventeen they must be pronounced heretics, were still two and a half-odd centuries in the future.

So the Muslims became philosophers.

They began establishing the importance of Ptolemy from the first. Al-Farghani's *Elements of the science of the motions of stars* is an introduction to the *Almagest*. In the same generation Habash al-Hasib's *Compendium* is a more mathematically sophisticated introduction to the *Almagest*. They began reestablishing the importance of Euclid, Archimedes, and Apollonius – and in the same way in which their immediate successors had first established it, by building on their results – in the generation after al-Farghani, with the labors of al-Khwarizmi and banu Musa. In the same generation they began establishing the importance of Aristotle, with the labors of al-Kindi, and established it conclusively two generations later, with the labors of al-Farabi.

So there are in these two and a half centuries also the physicists Thabit ibn Qurra, ibn Khurdadbihi, al-Razi, al-Battani, ibn Yunus, ibn al-Haytham, ibn Sina, al-Zarqali. The mathematicians Abu Kamil, Abu'l-Wafa, al-Karaji, Khayyam. The historians al-Tabari, al-Masudi, al-Biruni.

And as far as the record is concerned the importance of these philosophers cannot be overstated.

The record always examines itself. But not always all of itself. Counting from al-Farghani back to Clement of Alexandria and Origen, with whom the assimilation of Christian doctrines into philosophy began, the record had for six centuries been examining steadily more its steadily growing newer parts, and steadily less its older and very much more important parts.

These philosophers reversed that.

Also, god has not only tended to be monolingual, he has tended to disapprove of the languages he does not speak. And of these languages the language of the world is only one. When he spoke Hebrew, he would not tolerate other languages. When he learned Arabic, he would not tolerate other languages either.

These philosophers showed that the record is one, Greek and Arabic indiscriminately. And the record is one, because the council of our predecessors is one, in permanent session, judging the importance of the philosophers, and all their kinds, and the not philosophers, whatever their kinds, and over time conclusively.

The two-odd generations from Anselm to Gerard.

Gerard corroborated forcefully the judgment of his Muslim predecessors. The record is Greek, Arabic, and Latin indiscriminately. Aristotle, Euclid, and Ptolemy are very important. So much so, in fact, one century-odd later, in the *Theological summa*, no less, Aquinas builds on the authority of the philosopher more than he does on the authority of the most illustrious teacher, the most blessed Augustine, the subduer of heretics, the defender of the faithful, the victor in famous contests, and very much more than he does on the authority of the apostle.

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Thus the nearer past. Its examination shows what is not lost. It shows the great abundance which the Muslims, unaware of it, when they became philosophers, found. And the greater abundance which the Christians, unaware of it, when they became philosophers, found.

The examination of the remoter past can show what is lost.

It will be said that, the lost being lost, there is no knowing what is lost.

Not so. Neglect and ignorance destroy the not important so much more than the important as there is not important than important. Prejudice and bias affirm importance, and the more so the stronger they are.

Hence, if anything not important survives, it cannot be likely that much important is lost. If much not important survives, it cannot be likely that anything important is lost. And if much too

much not important survives, nothing important is lost. Not 1 thing.

And to show this, first the Greek record can be examined. It can be examined how many philosophers, and how many not philosophers, how many very important, how many important, how many not important, and how many very not important, the Greek record has lost.

In particular, it can be examined how many Pythagoreans the record has lost. How many sophists it has lost. How many of the seven wise men it has lost. And how many mathematicians it has lost.

The Pythagoreans.

Pythagoras is the fourth philosopher, very early in the development of philosophy. The fourth philosopher is also the first philosopher to have followers. And these are the Pythagoreans.

Laertius reports: the school of Pythagoras continued for 9 or 10 generations; for the last Pythagoreans, whom Aristoxenus himself saw, were Xenophilus, Phanton, Echecrates, Diocles, and Polymnastus, who were students of Philolaus and Eurytus (VIII, 45-6).

The dates are,

570 - 495 Pythagoras,

371^{BC} Aristoxenus.

Counting 30 years per generation, the generations from Pythagoras through the time of Aristoxenus are 6-odd. The first school of philosophers produced philosophers for 6-odd generations, two centuries' worth of philosophers.

By the time of the last Pythagoreans it was not so early in the development of philosophy any longer. Schools abounded. Socrates had had his many followers, and many of his followers had had his own followers each. Euclid of Megara, Antisthenes, Aristippus, Plato had a school of his own each. Then their students began having a school of his own each. Aristoxenus is thus a student of Plato's student Aristotle.

And the abundance of new schools can explain the disappearance of the oldest.

In the *Republic*, while criticizing Homer by going through a long list of deficiencies of his, Plato asks: did Homer teach some men who loved him? did he pass to any followers of his a distinct way of life as Pythagoras passed to his followers? it is for this reason that Pythagoras is especially

loved, and even today his followers are conspicuous for their Pythagorean way of life (X, 600a-b).

Two generations after Plato, a dozen new schools were each passing a distinct way of life, the founder of each for this reason especially loved. The distinct Pythagorean way of life, and loving especially Pythagoras, had apparently become superfluous.

Six-odd centuries after the last Pythagoreans, Iamblichus wrote *The life of Pythagoras*.

His date is,

240^{AD} - 325 Iamblichus.

By this time it was not early in the development of philosophy, not early at all. Philosophy had developed for eight and a half-odd centuries. Iamblichus is contemporary with the fathers of the church, two centuries' worth of fathers by his time.

And at the end of *The life of Pythagoras*, having dealt with Pythagoras's death, and then with his successors in charge of the school, Iamblichus concludes: most of the Pythagoreans are probably unknown, but the following are known and celebrated (266). And proceeds to enumerate the known and celebrated, arranged Homeric fashion, contingent by contingent, first the contingents of the men, 29 Crotoniates, 38 Metapontians, 1 Acragantine, 1 Elean, 43 Tarentines, and so on, for a total of 218 men, then the contingent of the women, for a total of 16 women. Men and women 234. While listing Pythagoras's successors in charge of the school, too, Iamblichus has also noted 8 who are not in the following contingents. The grand total is thus 242.

Most of the Pythagoreans are probably unknown. But the known and celebrated are 242. The average over 6-odd generations is about 40 per generation. Known and celebrated six-odd centuries after the last of them.

It can be concluded on the ground of these numbers alone that the record has not lost any important Pythagoreans, not 1. The record has not lost many very not important Pythagoreans either.

And to draw the conclusion in particular, the particulars – all the known and celebrated – can be sorted out, into very important, important but not very important, not important but not very not important, and very not important. The fact that

they can be thus sorted out, too, shows the overabundance, not just abundance, of the record.

Adding the master, the grand total becomes 243.

And 6 of the 243 are very important. Pythagoras, Alcmaeon, Parmenides, Empedocles, Theodorus of Cyrene, and Archytas. All 6 have been presented above in some detail.

Pythagoras discovered proof. He proved that the sum of the angles of the triangle is two right angles. He discovered the incommensurability of the side and diagonal of the square, and thus the irrationality of $\sqrt{2}$. He discovered the method of assigning a Pythagorean triple to every odd number, if a is odd, a , $\frac{a^2-1}{2}$, and $\frac{a^2+1}{2}$ are a right triangle.

He discovered that number is the principle of all things.

He said that the whole world is a harmony and number.

He discussed the order of the planets.

The investigation of the musical intervals begins with him.

He said that 1 is god and good, 2 is a demon and bad.

He said that the soul is number. It is immortal. And any soul can be in any body.

Himself, he was first Aethalides, a son of Hermes, next he was Euphorbus and was wounded as such by Menelaus at Troy, next he was Hermotimus, next he was the Delian fisherman Pyrrhus, and only then he became Pythagoras.

He coined philosopher. Life is like the Olympic games, some go there to compete, some to make money by selling and buying, some to just watch what and how is done, and those last, a very few, call themselves lovers of wisdom. Or he calls himself lover of wisdom because no one but the god is wise.

He had followers.

He gave his followers precepts to follow. Do not stir the fire with a knife. Do not walk on the main road. Do not shake hands too eagerly. Do not keep swallows under the roof. Do not make water on nail- and hair-trimmings. Do not look back when crossing a boundary. Do not eat red mullet. Do not eat the heart of an animal. Do not

touch beans.

He established the brotherhood of his followers at Croton. The brotherhood became the aristocracy ruling the city (Laertius, VIII, 3).

The democratic opposition brought down the aristocracy. The Crotoniates set the houses of the brotherhood on fire. The master escaped. But a field of beans barred his way. He halted rather than touch beans, and his pursuers cut his throat.

A deadly snake tried to bite him, he bit and killed it himself. In the theater, he rose from his seat, and those around him saw his golden thigh. Crossing the Cosas, the river rose from her bed and greeted him, good morning, Pythagoras. On the same day, at the same hour, he appeared at Croton and at Metapontum. These four events Aristotle records (fr. 191). Later on, events of even greater portent are recorded. He taught bears to abstain from hunting and oxen to abstain from beans (Porphyry, *Pythagoras*, 23-4).

His teachings came from Apollo, he had received them, he said, from the god's Delphic priestess, Themistoclea (Laertius, VIII, 21).

He was the man. This is how his followers called him, the man, and never by his name (Iamblichus, *Pythagoras*, 18).

Alcmaeon said that the ruling power is in the head. He said that the senses are connected to the brain.

He excised eyes to investigate their nature.

He said that health is the equal rule of opposites, of moist and dry, cold and hot, bitter and sweet, and the cause of disease is the rule of one of them.

Parmenides discovered the principle of contradiction.

He said that all is one in form. It yet appears as many and as such has two principles, fire and earth.

He discovered that the earth is a sphere.

He said that the morning star is the evening star.

And they wander about two-headed, deaf, blind, befuddled, hordes with no judgment, believing that what is and what is not are the same and not the same and everything turns back on itself.

Empedocles said that earth, water, air, and fire are the elements. The sources of motion are love

and strife.

And can anything increase the all? Where will it come from? And how will it perish? No, nothing can be void of them.

He said that the earth is at rest because the very fast motion of the heaven prevents it from moving, like water in a spinning cup.

He said that the parts of the body are ratios of the elements. In bones the ratio of earth to water is 2:6, of earth to fire 4:4.

He said that the soul is the ratio of the elements of the parts of the body.

Also, you will learn from him all remedies for illness, and for old age, and how to bring back from Hades the strength of the dead.

He was once a boy and a girl and a bush and a bird and a fish.

He is an immortal god amongst you.

He jumped into Etna.

Theodorus of Cyrene proved that $\sqrt{3}$, $\sqrt{5}$, ..., $\sqrt{17}$ are irrational.

Plato has him listen through the general conversation of the *Theaetetus*, then through the general conversation of the *Sophist*, then through the general conversation of the *Statesman*, and notes: Theodorus since youth inclined away from general conversations.

Archytas doubled the cube.

He was also a fine general. Elected seven times to lead the Tarentines, he never lost a battle (Laertius, VIII, 79, 82).

The results of these 6 philosophers all break new ground, greatly, massively, extensively and intensively. There are few fundamental developments in philosophy, good and bad, that do not begin with Pythagoras. With Alcmaeon medicine became a theoretical concern. There are no discoveries more important than Parmenides's, the principle of contradiction and the sphericity of the earth, both. Empedocles's is a decisive advance in the solution of the problem of the elements, in the solution of the problem of the causes, in the investigation of the body, in the investigation of the soul. The results of Theodorus of Cyrene and Archytas, the discovery of irrationals other than $\sqrt{2}$ and the first spectacular demonstration, are decisive advances in mathematics.

8 of the 243 are important, if not very impor-

tant. Zaleucus, Charondas, Hippasus, Melissus, Hippo, Philolaus, Menestor, and Ecphantus. All 8 have been presented above in some detail as well.

Zaleucus first committed to writing the laws of a Greek city, of Locri.

Charondas wrote down the laws of Catana.

Hippasus said that fire is the principle.

The Pythagoreans were of two kinds, listeners and students, and the listeners did not recognize the students as Pythagoreans because, the listeners said, the students had received their doctrines not from Pythagoras but from Hippasus.

Listeners renders ἀκουσματικοί, students μαθηματικοί.

The master had sworn the brotherhood to secrecy. Hippasus first revealed the construction of the dodecahedron to the uninitiated, and he was drowned at sea for that.

He used vases of different volume and shape to teach consonances (Theon of Smyrna, II, 12).

He said that all things are in motion, but all motion will come to an end (Laertius, VIII, 84).

He was also said to have written a poem defaming Pythagoras (7).

Melissus said that all is one in matter.

He was also a fine general, defeated Pericles (Plutarch, *Pericles*, 26).

Hippo said that the soul is water.

He was also an atheist.

Philolaus said that there is fire in the center of the world. There is another fire at the circumference, but the center is primary and around it 10 bodies revolve, the heaven, the 5 planets, the sun, the moon, the earth, and closest to the hearth the counter-earth.

The doctrines of the Pythagoreans were secret down to the time of Philolaus. He first brought them out in the three famous books which Plato bought for 100 minae.

100 minae could maintain 500 infantrymen for 40 days in the field.

Menestor wrote on plants. Theophrastus quotes him 7 times.

Ecphantus said that the earth rotates on its axis.

He also said that atoms are the principles.

The results of these philosophers – and one of them, predating as he is the first philosopher, is

rather a predecessor of the philosophers – do not break new ground. They are nevertheless all 8 of them important. Zaleucus and Charondas are among the earliest Greek lawgivers. The other 6 are among the first to examine, corroborate, affirm, deny the new results of their predecessors. Hippasus and Melissus are part of the development of the problem of the principles, Philolaus and Ecphantus are part of the development of the problem of the earth, Hippo and Menestor are part of the development of the investigation of organisms and the soul.

These philosophers also attest the beginnings of three developments which will not leave philosophy.

The first is attested by the listeners.

The philosophy of the listeners consisted of undemonstrated precepts ordering them to do certain things. They followed these precepts as divine revelations, said nothing of their own, thought it wrong to do so, and considered whoever knew the greatest number of precepts the wisest.

Cicero also reports: when asked what are the reasons for what they said, the Pythagoreans replied, *ipse dixit* (*Gods*, I, 10).

And in the two and a half millennia since none of this has lost any of its power. Following precepts as divine revelations. Saying nothing of one's own. Thinking it wrong to do so. Considering whoever knows the greatest number of precepts the wisest. *Ipse dixit*.

The second development is attested by Zaleucus and Charondas, enlisted as they are in the contingents of Pythagoreans. Zaleucus predates Pythagoras by some four generations, Charondas predates him by one generation or so.

Predating Thales by two or three generations had not prevented Zaleucus from becoming a student of Thales by Aristotle's time already. Aristotle reports: some say that Lycurgus and Zaleucus were students of Thales, and Charondas was a student of Zaleucus; but this confuses the times of these men.

Three centuries later, three and a half before Iamblichus, Zaleucus had become a student also of Pythagoras (*Siculus*, XII, 20).

Clearly, while he may have found it difficult to be a student of the yet unborn first philosopher,

he could easily be a student of the fourth philosopher during one of his earlier transmigrations. Either way, it was at the same time, the century before the first Christian century, that the laws of Zaleucus were equipped with a preamble: all citizens should believe that the gods exist.

It was at the same time also that, having lapsed for three centuries, interest in the Pythagorean way of life revived.

In the following century, the first Christian, gods developed a general fondness for having what they said and did committed to writing. The god's son, Orpheus, had had his writings in circulation for some time. Now Hermes also, having become Troth and hence Trismegistus, had a corpus of his writings come into being as well. The most consequential divine corpus came into being as well. A corpus of the writings of Democritus was authored. Because he was, like Hermes Trismegistus, an alchemist. And a corpus of Pythagorean writings was authored. Not because Pythagoras was a mathematician. The corpus included writings by the man himself, by his wife, by his sons, by his daughters. Timaeus of the *Timaeus* was also brought to life to make a contribution to the corpus.

Iamblichus does not have Timaeus in the contingents of Pythagoreans. But he has Zaleucus and Charondas. Showing, where the Pythagoreans, in particular, and the philosophers, in general, are concerned, the tendency of the record to increase, not decrease, their number.

The third development is attested by those in the contingents whose association with Pythagorean brotherhoods, independent of Iamblichus's enumeration, is tenuous.

Among the very important, the independent association with Pythagorean brotherhoods of Alcmaeon, Empedocles, and Archytas is strong, that of Parmenides and Theodorus of Cyrene tenuous. Among the important, if not very important, the independent association with Pythagorean brotherhoods of Hippasus, Philolaus, and Ecphantus is strong, that of Melissus, Hippo, and Menestor tenuous.

Showing the strong tendency of the record to increase the number of the Pythagoreans, in particular, and of the philosophers, in general. And the means is just that, enlisting philosophers

in schools, as many philosophers as possible in as many schools as possible. Or, as Zaleucus and Charondas also show, impossible.

Laertius reports: Parmenides was a follower of Xenophanes, but Theophrastus says that he was a student of Anaximander, and Sotion says that he later became a follower of the Pythagorean Ameinias (IX, 21).

Pace Theophrastus, Parmenides was not a student of Anaximander. This confuses the times of these men. But it does show that Zaleucus was not too exceptional in his choice of teachers. With Xenophanes Parmenides is bound in the Eleatic tribe. Plato brought this tribe into being. The Eleatic stranger in the *Sophist* reports: our Eleatic tribe originated with Xenophanes. In the *Theaetetus* the Eleatics are the followers of Parmenides. As to Ameinias, who would establish the Pythagorean credentials of Parmenides, he is not one of the known and celebrated in Iamblichus's contingents. Raising the total of the known and celebrated to 244.

Plato brought into being the tribe of Heracliteans as well, so that: to everything the Heracliteans say the Eleatics say the opposite.

Melissus, for his part, was not just a Pythagorean either. Laertius reports: Melissus was a student of Parmenides, then he associated with Heraclitus (IX, 24).

6 of the 244 are very important, then, 8 are important, if not very important.

And not more than 5 are not important, rather than very not important. Epicharmus, Milo, Theano, Eurytus, and Thymaridas.

Epicharmus.

Plato quotes him a couple of times, Aristotle quotes him a half dozen times.

In Plato Epicharmus comes the closest to importance, and it is not close at all, when Plato enlists him in one his motley armies. There is the Eleatic tribe. There are the Heracliteans so that to everything they say the Eleatics say the opposite. Also, are we to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias, and fight against Periander, Perdiccas, Xerxes, and Ismenias? Also, with the exception of Parmenides, all wise men in the past, Protagoras and Heraclitus and Empedocles and the masters of the two kinds of poetry, Epicharmus in comedy,

Homer in tragedy, have said that nothing ever is and all things are always becoming.

On justice, one of the spurious Platonic dialogues, has also this:

no one is willingly wicked
or unwillingly blessed (374a).

The closest Epicharmus comes to importance in Aristotle, and it is not too close either, is in the *Poetics*. Aristotle reports: the Dorians claim the discovery of both tragedy and comedy; the Megarians claim that of comedy; those in Greece say that it began when Megara became a democracy, those in Sicily claim it because Epicharmus was from their country and he was much earlier than Chionides and Magnes; the discovery of tragedy the Peloponnesian Dorians claim, pointing to the origin of the words, comedy, and drama (3).

One of the illustrations of spurious antithesis in the *Rhetoric* is also this:

once I was a guest of theirs,
on another day they were my hosts (III, 9).

Epicharmus became a Pythagorean in the first Christian century. Plutarch first counts him one (*Numa*, 8).

Milo.

Milo was not an ordinary man. Or an ordinary philosopher. Or an ordinary Pythagorean.

He was a wrestling champion six times at the Olympic games, six times at the Pythian games, nine times at the Nemean games, ten times at the Isthmian games (Eusebius, *Chronicle*, I, 202).

Simonides celebrated him in verse (ep. 25).

Darius admired him greatly (Herodotus, III, 137).

He was a fine general. Attacked by the neighboring Sybarites, the Crotoniates went to battle under Milo – in a lion's skin, wielding a club, like Heracles – vanquished the enemy, and laid Sybaris to waste (Siculus, XII, 9).

The Sybarites being Sybarites, the destruction of Sybaris was clearly a feat of philosophy. And so were Milo's other feats.

He ran around the Olympic track with a four-year-old heifer on his shoulders, killed it with one blow, and ate it by himself before the end of the day (Athenaeus, X, 412e-f).

On another occasion, the roof of the common Pythagorean mess caved in, and Milo held the falling roof until all philosophers escaped

(Strabo, VI, 1.12).

On still another occasion, walking by himself through the woods, Milo saw a log cleft with wedges; he thrust his hands and feet into the cleft to split the log asunder, but the wedges slipped, the log snapped back, Milo was trapped, and wild beasts ate him (*id.*). Clearly beasts not taught to abstain from meat.

It was at Milo's house that the philosophers were gathered, when evildoers – offended at being excluded from the brotherhood, Laertius notes – set the house on fire (VIII, 39).

Milo's wife, Mya, is herself known and celebrated in the contingent of women in Iamblichus.

Not quite two centuries after him, Milo appears in Aristotle once, to illustrate the doctrine of the mean: what is one athlete's mean diet is too much for another athlete and too little for Milo (*Nic. ethics*, II, 6).

Seven centuries after him, Galen mentions Milo several times. In the *Exhortation*, for instance, exhorting the young to embrace the arts, rhetoric, music, geometry, astronomy, grammar, the law, and especially medicine, Galen teaches them: strength is not a virtue (*id.*). And to help them appreciate the lesson, Galen relates the heifer incident and a version of the wedges and log incident, and exclaims: what an incredible stupidity (*id.*)!

Then again, could Galen kill a four-year-old heifer with one blow, and eat it by himself before the end of the day? Would he, on seeing a log cleft with wedges, thrust his hands and feet into the cleft to split the log asunder?

Theano.

Porphyry reports: when Pythagoras came to their city, the Crotoniates liked him so much, they ordered him to teach their young men, and even young women came to listen to him, including the illustrious Theano (*Pythagoras*, 18-9).

Pythagoras married Theano. They had several sons and daughters.

Theano also said: it is proper for a woman to sacrifice when she rises from the embraces of her man (Iamblichus, *Pythagoras*, 27).

Eurytus.

Aristotle mentions him once: Eurytus arranged pebbles to show the numbers of man and of horse (*Metaphysics*, XIV, 5). Theophrastus reports that

Archytas commended Eurytus for thus arranging pebbles, then commends him himself: because one would expect those who lay down principles to show what follows from the principles (*Metaphysics*, 11).

And the more should Eurytus be commended for having met that expectation the more the number of philosophers who fail to meet it grows. There is yet no helping what turned out to follow.

Thymaridas.

Iamblichus reports that Thymaridas discovered: a flower (*Introduction*, 88-9). The flower is a way of solving indeterminate sums. Iamblichus describes it verbally. In letters, it can be reduced to this. Given the sums

$$x + x_1 + x_2 + \dots + x_n = a,$$

$$x + x_1 = b_1,$$

$$x + x_2 = b_2,$$

$$\dots$$

$$x + x_n = b_n,$$

they are solved by

$$x = \frac{(b_1 + b_2 + \dots + b_n) - a}{n - 1}.$$

This should have been trivial for the early Pythagoreans already, the students, if not the listeners. Nor is Thymaridas noted before Iamblichus. In particular, he is not noted by Eudemus in his description of the development of mathematics through Euclid. And in his description Eudemus notes not only many not important mathematicians, he notes many very not important.

The remaining 225 – 26 Crotoniates, 38 Metapontians, 40 Tarentines, and so on, for a total of 209 men, and 15 women, as well as the teacher who would establish the Pythagorean credentials of Parmenides – are very not important.

One of them should yet be singled out.

Abaris. He is by himself the contingent of the Hyperboreans.

Pindar sings:

the Hyperboreans are blessed men,

untouched by sickness or by old age,

dwelling apart from toil or struggle (*Pythian*, 10).

Herodotus writes: among the peoples in the north no one has heard of Hyperboreans (IV, 32).

And in particular, Herodotus writes: I will not tell the tale of the Hyperborean Abaris who carried an arrow around the earth without eating anything at all (36). Others told the tale. So later

on, the arrow began carrying Abaris (Iamblichus, *Pythagoras*, 19).

Thus the 244 collected from Iamblichus's enumeration plus the master plus the teacher of Parmenides.

And even as this is more than enough Pythagoreans, for the sake of completeness 3 more have to be added. Democedes, Hicetas, and Eudoxus. They have also been presented above in some detail.

It was at Democedes's time, and not least because of him, that the Crotoniates became famous as the best doctors.

Hicetas discovered that the earth rotates on its axis.

Eudoxus formulated the theory of proportion.

He formulated the axiom of measure.

He discovered the method of exhaustion.

He proved that the pyramid is $\frac{1}{3}$ of the prism

of the same base and height, the cone is $\frac{1}{3}$ of the cylinder of the same base and height,

He formulated the theory of the motions of the heavenly bodies in concentric circles.

He measured the periods of the planets.

He catalogued 47 constellations.

He measured the radius of the earth.

Democedes belongs in the enumeration on the authority of Iamblichus, who writes about him earlier in *The life of Pythagoras*. Hicetas and Eudoxus belong in the enumeration on the authority of Laertius. He investigates Pythagoras and the Pythagoreans in book VIII of *The lives and doctrines of the philosophers*. He treats 8 under his own head each, Pythagoras, Empedocles, Epicharmus, Archytas, Alcmaeon, Hippasus, Philolaus, and Eudoxus. And he writes about Hicetas while discussing Philolaus (VIII, 85).

Tabulating.

The important, including the very important, are 17,

703	Zaleucus,
610	Charondas,
570 - 495	Pythagoras,
562	Democedes,
532	Alcmaeon,
519	Hippasus,
515 - 445	Parmenides,

495 - 435	Empedocles,
481	Melissus,
470	Hippo,
469	Philolaus,
460 - 394	Theodorus of Cyrene,
448	Hicetas,
433	Menestor,
427	Archytas,
427	Ecphantus,
408 - 356	Eudoxus.

5 are not important, if not very not important,

556 Epicharmus,

555 Milo,

550 Theano,

439 Eurytus,

397 Thymaridas.

225 are very not important.

The date of Laertius is,

219^{AD} Laertius.

He is thus an older contemporary of Iamblichus, himself writing six centuries after the last Pythagoreans. And while Iamblichus can show better that the record has not lost any important Pythagoreans, Laertius can show better how, and why.

The lives and doctrines of the philosophers is the most important source, by very far, on the earlier development of philosophy. Because Laertius is not only the most important source, by very far, on the philosophers, he is the most important source, by very far, on the sources on the philosophers.

The ten books of *The lives* are divided into sections, for a total of 1 204 sections. Book VIII, on Pythagoras and the Pythagoreans, comprises 91 out of the 1 204. And in these 91 sections Laertius quotes explicitly 41 of his authorities.

The important, including the very important, are 21,

570 - 473	Xenophanes,
540	Heraclitus,
495 - 435	Empedocles,
484 - 425	Herodotus,
475 - 411	Antiphon,
437 - 361	Aristippus,
427 - 347	Plato,
408 - 356	Eudoxus,
395 - 317	Ponticus,
384 - 322	Aristotle,
371 - 287	Theophrastus,

371	Aristoxenus,
371	Dicaearchus,
350 - 259	Timaeus,
320 - 230	Timon,
312 - 241	Callimachus,
282	Hermippus,
274 - 194	Eratosthenes,
249	Sotion,
186 - 114 ^{BC}	Apollodorus of Athens,
85 ^{AD} - 155	Favorinus.
11 are not important, if not very not important,	
505	Xanthus,
490 - 426	Ion of Chios,
450 - 386	Aristophanes,
340	Neanthes,
297	Hieronymus of Rhodes,
252	Hippobotus,
234	Satyrus,
234	Sosicrates,
215	Heraclides Lembus,
112	Alexander Polyhistor,
106 ^{BC}	Demetrius of Magnesia.

The remaining 9 are very not important, Anticlidus, Cratinus, Mnesimachus, Aristophon, Dionysius, Theaetetus, Alcidas, Diodorus of Ephesus, Demetrius of Troezen.

The council of our predecessors, in permanent session to adopt the sound in what our predecessors have said and avoid the erroneous, is how, and why, the record has not lost, nor can it have lost, any important Pythagoreans.

Ignoring the very not important, the distribution of the other 32, important and not important, counting centuries from the year of birth of Pythagoras, is,

570- 471	5	2,
470- 371	8	1,
370- 271	5	2,
270- 171	2	4,
170- 71	—	2,
70 ^{BC} - 30 ^{AD}	—	—,
31- 130	1	—,
131- 230	—	—.

In this, as in so much else, the sessions of the council are vigorous in the first three of these eight centuries, increasingly less vigorous in the following five. Yet, even as the darkest of dark ages was descending, Laertius, in the last of these eight centuries, wrote the most important, by very

far, history of philosophy. In the next generation Iamblichus knew and celebrated not less than 244 Pythagoreans.

cdv

The sophists.

Aristotle writes in the *Sophistical refutations*: just as in counting those who are not very clever can be taken in by those who are, so in arguments those who are not good at them reason poorly both themselves and when listening to others; for there are inferences which appear true but are not; there are also those who would rather appear wise than be truly wise, for this is the art of the sophist, the appearance of wisdom without the reality; the sophist is the one who makes money from apparent but not real wisdom (I, 1).

The art of the sophist is the appearance of wisdom without the reality. The sophist is the one who makes money from apparent but not real wisdom. Taking in the not very clever ones.

And, on the one hand, it must be a matter of course that there would be this art, the appearance of wisdom without the reality, and there would be the one practicing it, making money from apparent but not real wisdom, taking in the not very clever ones. This art, and the one practicing it, both, must be as old and ubiquitous, both, as men's opportunism. Very much older than philosophy. Once philosophy has begun, too, may it not be that philosophy is this art, and the philosopher the one practicing it? taking in the not very clever ones?

On the other hand, however, in the generation before Aristotle Plato collected the practitioners of this art – clearly the real ones, not the apparent – into the entity of the sophists, bestowed on it the odium it deserves, and Plato's odious, if fictional, entity of the sophists has populated the history of philosophy ever since.

Plato is himself explicit that the art of the sophist is old and ubiquitous. He writes in the *Protagoras*: the art of the sophists is very ancient; the men who practiced it in ancient times, however, fearing the odium attached to it, disguised it sometimes as poetry, as Homer, Hesiod, and Simonides did, sometimes as mystery or prophecy, as Orpheus and Musaeus did, sometimes even as athletics, as Iccus and Herodicus did;

Agathocles, a great sophist, disguised it as music, and so did Pythoclides.

Plato is waging a war. Also in the *Protagoras*, he writes of the Spartans: the true virtue of the Spartans is not fighting prowess but wisdom; indeed, to be a Spartan is to be a philosopher more than it is to be a fighter. And it can be said of Plato that his true virtue is not wisdom but fighting prowess, indeed, Plato is a fighter more than he is a philosopher.

Fighting needs an enemy. And an old and ubiquitous enemy is very well. But a newer and more localized enemy is better. And the sophists are this enemy.

What the war is over is clear. Still in the *Protagoras*: the sophists are peddlers of nourishment for the soul, and if you do not know what you are buying, they may well deceive you. The war is over the nourishment of your soul.

And Plato fights the enemy unflinchingly. Fighting the enemy is a main task of the *Greater Hippias*, *Lesser Hippias*, *Protagoras*, *Meno*, *Euthydemus*, *Gorgias*, *Phaedrus*, *Republic*, *Theaetetus*, *Sophist* – more than a third of the genuine dialogues – at a minimum.

In the *Phaedrus* (266e-7d) Plato enumerates the enemy, too.

And to the end of showing how many philosophers, and how many not philosophers, the record has lost, it can be examined also how many sophists it has lost.

There are inferences which appear true but are not. There is the appearance of wisdom without the reality. There are also real associations of the philosophers, like the Pythagoreans, and fictional, like the sophists. Pythagoras passed a distinct way of life to his followers, for this reason he was especially loved, and his followers were conspicuous for their Pythagorean way of life. The sophists are associated by nothing firmer than Plato's disapproval and the continuing approval of Plato's disapproval. The examination of the sophists can thus also show that, much like prejudice and bias, disapproval affirms importance, and the more so the stronger it is.

There are 10 sophists in Plato's enumeration.

2 are very important. Protagoras and Hippias. Both have been presented above in some detail.

Protagoras said that man is the measure of all

things.

He said that of the gods he cannot know either that they are or that they are not, for many are the barriers hindering knowledge, including the obscurity of the matter and the brevity of man's life. Hence, he is the second philosopher honored with a condemnation for impiety and the first honored with the burning of his books.

He was the first philosopher to concern himself with the state. Aristoxenus said that nearly all of Plato's *Republic* could be read in his *Antiarguments*.

He was the first to charge a fee for teaching. He was the first to collect a fee of 100 minae.

100 minae was what Plato paid for the three famous Pythagorean books.

He drew the laws of Thurii.

Hippias discovered the quadratrix. The quadratrix solved the problem of trisecting the angle.

He compiled the list of Olympic victors. The historians reckoned by olympiads.

He made more money than any other two sophists combined.

And the importance of Protagoras and Hippias each is established unshakably by the amount of abuse each receives in a Platonic dialogue after Platonic dialogue after Platonic dialogue.

3 of the 10 are important, if not very important. Gorgias, Prodicus, and Thrasymachus. All 3 have been presented above in some detail as well.

Gorgias wrote *On the not existent, or nature*. Nothing exists, and even if anything existed, it could not be known, and even if it could be known, it could not be expressed.

He gave speeches to his students to learn by heart. Like giving them shoes rather than teaching them how to make shoes. Two of the speeches the record has failed to lose, an *Encomium for Helen* and an *Apology for Palamedes*. So they can still be learned by heart.

Prodicus taught that first of all the right use of the word should be learned. He was the best at splitting words (Plato, *Laches*, 197d).

He said that the gods are personifications of things beneficial to men (Cicero, *Gods*, I, 118).

Thrasymachus said that justice is what is useful to the stronger. For, whether in a tyranny, or in a democracy, or in an aristocracy, the rulers make the laws, they make them useful to them-

selves, and proclaim what they have made just.

The amount of abuse each of these 3 receives from Plato is proportionate to the fact that each is important, but not as important as Protagoras or Hippias.

2 of the 10 are not important, rather than very not important. Tisias and Polus.

Tisias Aristotle notes once: after the first writers of speeches came Tisias, and after him Thrasymachus (*Refutations*, 34).

Plato abuses him twice, by including him in the enumeration of 10, and by reporting a discovery of his: Tisias discovered that if a little but spunky fellow beats up a big coward and steals his cloak, in court the big fellow should posit, he did not beat me by himself, he was helped; and the little fellow should riposte, would a man like me attack a man like him (*Phaedrus*, 273b-c). The discovery was entangled in a dispute over priority apparently. Aristotle attributes it to Corax (*Rhetoric*, II, 24).

Polus Aristotle notes twice. Once he quotes him: Polus said that experience made art, inexperience luck (*Metaphysics*, I, 1). And in the *Rhetoric*, while teaching you: to refute a proposition, consider whether the opposite has the opposite quality, and if it does not have it, refute the given proposition, if it has it, establish the given proposition (II, 23), Aristotle gives you a long list of examples – which, also, instead of learning how to make shoes, you can learn by heart – and since the technique includes, apparently, the calling of names (*id.*), one example of this last is: as Herodotus said to Polus, you are a colt (*id.*).

Polus, next to including him in the enumeration of 10, Plato abuses out of any proportion by making him one of a pair of particularly odious interlocutors of Socrates in the *Gorgias*.

The remaining 3 are very not important. Theodorus of Byzantium, Euenus, and Licymnius.

Other than to include them in the enumeration of 10, Plato wastes no abuse on them.

Thus the 10 in Plato's enumeration.

The rise of philological scholarship which began in the fifteenth Christian century reached its peak in the nineteenth. One of the crowning achievements of this scholarship is the collection *The fragments of the Presocratics*, by Diels, first published in 1903. – And the entity Presocratics,

too, has been a viable entity since. Clearly, created on the model, as there is Christ, dividing everything into before Christ and after, so there is Socrates, dividing the philosophers into Presocratics and after. – On the other hand, *The fragments of the Presocratics* is the outcome of the examination of the entire Greek and Latin record, and in its final edition by Diels, in 1922, it is the complete collection of the fragments of the philosophers it includes. Of the philosophers it includes these are the fragments, and there are no other fragments.

And among the philosophers in the collection there are 11 sophists.

5 of these 11 sophists are the 5 important in Plato's enumeration, Protagoras, Hippias, Gorgias, Prodicus, and Thrasymachus.

2 of the other 6 are Antiphon and Critias, and Antiphon and Critias are sophists on good ancient authority. There is a list of 7 ancient teachers of rhetoric in Cicero's *Brutus* (46-8), 4 of these are 4 of Plato's 10, and 1 of the others is Antiphon. There is a list of 16 ancient rhetoricians in Quintilian (III, 1.8-15), 7 of these are 7 of Plato's 10, and 1 of the others is again Antiphon. And Philostratus, in the *Lives of the sophists*, has 9 ancient sophists (I, 9-17), 6 of these are 6 of Plato's 10, and 2 of the others are Antiphon and Critias.

The remaining 4, Xenias, Lycophron, *Anonymous from Iamblichus*, and *Double arguments*, Diels created sophists.

And of these 6 newer sophists 1 is very important. Antiphon. He has been presented in some detail above, too.

Antiphon, to square the circle, inscribed in it a square, then a regular octagon, then a regular sixteen-sided polygon, and so on.

He said that the law is by convention, not by nature.

He said that by nature there is no difference between Greek and barbarian.

The oligarchy of the 400 took over the government of Athens during the Peloponnesian war, Antiphon was one of the 400, and when the 400 were brought down, he was executed. Thucydides reports: the most powerful mind, Antiphon planned the takeover; he gave the best advice on legal matters; and on trial for his life, he gave the best speech ever made (VIII, 68).

Antiphon wrote tragedies (Aristotle, *Eud. ethics*, VII, 4; *Rhetoric*, II, 23).

Antiphon divined dreams (Aristotle, fr. 75; Cicero, *Divination*, I, 39).

Antiphon's deeds were many. And cursed, or blessed, with the common name Antiphon, he has found it difficult to maintain his identity against the judgment of some of his successors. Six centuries after Antiphon, Hermogenes writes: Didymus the grammarian and not a few others say that there were several Antiphons and among them two sophists; so I cannot believe Plato and those others who say that there was only one Antiphon (*Kinds*, II, 11). Thus, with the labors of such as would believe Didymus the grammarian and Hermogenes rather than Plato, the Antiphons have continued to multiply, two or more sophists, a rhetorician, an orator, a statesman, a geometer, a tragedian, a diviner of dreams.

Antiphon also said: if you plant a bed and it happens to sprout, not a bed will shoot up, but a plant (Aristotle, *Physics*, II, 1). This suggests that, pace Antiphon, if Didymus the grammarian and Hermogenes plant a bed, a bed will shoot up.

2 of the 6 newer sophists are important, if not very important. Lycophron and Critias. And they have been presented above in some detail, too.

Lycophron said that the law is only a convention, it is men's promise to one another to be just, and it has no power to make the citizens good or just.

He said that highborn is an empty word, in truth there is no difference between lowborn and highborn.

Critias said that the soul is blood.

He said that at first men lived like beasts. Next laws were established so that justice may rule mankind, and the laws held men back from doing evil in the open, but not from doing it in secret. So a wise man discovered the fear of gods, to frighten evildoers even in their thoughts.

After the defeat of Athens in the Peloponnesian war the 30 tyrants took over its government. Critias was one of the 30. Soon after the takeover he fell in battle leading the cavalry (Xenophon, *History*, II, 3-4).

Critias also wrote tragedies.

1 of the 6 is not important, rather than very not important. *Double arguments*.

Double arguments is one of the many philosophers, or not philosophers, whom the record in its wisdom had been trying to lose, if not altogether, at least in obscurity, and philological scholarship in its wisdom has brought back to life out of obscurity.

Double arguments, in a half dozen pages, is making his first unsure steps in philosophy, or not philosophy, learning how to make arguments for and against the same thing. To take in the not very clever ones.

Two generations before these *Double arguments* were committed to writing, Protagoras discovered double arguments (Aristotle, *Rhetoric*, II, 24). In the following generation, Aristophanes brought Double Arguments to life to solicit the laughter of the Athenians (*Clouds*, 889-1104). It is in Socrates's think-shop that Aristophanes has Double Arguments practice their art.

Of the last 2, Xenocrates and *Anonymous from Iamblichus*, the less said the better.

Altogether, Plato's enumeration and the collection of Diels, twenty-two and a half-odd centuries after Plato, yield 16 sophists.

The important, including the very important, are 8,

490 - 420 **Protagoras**,
485 - 380 Gorgias,
475 - 411 **Antiphon**,
470 - 394 **Hippias**,
470 - 394 Prodicus,
467 Thrasyarchus,
455 Lycophron,
453 - 403 Critias.

3 are not important, if not very not important,

485 Tisias,
455 Polus,
429 *Double arguments*.

5 are very not important.

Laertius investigates the Socratics in book II, the Academics in book IV, the Peripatetics in book V, the cynics in book VI, the Stoics in book VII, the Pythagoreans in book VIII, the sceptics in book IX, the Epicureans in book X. The sophists Laertius does not investigate. Indicating rather unambiguously that as there is the appearance of wisdom without the reality so there is the appearance of associations of the philosophers without the reality.

cdvi

The seven wise men.

The seven wise men are very early. The seven wise men were also, clearly, wise. The examination of how many of them the Greek record has lost can thus also show how much wisdom the Greek record has lost, and can, in this way, be particularly instructive.

Laertius notes 1 273 predecessors of his. 1 273 philosophers and not philosophers whom the Greek record has not lost.

He investigates 102 of the 1 273 under his own head each. In books II-X he investigates 91 philosophers under his own head each, beginning with the second philosopher, Anaximander.

In book I he begins with the problem of the beginning of philosophy.

He reports: there are those who say that philosophy began among the Persians, or the Babylonians, or the Assyrians, or the Indians, or the Celts and Gauls, or the Phoenicians, or the Thracians, or the Libyans, or the Egyptians (1). Then he points out: they forget, however, that not only philosophy, but the human race itself began with the Greeks (3). Himself, Laertius forgot that it began with Adam.

The problem of the beginning of philosophy at its most general solved, Laertius turns to the particulars. In particular, he begins with Thales (22-44). And since Thales was 1 of the seven wise men, Laertius concludes his account of him with a general investigation of the problem of the seven wise men (40-2). Then, in the rest of book I, he investigates under his own head each 10 more of the seven wise men.

A Baconian and Cartesian *par excellence*, Laertius collected all the seven wise men, and in order to do so, researched all the earlier research into all of the seven wise men.

He traces it all back to Plato.

To the passage in the *Protagoras*, where Plato writes: philosophy had its first beginning among the Cretans and the Spartans; and philosophy is still practiced most among them, and it is they that have the best education in philosophy; indeed, it is a great secret, though well known to the wise, that the true virtue of the Spartans is not fighting prowess but wisdom; indeed, to be a

Spartan is to be a philosopher more than it is to be a fighter, as the sayings of the Spartans show; because to put things into a brief saying which men remember is the mark of the man who knows; as it was the mark of the seven wise men, Thales, Pittacus, Bias, Solon, Cleobulus, Myson, and Chilon; their Spartan wisdom is shown by their sayings, know yourself, for instance, and, nothing too much; and their sayings, now on everybody's lips, the wise men dedicated to Apollo at Delphi.

In Plato, then, the seven wise men are 7.

And this is how wise each of these 7 wise men was.

Thales said that water is the principle of all things. He said that the earth is at rest because it floats on water, like wood. He predicted a solar eclipse. He determined the solstices. He measured the distance of ships from the shore. He measured the height of the pyramids. He diverted the largest river in Asia Minor from its course. He advised the Ionians to set up a joint council.

Thales was very wise.

Also, reproached for poverty, he predicted a good season for olives, hired all olive presses in Chios and Miletus in advance, and cornering the oil market, made a fortune.

Also, while gazing at the stars, he fell into a well.

Solon abolished debt bondage, established the right of claiming redress and the right of appeal to a jury court, divided the people into four classes by property, and gave all magistracies to the first three classes. He was a general in the war of Athens with Megara over Salamis. When after the war the quarrel was submitted to the arbitration of the Spartans: in the proceedings, Solon produced as evidence two Homeric lines showing that Salamis had always belonged to the Athenians (Aristotle, *Rhetoric*, I, 15). Strabo notes: the critics think that Solon himself inserted the second of these lines in the *Iliad* (IX, 1.10).

Solon was very wise, too.

Also, when Croesus asked him, who is the most fortunate of all? he replied, Tellus the Athenian is the most fortunate of all.

About Thales and Solon there is very much in the record. About Chilon, Pittacus, and Bias there is less.

Chilon yoked the ephors alongside the kings. He told the Spartans that they should rather drown at sea than float on it.

Chilon was wise.

Also: before Pisistratus was born, his father, Hippocrates, was sacrificing once and a miracle occurred, the sacrificial meat and water began boiling without fire; Chilon was there, saw the sign, and warned Hippocrates, take no wife, or if you have one send her away, and if you have a son by her disown him; but Hippocrates did not listen and Pisistratus was born to him (Herodotus, I, 59).

Pittacus was elected tyrant of Mytilene. He drew the laws of the city. In the war of Mytilene with Athens, the Olympic victor leading the Athenians challenged him to a single combat, and he slew the Olympic victor.

Pittacus was wise, too.

Also, his fellow-citizen Alcaeus abused Pittacus, in fine lyric verse, for being fat and a drunkard (fr. 67-72, 305-6, 348).

Also, are we to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias? and yes, we are.

Bias was of more λόγος than the rest.

And are we to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias?

Bias was also wise, just.

Also: Croesus decided to build ships to subdue the Aegean islands; it then happened that Bias came to the king, or perhaps it was Pittacus, and when the king asked him for news, he replied, sir, the islanders are buying 10 000 horses to fight you; the king exclaimed, I pray to the gods they would! the other said, sir, as you pray to the gods to let you catch the islanders on land, do you not think the islanders pray to catch you at sea? pleased with this answer, the king gave up the building of ships (Herodotus, I, 27).

There is very much in the record about Thales and Solon, less about Chilon, Pittacus, and Bias, and very much less about Cleobulus and Myson. Not a necessary reason perhaps, yet a sufficient reason would be that these 2 of the seven wise men were not very wise.

Cleobulus, Laertius reports: was said to have written an epitaph for the tomb of Midas, and Simonides wrote a poem ridiculing the epitaph (I,

90-1). Cleobulus also composed riddles, and Laertius records this one: a father has twelve sons, each of them has thirty daughters, some of the daughters are white, some black, all are immortal, and yet all die (*id.*).

This is how wise Cleobulus was.

Of Myson there is but this: Anacharsis asked the Pythia whether anyone is wiser than himself; Myson is wiser, the Pythia replied; so Anacharsis went to see Myson for himself and found him fixing a plough in midsummer; it is not the time for ploughing, Anacharsis said; just the time to fix the plough, Myson replied (106).

This is how wise Myson was. Wiser than Anacharsis.

The Pythia, for her part, was clearly wiser even than Myson. And how wise the Pythia was, and how wise Apollo was, too, is quite relevant to the matter of wisdom.

Again: the Spartan wisdom of Thales, Pittacus, Bias, Solon, Cleobulus, Myson, and Chilon is shown by their sayings, know yourself, for instance, and, nothing too much; and their sayings, now on everybody's lips, the wise men dedicated to Apollo at Delphi.

And while Plato records only these two of the sayings dedicated to Apollo at Delphi, the Baconian and Cartesian Laertius records the sayings, now on everybody's lips, of 6 of the seven:

Thales	know yourself (39),
Solon	nothing too much (63),
Chilon	give a pledge, suffer for it (73),
Pittacus	know the right time (79),
Bias	most men are bad (88),
Cleobulus	moderation is best (93).

Myson's saying the record in its wisdom had apparently lost.

And if so, it would appear also that the loss should be celebrated, not lamented.

In Plato the seven wise men are 7. It was only before Plato, however, that the seven wise men were 7. With the labors of Plato they became 8.

Laertius reports: in the list of the seven Plato replaced Periander with Myson (41).

Periander was a warrior. He built the harbor of Corinth. He controlled Corcyra. He captured Epidaurus. He arbitrated between Athens and Mytilene. He maintained relations with Alyattes.

Periander was very wise.

Also: the tyrant of Miletus Thrasybulus sent a messenger to Periander to ask him how to rule his city; Periander took the messenger to a corn field and, as they walked, struck down each ear growing taller than the rest; the messenger did not, but Thrasybulus understood the message (Herodotus, V, 92).

Why he was banished from the list of the seven wise men is clear. Are we to fight against Periander, Perdiccas, Xerxes, and Ismenias? and yes, we are. Why in favor of Myson is also clear. It is just the time to fix the plough.

Plato's precedent of correcting the list of the seven wise men, like so many other of Plato's precedents, fared well with his successors.

Two generations after Plato, Dicaearchus found out, Laertius reports, that: Anacharsis, Aristodemus, and Pamphylus had joined the list (I, 41). The seven wise men had become 11.

The quality of the wisdom which these 3 added to the list is of the kind Myson had added to it. Similarly, the quantity is small, minuscule, and none, respectively.

Anacharsis is noted by Plato. Plato asks: is Homer famous for useful discoveries, as Thales and Anacharsis are? Laertius explains: some say that Anacharsis discovered the anchor and the potter's wheel (I, 105). They probably say also that Myson discovered the plough.

Herodotus reports: the men who live around the Black sea are the stupidest of all, none of them has ever shown any wisdom, except for the Scythians among peoples and Anacharsis among men (IV, 46). And the Scythians showed their exceptional wisdom among peoples and Anacharsis showed his exceptional wisdom among men, respectively, in these ways. Herodotus adds: when he returned to his native Scythia Anacharsis was killed for adopting Greek ways (76). In particular: for celebrating Cybele with a drum and images (*id.*).

Anacharsis came from the parts where the men are the stupidest of all. On this ground, if on no other, Anacharsis was wise, just.

Also, he was wiser than Myson.

Of the labors of Aristodemus even Laertius recovered very little, and nothing wiser than this: man is his wealth, to be poor is not good (I, 31).

Of the labors of Pamphylus Laertius recovered

nothing, not even that wise. Which at this point of the collection of wisdom should definitely be celebrated. Perhaps even with a drum and images.

Three generations after Dicaearchus, Hermippus found out, Laertius reports, that: Epimenides, Pherecydes, Pythagoras, Anaxagoras, Lasus, Acusilaus of Argos, and Leophantus had joined the list (42). The seven wise men had become 18.

And if the growth of the list from Plato to Dicaearchus does not, its growth from Dicaearchus to Hermippus does show that the search for wise men had been very exhaustive.

Pythagoras was the fourth philosopher.

Anaxagoras was the twelfth philosopher.

Pythagoras and Anaxagoras were very wise.

Epimenides was the Cretan who said that all Cretans are liars.

Epimenides was wise.

Also, the Cretans said that he lived 299 years. Laertius adds: once he slept 57 years (I, 109).

He also became, Plutarch reports: the wise man of choice of those who would not have Periander in the list (*Solon*, 12).

Pherecydes wrote genealogies.

Strabo writes: Cadmus, Pherecydes, and Hecataeus first began imitating poetry by writing prose.

One generation-odd before Hecataeus, Pherecydes was wise, just.

Acusilaus of Argos also wrote genealogies.

One generation-odd after Hecataeus, Acusilaus of Argos was not so wise.

Lasus was a dithyrambic poet.

Why Lasus, of all the many earlier and finer poets, the record in its wisdom is silent.

Of the labors of Leophantus, too, even Laertius recovered nothing.

In the generation after Hermippus, Hippobotus found out, Laertius reports, that: Epicharmus, Orpheus, and Linus had joined the list (I, 42). The seven wise men had become 21.

And if the earlier growth of the list attests that the search for wise men had been exhaustive, its growth now attests that the search had exhausted the wise men.

Epicharmus was a very fine poet.

Why Epicharmus is also clearer. He marched in Plato's armies. He joined the Pythagoreans, why not the seven wise men? Also, he said that

no one is willingly wicked or unwillingly blessed.

Orpheus was a son of Apollo.

Linus was another son of Apollo.

Five centuries after Hermippus, finally, Laertius himself found out that at some unspecified time: Pisistratus had joined the list (13). The seven wise men had become 22.

Pisistratus set himself up as a tyrant. Expelled, he returned, expelled again, he returned again. He governed by law. He gave money to the poor and helped them in their labors. He increased greatly the revenues of the city. His tyranny was known as a golden age. He captured Naxos and Sigeum.

Pisistratus was very wise.

Also, this is how, after he was expelled, Pisistratus returned to Athens. Herodotus reports: there was this Phya, very tall and very beautiful; Pisistratus dressed her in full armor, put her in a chariot, and drove her into the city with heralds preceding him, shouting, Athenians, receive with good grace Pisistratus whom Athena herself brings back to you (I, 60). The men living around the Black Sea were the stupidest of all. For their part: the Athenians were the shrewdest (*id.*).

No account of the seven wise men can do their wisdom justice if it omits the tribulations of the golden tripod. Of these, too, Laertius collected all the versions (I, 27-33). This is one way to tell them: fishermen caught a golden tripod at sea, and a quarrel arose who was to have it; Delphi was asked and the Pythia replied, Apollo says that the tripod belongs to the wisest; so the tripod was sent to Thales; Thales sent it to Solon; Solon sent it to Pittacus; Pittacus sent it to Bias; and having made the round of all the seven, it came back to Thales; Thales saw the sign, and sent it to Apollo at Delphi (*id.*).

The Pythia, not Apollo, was the wisest.

Tabulating, the important, including the very important, seven wise men are 12,

658 - 588 **Periander**,
653 Epimenides,
649 - 578 Pittacus,
634 **Solon**,
625 **Thales**,
622 Anacharsis,
622 Bias,
601 - 527 **Pisistratus**,
599 Pherecydes,

596 Chilon,

570 - 495 **Pythagoras**,

500 - 428 **Anaxagoras**.

3 seven wise men are not important, if not very not important,

558 Lasus,

556 Epicharmus,

523 Acusilaus of Argos.

7 seven wise men are very not important, Cleobulus, Myson, Aristodemus, Pamphylus, Leophantus, Orpheus, and Linus.

Of the important seven wise men the record has lost -5, of all seven wise men -15.

And if there were yet more seven wise men, whom the record has lost altogether, this loss should be celebrated definitely with a drum and images.

Laertius's research into the earlier research into the seven wise men shows three important steps in its development,

371 **Dicaearchus**,

282^{BC} Hermippus,

219^{AD} **Laertius**,

and between the second and the third, one not important,

252^{BC} Hippobotus.

And the steps in the development of the research into the seven wise men, in particular, are steps in the development of the research into our predecessors, in general.

Systematic research begins with Herodotus.

One century later, systematic research reaches a very high peak with Aristotle. Six important philosophers were also students of Aristotle, Theophrastus, Aristoxenus, Dicaearchus, Eudemus, Callisthenes, and Callippus. And with them systematic research reaches a higher peak still. The quantity of research at the Lyceum in the two generations of Aristotle and Theophrastus is very much greater than the quantity of all earlier research, counting back to the beginning of the earth. The advance in the quality of research is greater yet.

Our predecessors Aristotle and five of his six important students researched systematically.

Calling the council of our predecessors in formal session not less than 16 times, Aristotle discovered that Thales is the first philosopher. He discovered Anaximander, Anaximenes, Alc-

maeon, Hippasus, Leucippus, Cleidemus, Hippo, Democritus, and Hippocrates of Chios. None of the 9 is noted before Aristotle.

Theophrastus wrote the first history of physics.

Aristoxenus wrote on Pythagoras, on Socrates, on Plato, and on Archytas.

Dicaearchus wrote *The life of Greece*. This is Laertius's source for the seven wise men.

Eudemus wrote the first history of mathematics.

Callisthenes wrote the *Greek history* and *The deeds of Alexander*.

Yet another student of Aristotle, Meno, wrote the first history of medicine, too.

Thus their research into our predecessors. Next to the collection of 600 kinds of animals, the collection of 550 kinds of plants, the collection of stones not improved upon until Biringuccio and Agricola, and Dicaearchus measured the radius of the earth at 300 000 stades, too.

It can be concluded that, if Aristotle, Theophrastus, Eudemus, Dicaearchus, and Aristoxenus did not find it, it was not worth finding.

In the next generation, Ptolemy, prince 306-282, founded the Alexandrian library. In the next generation, under Ptolemy II, prince 282-46, Callimachus catalogued the books in the library. At that time, Tzetzes reports, the library had 532 800 books.

Hermippus was a student of Callimachus (Athenaeus, II, 58f). He wrote massive *Lives*. This is Laertius's source for the seven wise men.

Both the quantity and the quality of research at the library are indicated by the fact that Callimachus's *Catalogue of those distinguished in all learning and their books* was itself in 120 books.

The quantity and the quality of Hermippus's research are indicated by the fact that he recovered 7 more of the seven wise men than Dicaearchus's research had recovered. More generally, they are indicated by the fact that, five centuries later, Hermippus is quantitatively the second most important source of Laertius. Laertius quotes Favorinus 45+ times, Hermippus 38+ times. Qualitatively, Hermippus is the most important source of Laertius.

One generation after Hermippus, Hippobotus wrote *On the schools* and the *Catalogue of the philosophers*. The second is Laertius's source for

the seven wise men.

Jointly, the research of Hermippus and Hippobotus increased the number of the seven wise men from 11 to 21.

In the generation of Hippobotus, Sotion wrote *The succession of the philosophers*, in 13 books. Qualitatively, Sotion is the second most important source of Laertius. Laertius quotes him 22+ times. Hippobotus he quotes 15+ times.

Hermippus and Sotion represent Alexandrian scholarship at its best. Hippobotus represents it at its more common.

It can be concluded that, whether it was worth finding or not, Hermippus, Sotion, and Hippobotus found it.

With Laertius, finally, systematic research once again reaches a very high peak, as high as its beginning.

Book I of *The lives and doctrines of the philosophers* comprises 122 sections out of all the 1 204. In these 122 sections Laertius quotes explicitly 72 of his authorities.

The important, including the very important, are 28,

570 - 473	Xenophanes,
540	Heraclitus,
484 - 425	Herodotus,
470 - 394	Hippias,
460	Democritus,
459 - 380	Lysias,
437 - 361	Aristippus,
427 - 347	Plato,
408 - 356	Eudoxus,
405 - 335	Ephorus,
396 - 324	Anaximenes of Lampsacus,
395 - 317	Ponticus,
384 - 322	Aristotle,
378 - 315	Theopompus,
371	Aristoxenus,
371	Dicaearchus,
371	Eudemus,
358 - 277	Demetrius of Phalerum,
350 - 259	Timaeus,
346	Manetho,
320 - 230	Timon,
312 - 241	Callimachus,
282	Hermippus,
274 - 194	Eratosthenes,
249	Sotion,

186 - 114 ^{BC}	Apollodorus of Athens,
14 ^{AD}	Pamphila,
85 - 155	Favorinus.
21 are not important, if not very not important,	
619	Alcaeus,
556 - 466	Simonides,
556	Hipponax,
505	Xanthus,
490 - 426	Ion of Chios,
475	Cratinus,
446	Choerilus,
376	Dieuchidas,
354	Clearchus of Soli,
341 - 276	Duris,
340	Neanthes,
330	Hecataeus of Abdera,
326	Clitarchus,
321	Daimachus of Plataea,
297	Hieronymus of Rhodes,
252	Hippobotus,
234	Satyros,
234	Sosicrates,
230	Antisthenes of Rhodes,
112	Alexander Polyhistor,
106 ^{BC}	Demetrius of Magnesia.

The remaining 23 are very not important, Hermodorus the Platonic, Dinon, Apollodorus the calculator, Minyas, Eleusis, Maeandrius of Miletus, Alexander of Myndos, Euanthes of Miletus, Andron of Ephesus, Archetimus of Syracuse, Phanodicus, Lobon of Argos, Dionysius, Damon of Cyrene, Dioscurides, Aristagoras, Demodicus of Leros, Anaxilaus, Euthyphro, Hermodorus, Phlegon, Myronianus, Sosibius.

The overlap between the authorities in book I and those in book VIII, collected above, is very substantial. The total for the joint collection is 85 – 19 very important, 12 important, 23 not important, 31 very not important.

Ignoring the very not important, the distribution of the 54 important, including very important, and not important, counting centuries from the year of birth assigned to the first philosopher, is,

625- 526	2	3,
525- 426	8	5,
425- 326	13	6,
325- 226	5	6,
225- 126	1	1,

125- 26	–	2,
25 ^{BC} - 75 ^{AD}	1	–,
76- 175	1	–,
176- 275	–	–.

And as these two books of *The lives and doctrines*, I and VIII, so the other eight.

It is of the essence of the record to examine itself. Always to examine itself. And if not always to examine all of itself, to examine all of itself whenever the acquisition of knowledge advances. It is the indispensable duty, too. To examine carefully all original materials.

The record is thus impervious to accidents, neglect and ignorance.

Caesar fought in Alexandria in 47, and fire engulfed the library. Ammianus reports: the fire destroyed 700 000 books (XXII, 16). It destroyed nothing but what had not been worth copying. It destroyed, for instance, none of the authorities of Laertius, very important, important, not important, or very not important.

And prejudice and bias are a bulwark against loss.

One generation-odd before Laertius, Hippolytus undertook the *Refutation of all heresies*. He writes: we must not neglect the figments of those whom the Greeks call philosophers; we must examine them, because of the great madness of the heretics; for all the doctrines of the heretics are rooted in the doctrines of the philosophers (I, pr.). Hippolytus then examines the madresses root by root: Thales (1), Pythagoras (2), Empedocles (3), Heraclitus (4), Anaximander (6), Anaximenes (7), Anaxagoras (8). Hippolytus is thus one of the important sources for the madresses of Anaximander, Anaximenes, Heraclitus, and Anaxagoras.

cdvii

The mathematicians.

As the Pythagoreans, and the sophists, and the seven wise men, and the writers who kept on writing on our predecessors, too, so the mathematicians. The Greek record has not lost many very not important mathematicians either.

Eudemus wrote the first history of mathematics.

Not quite eight centuries later, Proclus wrote a commentary on book I of the *Elements*. Proclus

proposes to describe: the development of mathematics before Euclid (65-8), and in order to do so quotes Eudemus.

22 predecessors of Euclid are noted in the passage from Eudemus.

13 of the 22 are important, including very important,

625	Thales,
570 - 495	Pythagoras,
500 - 428	Anaxagoras,
490	Oenopides,
470 - 394	Hippias,
460 - 394	Theodorus of Cyrene,
460	Hippocrates of Chios,
427 - 347	Plato,
427	Archytas,
414 - 369	Theaetetus,
408 - 356	Eudoxus,
378	Menaechmus,
378	Dinostratus.

12 of the 13 have been presented in detail above.

Thales, Eudemus writes: introduced mathematics among the Greeks. He measured the distance of ships from the shore. Measured the height of the pyramids.

Pythagoras discovered proof. Proved that the sum of the angles of the triangle is two right angles. Discovered incommensurability. Discovered the method of assigning a Pythagorean triple to every odd number. Said that number is the principle of all things.

Anaxagoras tried to square the circle.

Oenopides measured the obliquity of the ecliptic.

Hippias discovered the quadratrix.

Theodorus of Cyrene proved that $\sqrt{3}$, $\sqrt{5}$, ..., $\sqrt{17}$ are irrational.

Hippocrates of Chios wrote the first *Elements*. Squared lunes. Showed that to double the cube is to find two mean proportionals.

Plato wrote on the Academy's door: the not geometer is not to enter. Theaetetus, Eudoxus, Menaechmus, and Dinostratus were residents of the Academy.

Archytas doubled the cube.

Theaetetus formulated the theory of the irrationals.

Eudoxus formulated the theory of proportion.

Formulated the axiom of measure. Discovered the method of exhaustion. Showed what the volume of the pyramid and cone is.

Menaechmus discovered the conic sections.

Dinostratus used the quadratrix to square the circle (Pappus, *Collection*, IV, 30).

After Eudemus and before Proclus, to note only the major sources, Archimedes, Ptolemy, and Pappus write at length on our predecessors. After Proclus, Simplicius and Eutocius do. Thus, nearly all the results above are from the reports of the successors of Eudemus.

4 of the 22 in the passage are not important, if not very not important,

418	Leon,
397	Philip of Opus,
378	Hermotimus of Colophon,
378	Theudius.

Eudemus, Proclus reports, reports:

Leon wrote a book of elements to account for the uses of the theorems, and studied how to tell a problem which has a solution from one which does not (66);

Philip of Opus was a student of Plato; Plato encouraged him to study mathematics, and he set about to study all problems which would illuminate Plato's philosophy (68);

Hermotimus of Colophon continued the investigations of Theaetetus and Eudoxus, contributed many theorems to the elements, and wrote some things about loci (67);

Theudius had a reputation for excellence in mathematics as well as the other parts of philosophy, made an admirable arrangement of the elements, and generalized some theorems (*id.*).

Laertius adds: Philip of Opus supplemented Plato's *Laws* with the *Addition to the laws* (III, 37).

The last 5 of the 22 are very not important.

Eudemus reports:

Mamercus, the brother of the poet Stesichorus, studied geometry (65);

Leodamas increased the number of the theorems (66);

Nioclides was younger thanLeodamas (*id.*);

Amyclas was a student of Plato (67);

Athenaeus of Cyzicus was eminent in geometry and other parts of mathematics (*id.*).

Thus Eudemus.

Archimedes writes on our predecessors in the introductions to all his treatises.

Ptolemy writes: we must not neglect to examine all records.

Pappus wrote the *Collection*.

There is then Proclus.

Simplicius writes: I will copy here his book because it has become rare.

Eutocius writes: we will copy all solutions here.

If Eudemus, Archimedes, Ptolemy, Pappus, Proclus, Simplicius, and Eutocius did not find it, it was never there to be found.

cdviii

It will be yet said that, even if the Greek record has not lost even 1 philosopher, it has yet decimated the philosophers.

Of the first four philosophers only reports of their successors survives. Of the fifth philosopher, the first to leave his own words behind, only 40-odd fragments survive, and this is how, in fragments, all but a very few of the philosophers survive.

Chrysippus, the most important logician in the twenty-odd centuries between Aristotle and Leibniz, wrote more than 705 treatises, and not 1 of his treatises survives.

Polybius, the most important historian in the twenty-one centuries between Herodotus and Spinoza, wrote 40 books of *Histories*, and only 5 survive intact.

Pappus writes: the treasure of analysis comprises Euclid's *Data*, *Corollaries*, and *Surface loci*, Apollonius's *Conics*, *Division of a ratio*, *Division of an area*, *Determinate sections*, *Tangents*, *Inclinations*, and *Plane loci*, Aristaeus's *Solid loci*, and Eratosthenes's *On mean proportionals*. And of the 12 treatises comprising the treasure of analysis only 3 survive.

The response is, again, if much too much not important survives, and the more so if much too much of the not important is very not important, nothing important is lost.

Counting back to the 3 oldest calculations of area, the record has been accumulating for fifty-one centuries.

And for the first twenty-five of these fifty-one centuries, the record, as it grew steadily larger,

developed, in its wisdom, the tendency to lose much of itself, and thus lose much of the not important for good.

Then the first philosophers appeared. They began examining our predecessors, and steadily more of them, and the important as well as the not important.

The tendency of the record to lose much of itself was threatened.

One and a half centuries after the first philosopher systematic research began. One century later massive systematic research began.

The tendency of the record to lose anything was arrested.

In the next century the Alexandrian library was founded, more libraries were founded, and with libraries antiquarian and philological scholarship began.

The tendency of the record to lose anything was reversed. The record was forced to preserve anything.

Three and a half centuries after the foundation of the Alexandrian library Christianity appeared. Three and a half centuries later the darkest of dark ages descended.

The record recovered some of its lost tendency to lose much of itself.

Then the Muslim philosophers began infringing on the tendency of the record to lose much of itself. Seven centuries after its decent, the dark age of Christendom began coming to a close as well. Universities rose. In 1215, when the university of Paris was sanctioned by Innocent III, there were chartered universities from Oxford in the north to Salamanca in the southwest to Salerno in the southeast. Universities grew, and spread.

With the scholarship which the universities produced the tendency of the record to lose anything was again and more forcefully reversed. The record was again and more decisively forced to preserve anything.

In 1455 Gutenberg discovered movable type.

Between the scholarship which the universities produced and printing the record was forced to preserve everything. And for five and a half-odd centuries now to lose even the very very very not important has been impossible.

Then again, it may be that the record, in its wisdom, has thus developed the tendency to lose

much of itself, and thus lose much of the not important, into its sheer quantity.

Nothing important is lost, then.

Thales is noted by Xenophanes, by Heraclitus, Herodotus writes on him, Democritus notes him, Plato writes on him, Aristotle investigates him, Theophrastus investigates him, Aristoxenus investigates him, Dicaearchus investigates him, Eudemus investigates him. Laertius quotes 33 other writers.

Anaximander Aristotle investigates, then Theophrastus investigates.

Anaximenes Aristotle investigates, then Theophrastus investigates.

Pythagoras is noted by Xenophanes, by Heraclitus, Empedocles sings of him, Ion of Chios sings of him, Herodotus writes on him, Isocrates notes him, Plato notes him, Ponticus writes on Pythagoras and the Pythagoreans, Aristotle investigates the Pythagoreans, Aristoxenus investigates Pythagoras and the Pythagoreans, so does Theophrastus, so does Dicaearchus, so does Eudemus.

Xenophanes left behind 40-odd fragments.

Hecataeus left behind 360-odd fragments.

Heraclitus left behind 130-odd fragments.

Alcmaeon Aristotle investigates, then Theophrastus.

Hippasus Aristotle investigates.

Parmenides left behind some 20 large fragments.

Cyrus left behind one inscription, Darius left behind two dozen inscriptions, Xerxes left behind one dozen inscriptions. And they left behind many more of their great and magnificent deeds in the Greek record, when Herodotus fathered history with their great and magnificent deeds.

And thus but the first century of the development of philosophy.

Chrysippus wrote more than 705 treatises, Laertius reports (VII, 180).

Chrysippus was the third head of the Stoa. By his time the other schools had sunk into paltriness, and after him so did the Stoa.

Accordingly, what the schools most of all left behind is generic descriptions of generic doctrines, the doctrines of the Academics, the doctrines of the Epicureans, the doctrines of the Stoics.

Thus, the main sources on the Stoics, other than Laertius, are Cicero and Plutarch. Cicero writes on the Stoics in *On the good and bad ends* (III, 16-76), the *Tusculan disputations* (III, 8-21; IV, 11-46), and *On the nature of the gods* (II, 3-168). Plutarch wrote *On the self-contradictions of the Stoics* and *Against the common notions of the Stoics*. All five are generic descriptions of generic doctrines of the Stoics, none encumbered by quotations of its sources.

Not so Laertius. He describes the generic doctrines of the Stoics, too (VII, 38-159), meticulously and explicitly, however, analyzing them into their sources (*passim*). He also treats the philosophers of the Stoa under his own head each, and so he does Chrysippus (179-202).

He thus reports: Chrysippus wrote more than 705 treatises.

And he then proposes to enumerate the treatises, and does enumerate 161 of them, title after title after title (189-202), before a lacuna in the manuscripts, in its wisdom, obliterates the remaining not less than 544 titles.

Laertius enumerates 161 of Chrysippus's treatises. And he quotes, counting only those he quotes explicitly with their titles, 29 of them, most of them several times each:

Logic,
On definitions,
On dialectical definitions,
Dialectics,
On Zeno's use of terms,
Physics,
The physical sciences,
On the ancient physicists,
On the gods,
On the void,
On fate,
On providence,
On divination,
On the soul,
On the passions,
On the republic,
On government,
On justice,
Ethical questions,
On the ways of life,
On the end,
On the ends,

On virtues,
On things not desirable for themselves,
On means of livelihood,
On pleasure,
On love,
On the beautiful,
Proverbs.

And, next to some dozens of other results of Chrysippus in logic, physics, and ethics, Laertius describes in some detail the discovery of the rules of inference.

Kant wrote 7 very important treatises, the *General natural history and theory of the heaven*, the *Critique of pure reason*, the *Prolegomena*, the *Idea for a general history*, *What is enlightenment?* the *Groundwork for the metaphysics of morals*, and *Toward perpetual peace*.

He wrote 19 important, but not very important treatises, the *Thoughts on the true estimation of living forces*, *A new elucidation of the first principles of metaphysical knowledge*, the *History and natural description of the most remarkable occurrences of the earthquakes in 1755*, *The only possible argument for demonstration of the existence of god*, the *Investigation in the clarity of the principles of natural theology and morality*, *On the first ground of the difference of directions in space*, *On the form and principles of the sensible and intelligible world*, the review of Herder's *Ideas for the Philosophy of the history of humanity*, *The presumed beginning of human history*, the *Metaphysical elements of natural science*, the *Critique of practical reason*, the *Critique of judgment*, the *Religion within the boundaries of reason alone*, *The metaphysics of morals*, *On a supposed right to lie from philanthropy*, *The quarrel of the faculties*, the *Anthropology considered in pragmatic respect*, the *Logic*, and the *Physical geography*.

He wrote not less than 40 other not important, including very not important, treatises.

And had the not important all been lost, and a Laertius reduced the important, but not very important, to their titles and the few important results in each, and most of these results are important only in that they state and restate and restate the results of the very important treatises, the importance of Kant would not have been impaired, it would have been enhanced.

Thus Kant. Never mind less important philosophers.

Polybius wrote the *Histories*, in 40 books.

Books I-V survive intact. Most of book VI survives. Of the remaining 34 books only fragments survive. Many and substantial fragments, however, including much of book XII, including much of book XXXIV.

Polybius begins with the problem: how and under what constitution did the Romans succeed, in 53 years, from 220 to 168, in bringing under a single government, for the first time ever, nearly the entire known earth (I, 1)? The solution is: the Romans developed the best constitution (VI, 50).

More particularly, Polybius first formulates the problem explicitly. Then the solution of the problem follows in three parts. Polybius shows why the Romans succeeded, how they succeeded, and that they did, in fact, succeed. And he draws general conclusions concerning the investigation of the past.

Books I-V are the explicit formulation of the problem. Polybius describes events from 264 to 216. These are the events which led to 220, the beginning of the second Punic war. Polybius reports: in 218 Hannibal crossed the Alps; 20 000 foot and 6 000 horse survived the crossing (III, 56). Hence: events in the entire known earth became for the first time interconnected (V, 105). And, on the one hand, Hannibal threatened for a decade the very existence of Rome. On the other hand, by 168 the Romans had brought nearly the entire known earth under a single government. Events have thus formulated the problem explicitly. And it is a problem *par excellence*, how did the Romans do what no other state has done?

Book VI is the first part of the solution. Polybius interrupts the description of events in order to investigate constitutions, in general, and, in particular, the Roman constitution in comparison with other constitutions, and to show that it is the best. He concludes: when lifeless Platonic statues are ignored (47); the Spartan constitution may be the best for the preservation of freedom; but for the achievement of great deeds, the conquest of other peoples, and the attainment of power the constitution which the Romans have developed is the best (50). Nor should Polybius's solution of this part of the problem need a recommendation

as conclusive. This is why the Romans succeeded in bringing nearly the entire known earth under a single government.

Books VII-XI are the description of events from 216 to 206. These are the years when Hannibal threatened the existence of Rome. Polybius writes: vanquished, their military reputation destroyed, the Romans had lost the dominion over the Italians, and had to fear for their native land and for their very existence (II, 118). Then the Romans, under Fabius Maximus and Marcellus, began turning the war. This is the beginning of the second part of the solution, how the Romans succeeded.

Book XII is the general conclusions concerning the investigation of the past. Having shown in the previous books how the past should be investigated, Polybius interrupts the description of events in order to generalize his results explicitly. Nor have these general results of Polybius's been improved upon since.

Books XIII-XXXIII are the description of events from 206 to 155. In 168 the Romans, under Aemilius Paullus, concluded victoriously the third Macedonian war. The second part of the solution is thus complete.

Book XXXIV is the third part. Polybius shows that the Romans did, in fact, bring nearly the entire known earth under a single government. Earlier he writes: the conquests of Alexander in Asia and of the Romans elsewhere have opened new lands; so I undertook the danger and hardship of traveling through Africa, Iberia, and Gaul, and of sailing the seas bordering them, in order to correct the errors of my predecessors and make these parts of the earth known (III, 59). And now he again interrupts the description of events in order to describe the entire known earth. Book XXXIV is an important step in the advance of geography. Nor should Polybius's solution of this part of the problem need a recommendation as conclusive. This is the entire known earth.

Books XXXV-XXXIX are the description of events from 155 to 145. Nearly the entire known earth brought under a single government, its pacification has begun.

Book XL is a review.

The record, then, in its wisdom, has analyzed Polybius perfectly. It has preserved the formula-

tion of the problem, the first part of the solution, the third part of the solution, and the general results concerning the investigation of the past. It has also judged his solution of the second part of the problem, the description of events after 216, inferior to that of Livy.

Voltaire wrote *The century of Louis XIV.*

He wrote also the *History of Charles XII, king of Sweden*, the *History of the war of 1741*, and *The philosophy of history*, all 3 very important treatises as well.

He wrote also – treatises, drama, prose, verse – not less than 150 other titles. A handful of these are important, but not very important. The rest are not important, including the *History of the empire of Russia under Peter the Great*, the large majority of them very not important.

And had all but those 4 very important treatises been lost, the importance of Voltaire would not have been impaired, it would have been enhanced.

And again, thus Voltaire.

The treasure of analysis comprises 12 treatises, Pappus reports (*Collection*, VII, 3).

And he then proceeds to write epitomes of and lemmas for 8 of them, an epitome of 1 more, and lemmas for 1 more. In particular:

	epitome	lemmas
Euclid's <i>Data</i>	4,	
<i>Corollaries</i>	13-20,	193-232,
<i>Surface loci</i>		312-8,
Apollonius's <i>Conics</i>	30-42,	233-311,
<i>Division of a ratio</i>	5-6,	43-
<i>Division of an area</i>	7-8,	-67,
<i>Determinate sections</i>	9-10,	68-119,
<i>Tangents</i>	11-2,	120-57,
<i>Inclinations</i>	27-9,	158-84,
<i>Plane loci</i>	21-6,	185-92.

2 of the 12, Aristaeus's *Solid loci* and Eratosthenes's *Mean proportionals*, Pappus ignores. And in this case, too, the judgment of Pappus is unassailable. On Aristaeus there is nothing more than Pappus's note in the record. On Eratosthenes there is very much more in the record. Eratosthenes was: in philosophy pentathlete (*Suda*, s. v.). Mean proportionals was not his strong discipline, however. On his performance in this discipline there is nothing more than Pappus's note in the record.

Euclid's *Data*, in 1 book, survives intact. Apollonius's *Division of a ratio*, in 2 books, survives in an Arabic translation. Of the 8 books of the *Conics*, the most important of the 12 treatises in the treasure, by very far, books I-IV survive in the Greek, books V-VII survive in an Arabic translation, book VIII is lost.

Of the 12 treatises comprising the treasure of analysis, then, 3 survive, of 7 there are Pappus's epitomes and lemmas, 2 are lost.

In 1913 an enumeration of Euler's treatises was published. Euler wrote 856 treatises, and 31 were written by his son under his supervision.

Would that but the dozen most important survived, a Pappus had written an epitome and lemmas for another couple of dozen, and all the rest, including the filial, had perished.

And thus Euler.

And so much about the labors of the very important.

About the labors of the very not important, one instance, or two perhaps, should suffice.

Seneca writes: the grammarian Didymus wrote 4 000 books; I would pity him, if he had to read so many useless books, never mind write them, for he discusses in them things like where was Homer born, who was Aeneas's mother, was Anacreon a lecher or a drunkard, did Sappho sleep with everyone who asked her, which would all be better unlearned even if one knew them (*Letters*, 88).

And yet the grammarian Didymus is noted also by Quintilian (I, 8.20), by Plutarch (*Solon*, 1), by Athenaeus (IV, 139c), by Hermogenes (*Kinds*, II, 11), even by Laertius (V, 76).

Nay, in 1901 a papyrus was bought in Cairo, brought to Berlin it became Berol. 9780, and its obverse, published in 1904, rescued from oblivion Didymus's commentary on Demosthenes's *Philippics*.

In 1906 the reverse was published. It rescued from oblivion Hierocles's *Elements of ethics*. Its importance the company it keeps attests.

cdix

The accumulation of the Greek record begins with

764 Homer.

With Hesiod and then the successors of Homer

and Hesiod the accumulation continues. The first philosopher appears. The fifth philosopher,

570 - 473 Xenophanes,

examines 6 predecessors of ours, including Homer and Hesiod. The accumulation accelerates. The philosophers' examination of our predecessors accelerates. Research begins, and

484 - 425 Herodotus

arranges in their series and order 804 predecessors of ours. The accumulation accelerates. The philosophers' examination of our predecessors accelerates. Research accelerates. Schools appear.

384 - 322 Aristotle

examines our predecessors systematically not less than 16 times. Theophrastus writes the history of physics, Eudemus writes the history of mathematics. The accumulation accelerates. The philosophers' examination of our predecessors accelerates. Research accelerates. Systematic research accelerates. Schools proliferate. The first library is founded, and with the first librarian,

322 Zenodotus,

the production of editions, commentaries, and glossaries begins. The first catalogue of the books in the library is itself in 120 books. The accumulation accelerates. The philosophers' examination of our predecessors accelerates. Research accelerates. Systematic research accelerates. Schooling accelerates. Libraries proliferate. The production of editions, commentaries, glossaries, and catalogues accelerates.

Examination, more examination, and more, and this is how and why importance is determined. With Aristotle, we call the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous. With Frege, the striving for truth forces us to advance from the thought and the sense to the reference and the true.

Then there is derivative writing, and more, and more, and ever more. In part in emulation of the striving for truth, in part, and much the larger part, because the striving for truth is not irresistible but the striving for sense and saturation with ideas and feelings is.

And the Greek record in the first five centuries of its accumulation exhibits this development – examination, more examination, and more, and derivative writing, more derivative writing, and

ever more – more clearly and distinctly than either the older record or the younger record for this very reason, that it is younger than the older and older than the younger.

The younger record is all too liable to appear dominated, and ever more over time, by its sheer quantity. Hence, it is all too liable to appear dominated by derivative writing, and hence also by prejudice and bias. All of which is liable to obscure the fundamental fact of the dependence of the record on the determination of importance by the council.

None of which mars the older record. The older record is pristine. The quantity is so much smaller, and derivative writing is so much less, it is difficult to suspect the older record of being dominated by prejudice and bias.

The older record, however, attests the initial accumulation of the record. And in the initial accumulation of the record, its initial examination of itself – and hence the gradual discovery of how and why it examines itself – is implicit rather than explicit, and the older the record the more so.

The initial accumulation of the record begins in the valley of the two rivers and in the valley of the Nile. In the valley of the two rivers it begins with

3120 3 calculations of area.

In the valley of the Nile it begins with the first prince,

3040 Narmer.

Twenty-three and a half centuries, and twenty-two and a half-odd centuries before Homer, respectively.

The accumulation continues in each of the two valleys entirely independently of the other for seventeen centuries. The Amarna archive, collected under Smenkhkare, prince *c.* 1347-4, first attests the contact of the princes in the valley of the two rivers, Burnaburiash (9), prince of the Kassites *c.* 1370, and Ashur-uballit (15-6), prince of Ashur *c.* 1363-27, with Amenhotep IV, prince of Egypt *c.* 1364-47.

In the seven centuries after Ashur-uballit and Amenhotep IV contact between the two valleys remains sporadic and insubstantial.

715 - 668 Esarhaddon

conquers the valley of the Nile. The state built in

the east incorporates the state built in the west. And all developments in the two valleys, including the accumulation of the record, become one joint development.

All in all, the accumulation of the record in each of the two valleys continues independently of the other for twenty-four centuries, counting from the 3 calculations of area to Esarhaddon, twenty-three and a half centuries, counting from Narmer to Esarhaddon.

In the valley of the two rivers the record begins with the Sumerian. The first prince to leave his inscriptions behind is

2720 Enmebaragesi.

The inscriptions accumulate. The great advance in the acquisition of knowledge begins. Eanatum attests 16 localities. Enmetena attests 8 predecessors of his.

The Sumerian record gives rise to the Akkadian under

2362 - 2281 Sargon

and his successors. The accumulation continues. The great advance in the acquisition of knowledge continues. Sargon has left behind the names of 4 of the years of his reign. Naram-Sin attests 38 localities.

The Sumerian record flourishes again under

2161 - 2103 Ur-Nammu

and his successors. The accumulation continues. The great advance in the acquisition of knowledge continues. The inscriptions of the princes become a continuous series. Shulgi, Amar-Sin, Shu-Sin, and Ib-bi-Sin have left behind the names of all 90 years of their reigns. Ur-Nammu compiles the first code of laws. The first archive, the Ur archive, collects 23 documents. The Sumerian prince list is compiled. The oldest chronicle is compiled.

The Sumerian record gives rise in the following millennium to the Babylonian and the Assyrian, next to the less important Hurrian, Kassite, Hittite, Luwian, and Ugaritic. It has given rise also to the Elamite earlier.

The Babylonian record flourishes under

1817 - 1749 Hammurabi

and his successors. The accumulation continues. The great advance in the acquisition of knowledge continues. Hammurabi compiles the greatest code of laws. This is the time of the first of the

three brightest periods in the development of mathematics. The Venus tablet of Ammisaduqa is from this time. The epic *Gilgamesh* is composed. *When on high* is from this time.

After several dark centuries, the rise of the Assyrian record begins in the centuries after Ashur-uballit. It begins flourishing under 1330 - 1273 Adad-nirari and his successors, continues flourishing, more, and more, and very greatly under 785 - 727 Tiglath-pileser III and his successors. The accumulation accelerates. The great advance in the acquisition of knowledge accelerates. The inscriptions of these princes are more and more massive than the inscriptions of all their predecessors combined. The inscriptions record hundreds of localities. They reckon time across centuries. They are chronicles. They imply maps. The observation of the heavenly bodies is resumed, becomes sustained, becomes accurate. Ashurbanipal collects not less than 1 000 distinct compositions. This is the time also of the initial accumulation of the Hebrew record, and the time also of the initial accumulation of the Greek record.

And in the twenty-three and a half centuries of its independent development, the accumulation of the record in the valley of the Nile is very much slower than its accumulation in the valley of the two rivers. The amount accumulated here is a small fraction of the amount accumulated there. The record does not attest nearly as great an advance in the acquisition of knowledge here as there. And the record begins to examine itself, and to discover how and why it examines itself, here as there, but this initial examination, and discovery, too, is further removed from being explicit here than there.

In conclusion, then, in order to show that the record has lost nothing important, it can be examined how many predecessors of the philosophers the Egyptian record has lost.

In particular, it can be examined how many mathematicians it has lost, and how many princes it has lost.

cdx

The mathematicians.

All predecessors of the mathematicians and

mathematicians in the Egyptian record, in all the twenty-three and a half centuries of its independent accumulation from Narmer to the conquest of valley of the Nile by Esarhaddon, are these.

- 5 important,
2480 **Palermo stone,**
2016 account of work on a building
including calculations,
1885 **book of 87 problems,**
1826 **Moscow papyrus,**
1826 Berlin papyrus.
And 2 not important,
1826 Lahun papyrus,
1826 26 sums of fractions.

Unseemly enough, the names Palermo stone, Moscow papyrus, Berlin papyrus, and Lahun papyrus are from the locations of museums and finds. More unseemly, the account of work on a building is part of what goes by the name Reisner papyrus, having been found by Reisner during excavations in 1901-4. More unseemly, the book of 87 problems goes by the name Rhind papyrus, having been purchased by Rhind in 1858. The 26 sums of fractions goes by the name mathematical leather roll.

The date assigned to the Palermo stone is from the latest prince attested on the stone, Neferirkare, prince c. 2440. The account of work on a building was composed under Senwosret, prince c. 1976-32. The book of 87 problems was written under Amenemhet III, prince c. 1845-00. The Moscow papyrus, the Berlin papyrus, the Lahun papyrus, and the 26 sums of fractions are dated to the century around c. 1786 from the development of language, including that of writing, and that of subject matter.

The account of work on a building, the Berlin papyrus, the Lahun papyrus, and the 26 sums of fractions are all fragmentary.

The 5 important have been presented above in some detail.

Five and a half centuries separate Narmer and the Palermo stone. And the earliest development which points toward mathematics can be recovered from the development of the tombs of the princes in these five and a half centuries.

Two generations after Narmer, Djer has left behind his tomb.

The tombs become larger, and three centuries

after Djer, Djoser has left behind the oldest pyramid. It was built by his chief official Imhotep.

The pyramids also become larger, and one century after Djoser, they become the largest with the pyramid of Khufu. It was built by his chief official Hemiunu.

The pyramid of Khufu stood 147 m high. The second largest, of his successor's successor Khafre, stood 136 m high. In the forty-six centuries since they have been weathered down by some 10 m each. After Khufu and Khafre the pyramids become smaller. One century after Khafre, there is the Palermo stone.

And, in particular, the development which points toward mathematics is attested by the oldest account of the building of the largest pyramid. And this, too, is in Herodotus.

Herodotus writes:

Khufu ordered workers to drag great stones from the quarries in the Arabian mountains on the far side of the Nile, and other workers to ferry the stones across the river and drag them again as far as the Libyan hills; they worked in gangs of 100 000 for three months each; they built the road on which they dragged the stones in 10 years, and this was a labor as great as the pyramid, I think; the pyramid itself they built in 20 years (II, 124);

and this is how they built it, like a staircase;

they made a base, then they lifted the stones with levers made of timbers, and either with as many levers as there were steps, or with the same lever after they had lifted a stone to one step in order to lift it to the next; I have two accounts for this, for they told me both;

so they finished the top first, then the next level down, then the next, and so until they reached the ground;

the Egyptians have an account also of how much was spent on radishes, onions, and garlic for the workers; the interpreter who read the book for me told me that 1 600 silver talents were spent; and if so much was spent on radishes, onions, and garlic, how much more was spent on the iron with which they worked, or on food and clothing for the workers (125)?

Herodotus attests the solution of three problems.

The counting of large collections, of gangs of

100 000.

More difficult, the counting of years, the 10 years to build the road, the 20 years to build the pyramid.

Most difficult, the calculation of value, of the 1 600 talents spent on radishes, onions, and garlic. And this was calculated, rather than how much was spent on the iron with which they worked, because the radishes, onions, and garlic were more valuable, presumably. Concern with what was more valuable, and what was the most valuable, is indicated rather unambiguously by the goal of the edifice.

The three problems attest the first steps toward mathematics.

One century after Khafre, the Palermo stone attests all three problems, and an advance in the solution of all three.

It counts larger collections.

On the Palermo stone the oldest annals are inscribed. The annals record the deeds of the princes. And among the deeds of Sneferu are these:

the year he smote Nubia; he took 4 000 men, 3 000 women, and 200 000 large and small cattle (Palermo fr.).

It records successions of years. The stone is the first step toward the solution of the problem of time reckoning. It attests the oldest explicit distinction of one year from another by the deeds of the princes. Djer is the first prince whose deeds the stone records, and these are his years: the year of the following of Horus at the birth of Anubis;

the year of the festival of the two lakes;

the year of the following of Horus at the birth of Seth (Cairo fr. 1).

It calculates more difficult values. These are again among the deeds of Sneferu:

the year he built 35 houses for 122 oxen; he built one ship of 100 cubits of cedar and two ships of 100 cubits of meru each (Palermo fr.).

And the Palermo stone attests a major advance as well. Each year the annals record also the level of the high Nile:

3 cubits, 1 palm, 2 fingers;

4 cubits, 1 span;

8 cubits, 3 fingers (*id.*).

It is the oldest measurement.

And no doubt, once obtained, this measurement was used, just as, once obtained, all subsequent measurements will be. From the inspection of the level of the high Nile to harvesting to harvesting the harvesters, presumably. Nevertheless, much as it may have to be contaminated by the supposition of utility, the oldest measurement is a theoretical result. The striving for truth has for the first time unambiguously succeeded in forcing us to advance to the reference and the true. And the oldest measurement is a decisive step toward mathematics.

Four and a half-odd centuries then separate the Palermo stone and the account of work on a building. That there was no further advance in these centuries can be inferred again from the tombs of the princes. If building a larger tomb had been the means of improving the prince's odds of beneficial journey to heaven, inscribing the tomb with spells now became the means. Unas postdates the Palermo stone by one century-odd. Unas, an indestructible spirit, is coming to Re in heaven. And so are the successors of Unas, an indestructible spirit each, coming to Re in heaven. Not quite one century after Unas the state falls apart.

After some two centuries of disorder the state is rebuilt. And that there was no further advance in the four and a half-odd centuries after the Palermo stone the account of work on a building composed under Senwosret attests. The account contains calculations of sizes of chambers, quantities of stones, and wages of workers (*id.*). It attests nothing more difficult than the calculation of how much was spent on radishes, onions, and garlic or of how much timber it took to build a ship.

Then, not quite one and a half centuries later, there is the book of 87 problems. And the book of 87 problems is mathematics *par excellence*.

The book begins:

the rules of calculation, the gateway to the knowledge of all things and the uncovering of all secrets.

The book divides into three parts, problems 1-23, problems 24-34, and problems 35-87. The first part is the rules of calculation, the second part is the gateway to the knowledge of all things, the third part is the uncovering of all secrets.

The first part, problems 1-23, is the rules of calculation for all positive rational numbers.

The second part, problems 24-34, is the greatest advance. The gateway to the knowledge of all things is the general treatment of quantity.

The third part, problems 35-87, uncovers all secrets. It shows that round fields, volumes, grain, loaves, barley, fat, cattle, beer, barns, cats, mice, malt are all quantities, their secrets uncovered by calculation. Problem 40 deals with an arithmetical progression. Problem 50 implies $\pi = 3.16049 \dots$. Problem 51 attests the discovery of the triangle. Problem 56 deals with the slope of the side of a pyramid. Problem 79 deals with a geometrical progression.

The Moscow papyrus, the Berlin papyrus, the Lahun papyrus, and the 26 sums of fractions are all from the following century.

The Moscow papyrus is a collection of 25 problems, the first 2 legible in part, the remaining 23 legible in their entirety. All 25 problems are like those in the third part of the book of 87 problems, some are exactly the same. Problem 23 is: you are told; in 1 day a cobbler cuts the leather for 10 pairs of sandals; in 1 day he sews the cut leather into 5 pairs; how many pairs will he make in 1 day if he both cuts and sews? add the days for the cutting of those 10 pairs and for sewing them; you have 3; divide 10 by 3; you have $3\frac{1}{3}$ pairs; look, you found it (*id.*).

The Berlin papyrus has a single problem, also like those in the third part of the book of 87 problems.

The Lahun papyrus is a copy of some of the rules and a couple of the problems of the book of 87 problems.

The 26 sums of fractions are a trivial application of the rules of calculation of the book of 87 problems.

Then there is nothing for eleven centuries, through the conquest of Egypt by Esarhaddon. Nothing comes closer to mathematics than a handful of inscriptions counting the years of a prince or his booty.

And that there was no advance in the two and a half centuries after the book of 87 problems, the scribe Ahmose, much like the Greek commentators later on, rather explicitly attests. He reports

in the introduction to the book: this book was copied in the thirty-third year of Apepi, the prince of all Egypt, from an old book written in the time of Amenemhet III, the prince of all Egypt; the scribe Ahmose copied it.

Amenemhet III was the prince of all Egypt *c.* 1845-00. Apepi was the prince of all Egypt *c.* 1590.

This is the development of mathematics attested by the Egyptian record. Five and a half centuries from nothing to the Palermo stone. Six centuries of nearly nothing from the Palermo stone to the book of 87 problems. Vigor in the following century. Followed by eleven centuries of nothing.

And the temporal characteristic of this particular development is general.

It is the temporal characteristic of other particular developments in the valley of the Nile.

There is the oldest measurement, of the level of the high Nile. Then there is nothing for five and a half centuries. Then there is the oldest observation of a heavenly body, of Sirius. Then there is nothing for three-odd centuries. Then there is another observation of Sirius. Then there is nothing in the eight and a half centuries through Esarhaddon.

There is the greatest advance in medicine attested by the 48 treatments of injuries, from the century after *c.* 1570. And there is nothing before or after.

There are the oldest annals, the Palermo stone. Then there is nothing for nine and a half-odd centuries. Then there are the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus. Then there is again nothing in the five and a half centuries through Esarhaddon.

The state itself begins with the first prince, and continues for seven and a half centuries. Then it disappears in disorder for some two centuries. Then it is rebuilt, a larger and more powerful state now, and continues for two and a half-odd centuries. Then it again disappears in disorder for two-odd centuries. Then it is again rebuilt, again a larger and more powerful state, and continues for four centuries. Then it again disappears in disorder.

It is the temporal characteristic as well of the

contemporary development of mathematics in the other valley.

There are the 3 calculations of area. Five centuries later there are the next two mathematicians. Not quite four centuries later there are the next two mathematicians. Four centuries later the first of the three brightest periods in the acquisition of knowledge begins, and continues for some two centuries. Toward the end of that time Venus is discovered. Two centuries after the discovery of Venus there is the map of Nippur. Other than the map of Nippur there is nothing after the discovery of Venus for nine centuries.

It is the temporal characteristic of the later development of mathematics, too.

There is no mathematician of any importance in all of Christendom before Fibonacci in the thirteenth Christian century. There is substantial advance in the two and a half centuries from al-Khwarizmi through Khayyam, then the number of mathematicians, never too large to begin with, dwindles in Islam, too, and until there are no mathematicians. Nineteen-odd centuries separate Chrysippus and Leibniz. Fourteen centuries separate Ptolemy and Copernicus. Thirteen centuries separate Diophantus and Pappus and Cardano and Viète.

Advance is rare. Nothing is common.

3 of the predecessors of the mathematicians and mathematicians in the Egyptian record are very important.

2 are important but not very important.

2 are not important, but, given the great scarcity of mathematicians, not very not important.

All 4 successors of the most important are derivative of him.

The record has not lost even 1 important mathematician.

cdxi

The princes.

The state appears in the valley of the Nile with Narmer prince *c.* 3000.

It appears in the valley of the two rivers three-odd centuries later with

Enmebaragesi prince *c.* 2680.

And for twenty-three and a half centuries, counting from Narmer to Esarhaddon, the state develops independently in the two valleys.

It is yet one and the same development.

The state appears in the valley of the Nile as one large state, in the valley of the two rivers as several small states. The state nevertheless exhibits in both valleys the same gradual halting development. In both valleys times of states and order keep alternating with times of no states and disorder. For two-odd millennia the state is, so to say, stammering, babbling, and prattling.

In the valley of the two rivers, for five centuries, from Enmebaragesi to

Sharkalisharri prince *c.* 2220-195,

there are at first states smiting one another, then the one state of Sargon and his four successors. Then, for two-odd generations, the state disappears in the disorder brought by the Gutian hordes. Then, for five centuries, from

Utuhegal prince *c.* 2128-1

to

Ammisaduqa prince *c.* 1646-25,

there are again states smiting one another, then the one state of Ur-Nammu and his successors, then again states smiting one another, then the one state of Hammurabi and his successors. Then, for two and a half centuries, the state in the valley of the two rivers disappears in the disorder brought by the Kassite and Hurrian hordes.

Further west, in Asia Minor, there is the Hittite state, from

Labarna prince *c.* 1650

to

Telipinu prince *c.* 1510,

then the Hittite state disappears in disorder, then there is again the Hittite state, from

Suppiluliuma prince *c.* 1350-25

to

Tudhaliya IV prince *c.* 1245-15,

then the Hittite state disappears altogether.

In the valley of the two rivers Ashur rises, from

Ashur-uballit prince *c.* 1363-27

to

Tukulti-Ninurta prince *c.* 1243-06,

then declines, then rises again under

Tiglath-pileser prince 1115-076,

then declines again, then rises again under

Ashur-nasirpal II prince 884-59,

then declines again.

In the valley of the Nile, for seven and a half

centuries, from Narmer to

Pepi II prince *c.* 2240,

there is one large state. Then, for some two centuries, the state disappears in disorder. Then, for two and a half-odd centuries, from

Mentuhotep prince *c.* 2069-18

to

Sobeknefru prince *c.* 1790-86,

there is again one large state. Then, for two-odd centuries, the state again disappears in disorder. Then, for four centuries, from

Ahmose prince *c.* 1570-45

to

Ramesses III prince *c.* 1191-59,

there is again one large state. Then the state again disappears in disorder.

The same gradual halting development which the state exhibits in both valleys is also the same gradual halting expansion. And to the same end. In both valleys the state reaches further, becomes larger, and more powerful. In both valleys attesting clearly and distinctly the end, to bring all peoples, and all states, under one state.

In the valley of the two rivers the state appears as several small states. The princes of Kish, Uruk, and Ur begin smiting one another. The princes of Lagash rise, their success at its greatest under

Eanatum prince *c.* 2470,

whose inscriptions attest campaigns across 730 km.

Sargon prince *c.* 2337-281

wins 34 battles, and the state achieves its end. To Sargon Enlil gave no rival from the upper sea to the lower sea. The domain of the Akkadian princes reaches under

Naram-Sin prince *c.* 2257-20

from the sources of the Tigris and the Euphrates to their mouth in the Persian Gulf, and from the Mediterranean to the Persian Gulf across 1 300 km. Then the one state falls apart. And the attempts to rebuild it begin. The state is again one under the princes of Ur,

Ur-Nammu prince *c.* 2121-03

and his successors. It falls apart again, and it is again one under the princes of Babylon,

Hammurabi prince *c.* 1792-49

and his successors. This state is destroyed, and Babylon sacked, by

Mursili prince *c.* 1610.

From Hattusa to Babylon, this campaign of Mursili reaches across 1 200 km along the great circle. Disorder follows. Then there are the princes of Ashur. With Ashur-uballit a continuous succession of 41 princes over seven centuries begins. They come close to achieving the end of the state in the one century, from

Adad-nirari prince *c.* 1305-273
to Tukulti-Ninurta, come closer under

Tiglath-pileser prince 1115-076,
come closer still under

Ashur-nasirpal II prince 884-59,
Shalmaneser III prince 859-24,
and achieve the end in the one century-odd from
Tiglath-pileser III prince 745-27
to

Ashurbanipal prince 668-27.
The state of the Assyrian princes reaches from the source of the Euphrates in the north to Thebes in the valley of the Nile in the south and from the delta of the Nile in the west to Susa in Elam in the east, across 1 600 km along the meridian and 1 700 km along the parallel.

In the valley of the Nile the state appears as one large state. And this fact explains the stability of the state in this valley for the first seven and a half centuries of its existence. In the other valley the princes build the one state. In this valley the state is one from the first, and the princes build their tombs. The third prince already,

Djer prince *c.* 2960,
left behind his tomb. The tombs of his successors become larger, and larger, and as large as the pyramids of

Khufu prince *c.* 2580
and

Khafre prince *c.* 2540,
the largest edifices built on earth for the following forty-four centuries, until the nineteenth Christian century. The tombs then become smaller, but then in the tomb of

Unas prince *c.* 2320
the 228 spells are inscribed, informing Re in heaven that Unas is coming to Re in heaven. At its greatest the state reaches from the mouth of the Nile in the north to the first cataract in the south, some 800 km along the meridian.

After Pepi II the state falls apart.

The one state is rebuilt, beginning with Mentu-

hotep. The state now becomes larger and more powerful. Nor is the state stable now. The princes build the state as vigorously as they build their tombs. The acquisition of knowledge advances greatly, too. With Mentuhotep already campaigns beyond the first cataract begin.

The state is at its greatest under

Senwosret III prince *c.* 1878-45,
who campaigns beyond the second cataract, and first breaks out of the valley of the Nile and ventures into Asia. Senwosret III reports:

I set my border further than my forefathers; I am the one who conquers; I am the one who is victorious; I am the protector of my friends, merciless to the foe who attacks me (Semna stele).

Also under Senwosret III the oldest observation of a heavenly body is made, of Sirius in 1871 ± 5 . Under Amenemhet III the book of 87 problems is composed. At its greatest the state reaches along the Mediterranean littoral some 500 km west to east along the parallel, and from the sea to the second cataract some 1 100 km north to south along the meridian.

After Sobeknefru the one state falls apart again.

The one state is again rebuilt, beginning with Ahmose. The state now becomes yet larger and yet more powerful.

Amenhotep prince *c.* 1545-21
begins campaigning again both in the south and in Asia.

Thutmose prince *c.* 1521-09
reaches the third cataract, and erects a victory stele on the Euphrates. He reports:

I set the boundaries of my domain as far as the sun reaches (Abydos stele).

Amenhotep III prince *c.* 1402-364,
reaches the fifth cataract. He set the boundaries of his domain as far south as Nubia and as far north as Phoenicia, including within the boundaries the land which, some centuries later, god was to promise to his people. Under Amenhotep IV the contacts of the Egyptian princes with the Kassite and the Assyrian princes in the east and the Hittite princes in the north are attested by the Amarna archive. For one and a half centuries the successors of Amenhotep III maintain more or less firmly their control over the entire domain

conquered earlier, and

Ramesses II prince *c.* 1291-24, reasserts his control at the battle of Kadesh on the Orontes. At its greatest the state reaches along the African Mediterranean littoral and into Asia some 700 km west to east along the parallel, and along the Asian Mediterranean littoral and down the Nile some 2 100 km north to south along the meridian. The contacts between the two valleys remain sporadic and insubstantial, and the hold of the Egyptian princes on the Asian Mediterranean littoral remains tenuous. This is yet the beginning of the gradual convergence of the development in the valley in the west and in the valley in the east into one another, completed by the conquest of the valley in the west by the Assyrian princes. After Ramesses III the one state falls apart, and for five and a half centuries disorder predominates.

Sheshonq prince *c.* 928-07, briefly unifies the country and campaigns in Asia. *Kings* reports: Sheshonq seized Jerusalem, and took the treasures of the house of the lord and of the palace of the king (I, 14). Disorder follows.

Piyi prince *c.* 729-08, unifies the country again. Then Esarhaddon conquers Egypt. Ashurbanipal subdues the country, and installs

Psamtik prince 664-10. One century-odd of stability follows. After the fall of Assyria the Egyptian is one of the four kingdoms, next to the Babylonian, Mede, and Lydian, vying to become the dominant power on earth. Under Psamtik's successor Necho Africa is circumnavigated.

Cyrus conquers the Mede, Lydian, and Babylonian kingdoms. Cambyses conquers the Egyptian in 526. The state of the great kings reaches from the gulf of Sidra to the Indus, 4 900 km along the great circle. It is the state of one fifth of humanity. The state has, so to say, matured.

cdxii

The sources for the development of the state in the valley of the Nile can be divided into four kinds. The predecessors of the historians and the historians. The inscriptions of the princes. Inscriptions of lesser officials. Other monuments.

The inscriptions of the princes.

These are not nearly as many as they are in the other valley. Nor are they nearly as explicit. The 9 princes of Lagash from Ur-Nanshe, prince *c.* 2535, through Urukagina, prince *c.* 2340, left behind between them some 110 inscriptions, describing their deeds in relation to the deeds of other princes, describing their city in relation to other cities, and describing between them with some particularity a substantial portion of time and space, some two centuries and much of the lower valley of the two rivers. The inscriptions of the princes of Akkad describe a larger portion and more explicitly. The inscriptions of the princes of Ur describe a larger portion and more explicitly. Thus in the first six centuries of development of the state, and in the following millennium and a half the inscriptions of the princes continue to describe a steadily larger portion of time and space steadily more explicitly. The inscriptions of the princes in the valley of the Nile never attain the quantity or quality of the inscriptions of the princes in the valley of the two rivers.

The inscriptions of the princes in the valley of the two rivers attest the decisive step, and steadily more decisive over time, from the thought and the sense to the reference and the true. The inscriptions of the princes in the valley of the Nile attest the step as well. But the step is not nearly as decisive. And the inscriptions attest much more of the thought and the sense than they do of the reference and the true.

The following five – except in being each the most important of its time, and being each an artistic masterpiece – are representative of the large majority of inscriptions.

Narmer, prince *c.* 3000, has left behind a palette. On the obverse, wearing the crown of upper Egypt, the prince holds an upraised mace in his right hand ready to smite his kneeling foe whose forelock he holds in his left hand. On the reverse, wearing the crown of lower Egypt, the prince marches in a procession with his retinue, on the left, toward the corpses of his decapitated foes, on the right. It is a picture. The hieroglyph identifying the prince, a mud fish above a chisel, is a small part of the picture.

Unas, prince *c.* 2320, has left behind an inscription. Writing has in the meantime developed into a coherent system, and words now dominate

the inscription. It is a large inscription, too, 228 spells. But it is a tomb inscription. The words are saturated with ideas and feelings. Events in heaven are described. Events on earth, if any, have to be inferred from those in heaven.

Senwosret III, prince *c.* 1878-45, has left behind the Semna stelae. The prince informs posterity: I set my border further than my forefathers. And: I am the protector of my friends, merciless to the foe who attacks me. Both are very important facts. But the inscription is a poem. The prince sings:

I took their women,
I carried off their offspring,
I captured their wells,
I killed their cattle,
I cut down their grain,
I set it on fire,

as my father lives in me, I speak the truth (*id.*).

And in the two dozen lines of the poem, the prince informs posterity of very little in particular. He set his boundary where the stele is, his foe is: the Nubian (*id.*), and that is that.

Ramesses II, prince *c.* 1291-24, has left behind the largest and best attested inscription. In the 5th year of his reign the prince fought the battle of Kadesh. The description of the campaign is attested in more than a dozen copies. It is inscribed on the walls of the temples of Karnak, of Abydos, of Luxor, and of Abu Simbel. It attests that Ramesses II, leading foot and chariots, fought the Hittites at Kadesh on the Orontes *c.* 1286. And it attests very little else. For this inscription is a poem, too, an epic poem. This is how it ends, for instance: my might made all my foes the Hittites fall in the Orontes, one upon the other, as crocodiles fall in the water; I defeated them all, all by myself; for all my foot and all my chariots had left me; not one of them had remained; and as I live, as Re loves me, as my father Amun favors me, everything I say I did, in truth I did, as all my foot and all my chariots were there to see it (*id.*).

Piyi, prince *c.* 729-08, has left behind the Napata stele. The lord of Nubia, then of upper Egypt, in the 20th year of his reign Piyi conquered lower Egypt. The stele describes the campaign. But this inscription, too, is a poem. This is how it describes the capture of Memphis, for instance:

the ships of his majesty moored at Memphis; his majesty saw that the city was strong, its walls were high, the battlements manned in strength; there was no way to capture it; some in his majesty's army said, let us besiege it; others said, let us build a siege tower; but his majesty raged against them like a panther, I swear, as Re loves me, as my father Amun favors me, I will capture it like a sandstorm; and he sent his ships against the harbor; and they captured all the ships in the harbor; and his majesty told his men, mount the walls, let no one stop you, we have taken upper Egypt, we will vanquish lower Egypt; and they took Memphis like a sandstorm; many were slain, the rest were brought to his majesty captive (*id.*).

The exception are the inscriptions of Thutmose III and his immediate successors. Thutmose III, prince *c.* 1470-37, has left behind annals. Inscribed on the walls of the temple of Karnak, the annals of Thutmose III describe the campaigns of the prince year by year, from the 1st year of his reign through the 19th. The annals describe with some particularity a portion of time. They record also a number of localities. They also count. In his campaign in the 2nd year of his reign, for instance, the prince collected from Palestine alone: the daughter of the chief, ornaments of gold, lapis lazuli, 30 slaves of the chief, 65 male and female slaves, 103 horses, 5 chariots wrought with gold and 5 wrought with electrum for a total of 10, 45 bullocks, 749 bulls, 5 703 goats and sheep, flat dishes of gold which could not be weighted, flat dishes of silver weighing 104 deben, 5 kidet, a gold horn inlaid with lapis lazuli, 823 jars of incense, 1 718 jars of wine, much ivory, fine wood, and all kinds of other jewels (*id.*). On the walls of the temple of Karnak Thutmose III has left behind also: a list of the countries which his majesty conquered and whose children he carried off (*id.*). The countries are 850+, the children correspondingly many more. The inscriptions of Thutmose III's immediate successors, Amenhotep II, prince *c.* 1437-11, and Amenhotep III, 1402-364, are more explicit as well. And the Amarna archive collects the letters to Amenhotep III, Amenhotep IV, prince *c.* 1364-47, and Smenkhkare, prince *c.* 1347-4, from the princes of Babylon, Ashur, Mittani, and Hattusa.

The princes who campaigned the furthest and

built the state at its greatest have left behind the most and most explicit inscriptions. Their successors, as the state began to decline, then declined catastrophically, have left behind fewer and less explicit inscriptions.

And thus in the valley of the Nile as in the valley of the two rivers. The inscriptions of the princes are the more numerous and the more explicit the greater the success of the state. The two, in fact, the success of the state and the quantity and quality of the inscriptions of the princes, are an excellent measure of one another. Which must be a matter of course, if the princes build the state.

In general, then, the inscriptions of the princes in the valley of the Nile are not very explicit. In the first seven and a half centuries of stability of the state they are not explicit at all. In the following two centuries of disorder there are no inscriptions. In the following two and a half-odd centuries, when the state is again one and begins to expand, the inscriptions are more explicit but still not very explicit. In the following two-odd centuries of disorder the inscriptions are few and not explicit. In the following four centuries, when the state is at its greatest, the inscriptions are at their most explicit in the century-odd beginning with Thutmose III, then become fewer and less explicit. And in the following five and a half centuries disorder predominates, the inscriptions are few and not explicit, and thus through the conquest of Egypt by Esarhaddon.

Of the four kinds of sources for the development of the state the inscriptions of the princes are second in importance.

Inscriptions of lesser officials.

All these are tomb inscriptions, accordingly saturated with ideas and feelings. Among the oldest, for instance, is the inscription of: the daughter of the prince, his ornament, the priestess of Hathor, the priestess of Khufu, Nisedjerkai (*id.*); may she be buried in the western chamber in great old age; may she follow the good path which the good follow; may offerings be given to her on the feast of the new year, on the feast of Thoth (*id.*), and on many other feasts, too.

The important among the oldest are the following,
2660

Metjen,

2500 Niankhsekhmet,
2325 **Weni,**
2285 Harkhuf.

They are tomb inscriptions, too. They describe, however, a little of the past as well as the future. They describe the services these officials rendered their lords. Metjen held office under Huni, prince *c.* 2620. Niankhsekhmet held office under Sahure, prince *c.* 2460. Weni held offices under Teti, prince *c.* 2300, Pepi, prince *c.* 2280, and Merenre, prince *c.* 2260. Harkhuf held offices under Merenre, prince *c.* 2260, and Pepi II, prince *c.* 2240. The inscriptions of Metjen and Niankhsekhmet are brief and not very explicit. The inscriptions of Weni and Harkhuf are longer and more explicit.

The importance of these inscriptions as sources is small compared to that of the inscriptions of the princes.

Other monuments.

These are the tombs, temples, and all smaller artifacts, palettes, maceheads, labels, potsherds, seals, statues, stelae, bowls, such as they are distinct from the inscriptions of the princes or lesser officials which they bear, and such as they bear other inscriptions. With a few exceptions, their importance as sources is minimal. An exception is, for instance, a statue of the priest Hotepdip, inscribed with the names of three princes, beginning with Hotepsekhemwy, prince *c.* 2840.

The three masterpieces can be noted as well, the Shabaka stone, *The story of Sinuhe*, and *The story of Wenamun*.

Under Shabaka, prince *c.* 708-693, the Shabaka stone was inscribed with the composition which has come to go under the name Memphite theology. The stone reports: this book was copied by the order of his majesty, because his majesty found it to be the work of the ancestors, but to be eaten by worms so that it could not all be read from the beginning to the end (*id.*). The composition is dated from its language and subject matter to the century before *c.* 2240. It is a celebration of Ptah:

Ptah gave birth to the gods,
and from him everything came,
food, livelihood, offerings to the gods, all good things (*id.*);
he gave birth to the gods,

he made the towns,
 he divided the country,
 he put the gods in their temples,
 he set their offerings,
 he established their shrines,
 he made them bodies such as each wanted (*id.*).

It has no importance as a source.

The story of Sinuhe, from the century after *c.* 1932, and *The story of Wenamun*, composed under Herihor, prince *c.* 1080, emulate the tomb inscriptions of the officials reporting their services. As their artistic virtues are greater, their importance as sources is, respectively, of *The story of Sinuhe* minimal, of *The story of Wenamun* small.

The most important sources, by far, are the predecessors of the historians and the historians.

The record of the development of the state in the valley of the Nile is substantially less explicit than the record of the development of the state in the valley of the two rivers. It is the least explicit in the first millennium of that development. If the record has lost any princes, it has to be some of the princes in that millennium that it has lost. If it has lost none of these princes, it has lost none of the later princes either.

It can thus be examined, in particular, how many of the princes in the first millennium of the development of the state in the valley of the Nile the record has lost.

cdxiii

The predecessors of the historians and the historians are these 7,

2480	Palermo stone,
1510	Karnak prince list,
1342	Abydos prince list,
1331	Saqqara prince list,
1281	Turin papyrus,
484 - 425	Herodotus,
346	Manetho.

The stone and the three prince lists are dated from the latest prince listed in each. The latest prince attested by the Palermo stone is Neferirkare, prince *c.* 2440. The Karnak prince list was completed under Thutmose III, prince *c.* 1470-37. The Abydos prince list was completed under Seti, prince *c.* 1302-291. The Saqqara prince list was completed under Ramesses II, prince *c.* 1291-24.

The Turin papyrus, which is also a prince list, is dated from its language and subject matter to the century after *c.* 1291.

The 7 indicate clearly and distinctly three steps of advance in the acquisition of knowledge. First there is the Palermo stone. Then there is no development for nine and a half-odd centuries. Then there are over the next not quite two centuries the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus. Then there is again no development for eight and a half centuries. Then there are over the next not quite one and a half centuries Herodotus and Manetho.

On the Palermo stone the oldest annals are inscribed. Seven fragments survive.

The annals record the deeds of the princes. Early on, these are some of the deeds of Djer:

the year of the following of Horus at the birth of Anubis;
 the year of the festival of the two lakes;
 the year of the following of Horus at the birth of Seth.

Later on, these are some of the deeds of Sneferu:
 the year he smote Nubia; he took 4 000 men, 3 000 women, and 200 000 large and small cattle; 40 ships brought cedar;
 the year he built 35 houses for 122 oxen; he built one ship of 100 cubits of cedar and two ships of 100 cubits of meru each.

And all in all, the annals attest 11 princes:

Djer,
 Den,
 Ninetjer,
 Khasekhemwy,
 Sneferu,
 Khufu,
 Djedefre,
 Shepseskaf,
 Userkaf,
 Sahure,
 Neferirkare.

The advance achieved by this predecessor of the historians who has to go under the name Palermo stone is very great. And like so many others, this very great advance is not followed by further advance for a long time.

Then, nine and a half-odd centuries later, there is the Karnak prince list, then the Abydos prince

list, then the Saqqara prince list, then the Turin papyrus. And the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus are not only jointly a great advance over their predecessor. They show a great advance among themselves. From the Karnak prince list to the Abydos prince list to the Turin papyrus.

The Karnak prince list is inscribed on the walls of the temple of Karnak. It is a list of 61 princes. The princes are not arranged in chronological order. The names of 48 of the 61 princes are legible.

The Abydos prince list is inscribed on the walls of the temple of Abydos. It is a list of 76 princes. The princes are arranged in chronological order. The first prince is Meni. The seventy-sixth prince is Seti. The names of all 76 princes are legible.

The Abydos prince list is the second most important source for the series of the princes in the valley of the Nile. Its importance is comparable to that of the Sumerian prince list for the valley of the two rivers.

The Saqqara prince list is inscribed on the walls of the tomb of the overseer of works Tenry. It is a list of 58 princes. The princes are arranged in chronological order. The first prince is Ane-djib. The fifty-eighth prince is Ramesses II. The names of 47 of the 58 princes are legible.

The Turin papyrus is also a prince list. The advance is twofold. While the Karnak, Abydos, and Saqqara lists enumerate only the important princes, the Turin papyrus enumerates all princes, important and not important. It also not only arranges the princes in chronological order, it records their reign years. Also, while the chronological lists of the princes in the Abydos and Saqqara lists each begins with a prince, Meni and Ane-djib, respectively, the Turin papyrus begins with gods and spirits. After the gods and spirits the first prince follows. The first prince is Meni, as he is in the Abydos prince list. The last prince is Ramesses II. The Turin papyrus survives in some fifty fragments. The names or parts of the names of some 150 princes are legible.

For eight and a half centuries there is then again no further development.

Then there are Herodotus and Manetho.

Herodotus records the great and magnificent

deeds of the great kings, and as the great kings conquer one country after another, he researches the countries they conquer. Cambyses conquered Egypt, Herodotus records this fact, then researches Egypt. And he researches Egypt more than any other country, 1 of the 9 books of the *Histories*, book II, is devoted to his researches of Egypt. And in Egypt he researches the princes more than anything else, more even than the Nile, close to one half of the book is devoted to his researches of the Egyptian princes (99-182)

He begins: the first prince was Min (99). And continues: from their lists the priests told me the names of 330 princes (100). He reports on 11 more princes, and then computes: the Egyptian priests counted 341 generations of princes before Psamtik; 3 generations are 100 years, so 300 generations are 10 000 years, and 41 generations are 1 340 years, for a total of 11 340 years (142).

Herodotus investigates the Egyptian princes in relation to the great kings, and so in relation to the Mede princes, and the Babylonian princes, and the Lydian princes, and in relation to the Greeks as well as the barbarians. Herodotus established the fact of Egyptian antiquity.

His success in the investigation of the particulars is very great as well.

He records the fact that: the first prince was Min. It is a very important corroboration of the Abydos prince list and the Turin papyrus.

Herodotus then reports in some detail on 2 more of the 330 early princes: queen Nitocris and Moeris (100-1). He then reports in greater detail on the 11 princes who followed (102-141). Among these are the pyramid builders, Khufu, Khafre, and Menkaure (124-35). For these princes, the 340 after the first prince, Herodotus is not an important source.

He then calculates: 341 princes before Psamtik for a total of 11 340 years. And then he reports in detail on the last 6 princes of Egypt before its conquest by Cambyses, from Psamtik through Amasis (147-82). And for these princes Herodotus is the most important source.

After Herodotus history advanced greatly. In the generation after him, Thucydides wrote the history of the war of the Athenians and the Spartans. Two generations after Thucydides, Ephorus wrote a general history, in 30 books, collecting

the histories of all countries. One generation after Ephorus, Theophrastus and Eudemus wrote the histories of physics and mathematics. These are the high points. The common kind of history, as histories proliferated, and ever more, is the history of one country. Of this kind the most important, by far, is, one generation after Theophrastus and Eudemus, Manetho's *Egyptian history*. And Manetho is the most important source for the Egyptian princes, and for the development of the state in Egypt, again by far.

The sources for the valley of the two rivers are superior to those for the valley of the Nile in all respects but one. The inscriptions of the princes are more and more explicit. The Sumerian prince list was compiled six centuries after the first Sumerian prince, the Abydos prince list was compiled seventeen centuries after the first Egyptian prince. The Sumerian prince list was succeeded by many prince lists, the Abydos prince list was not. On the other hand, for the valley of the Nile there is Manetho. Manetho's analysis remains, and will forever remain, the foundation of the investigation of Egyptian antiquity.

Manetho is an excellent instance, too, of the indestructibility of importance.

The *Egyptian history* was in 3 books. It survives in fragments. The largest fragment has the totals for the reign years of the princes in each book:

book I	2 300 years, 70 days;
book II	2 121 years;
book III	1 550 years (fr. 2a).

For a total of 5 971 years and 70 days from the first prince to the conquest of Egypt by Alexander, with which Manetho ends. Alexander conquered Egypt in 332.

Four-odd centuries after Manetho, ben Halafta, in *The order of the world*, computed when, on the evidence of the holy scriptures, the world was created. Ben Halafta computes: 1 948 years from creation to the birth of Abraham; 500 years from Abraham to the exodus; 890 years from the exodus to the destruction of the first temple; 490 years from the destruction of the first temple to the destruction of the second temple. For a total of 3 828 years from creation to the destruction of the second temple. The second temple was destroyed in 70^{AD}.

On Manetho's reckoning the first prince predated creation by 2 546 years and 70 days.

Not quite three centuries after ben Halafta, Augustine was one of the many philosophers who recomputed when the world was created. In *The city of god*, he computes: 2 262 years from creation to the flood; 1 072 from the flood to Abraham; about 1 200 years from Abraham to the foundation of Rome; 787 years from the foundation of Rome to the resurrection of our lord Jesus Christ in the 15th year of Tiberius. For a total of about 5 321 years from creation to the resurrection. The 15th year of Tiberius is 29^{AD}.

On Manetho's reckoning the first prince still predated creation by about 1 011 years and 70 days.

Clearly, with Josephus: Manetho is a ridiculous liar (*Apion*, I, 29), with Syncellus: the book of Manetho is full of lies (*Collection*, 29).

Four centuries after Manetho, Josephus wrote *Against Apion, on the antiquity of the Jews*, to show not just the antiquity of the Jews, but, more generally, that: our truly trustworthy books contain the record of all time (I, 8). One and a half centuries after Josephus, Christians were claiming the stewardship of the truly trustworthy books containing the record of all time, and Africanus, in the *Chronography*, undertook the task of fitting the profane history recorded by the historians into the sacred history recorded in the holy scriptures. Not quite one century after Africanus, the *Chronography* became the foundation of Eusebius's *Chronicle*. Five centuries after Eusebius, eleven after Manetho, Syncellus wrote the *Chronological collection*, excerpting heavily from Africanus and Eusebius.

And Manetho's book has perished. When Manetho's book was epitomized, these epitomes have perished. When Africanus used an epitome of Manetho, the *Chronography* of Africanus has perished. And when Eusebius used Africanus, the *Chronicle* of Eusebius survives in but a garbled translation into Armenian, and in part into Latin. And yet Syncellus, excerpting from Eusebius and Africanus, has preserved much of the book full of lies. Josephus has preserved substantial passages from the ridiculous liar. All in all, in fragments as it is, the entire temporal framework of the *Egyptian history* survives. Survives particular by

particular by particular, too.

Manetho begins, like the Turin papyrus, with: gods (fr. 2a). The gods are followed by: sons of the gods (*id.*). The sons of the gods are followed by: spirits of the dead (*id.*). And the spirits of the dead are followed by the first prince:

the first prince was Menes, whom Herodotus called Min; he reigned 62 years; he led an army across the border and won great glory; he was killed by a hippopotamus (*id.*).

Beginning with the first prince, Manetho divides the series of the princes into thirty-one dynasties.

Dynasties I-VI are the time of order which goes by the name old kingdom.

Dynasties VII-XI are the time of disorder which goes by the name first intermediate period.

Dynasty XII is the time of order and expansion which goes by the name middle kingdom.

Dynasties XIII-XVII are the time of disorder which goes by the name second intermediate period.

Dynasties XVIII-XIX are the time of order and expansion which goes by the name new kingdom.

Dynasties XX-XXVI are the time when disorder again predominates, then order is restored by Psamtik – the fourth prince of dynasty XXVI – which goes by the name late period.

Dynasties XXVII-XXXI are the time of the great kings – Cambyses is the first prince of dynasty XXVII – then of local rulers, then of the reestablishment of the rule of the great kings, through the conquest of Egypt by Alexander, which is the end of dynasty XXXI.

In the first time of order, dynasties I-VI, Manetho has a succession of 49 particular princes with the name and reign years of each. Some of his reports on some of the princes after the first survive as well:

Uenephes, he reigned 42 years; in his reign there was a great famine; he built the pyramids around Kokhome;

Suphis, he reigned 63 years; he built the great pyramid which Herodotus says Cheops built; he defied the gods; he wrote the sacred book venerated by the Egyptians;

Nitocris, she was the bravest and the most beautiful; she was fair in complexion; she built the third pyramid; she reigned 12 years (*id.*).

In the following time of disorder particularity disappears. Manetho has:

dynasty VII, 70 princes from Memphis reigned 70 days;

dynasty VIII, 27 princes from Memphis reigned 146 years;

dynasty IX, 19 princes from Heracleopolis reigned 409 years;

dynasty X, 19 princes from Heracleopolis reigned 185 years;

dynasty XI, 16 princes from Thebes reigned 43 years (*id.*).

Of all these 151 princes Manetho has the name, and not the reign years, of 1 particular prince, the first of dynasty IX.

Manetho writes: after these princes Ammenemes reigned 16 years (*id.*). With this prince particularity resumes, and the second time of order begins. With him and the 7 princes of dynasty XII, Manetho has a succession of 8 particular princes. Some of his reports on them survive as well:

Sesostris, he reigned 48 years; he conquered all Asia in 9 years and Europe as far as Thrace; he erected stelae everywhere to celebrate his conquests of the peoples; for a valiant people he engraved the genitals of a man, for a cowardly people the genitals of a woman; the Egyptians honored him as next to Osiris (*id.*).

In the following time of disorder particularity suffers greatly again. Manetho counts 217 princes of dynasties XIII-XVII. Of all the 217 he has the names and reign years of 6 particular princes.

In the third time of order, dynasties XVIII-XIX, particularity again resumes. Manetho has a succession of 22 particular princes.

In the last time of disorder, closest to the time of writing, particularity does not suffer so much. Manetho counts 12 princes of dynasty XX, and has no name or reign years for any of them. But then he has 28 particular princes of dynasties XXI-XXVI. The disorder is yet indicated unambiguously by the provenance of the princes. Those of dynasty XX are from Thebes, of dynasty XXI from Tanis, of dynasty XXII from Bubastis, of dynasty XXIII from Tanis, of dynasty XXIV from Sais, of dynasty XXV from Ethiopia, of dynasty XXVI from Sais.

The Abydos prince list has 76 princes through

Seti. Counting the particulars alone, Manetho has 81 princes through Seti.

Manetho's analysis of the series of princes into dynasties is not a success. In the times of order the succession of dynasties indicates breaks in the continuous succession of the princes, which are of minimal importance, at best. In the times of disorder the succession of dynasties misrepresents the contemporary reigns of local rulers. The division of the princes into dynasties is best ignored.

On the other hand, Manetho's analysis, on the ground of particularity, of the development of the state in Egypt into times of order, disorder, order, disorder, order, and again disorder – old kingdom, first intermediate period, middle kingdom, second intermediate period, new kingdom, and late period – is conclusive.

cdxiv

These are the sources.

The task is to examine the princes in the first millennium of the development of the state in the valley of the Nile, or what is the same, the princes of the old kingdom, the first intermediate period, and the beginning of the middle kingdom.

Of all problems of identification and chronology, which the record poses, the problems involving those princes are the most severe. And the fact that these problems can be solved, and have been solved, all by itself shows the abundance of the record, not scarcity.

The examination below is on the ground of the following presumptions.

In each case fundamental is the evidence of Manetho and the Abydos prince list. This is corroborated or corrected by the evidence of the Saqqara prince list and the Turin papyrus. Then the joint evidence of these four is corroborated or corrected by the evidence of the inscriptions of the princes, of the inscriptions of lesser officials, and of the other monuments.

Also, the corroboration of the Palermo stone is decisive.

The evidence of the Karnak prince list is important as well, but it can only be corroborative as well.

The corroboration of the inscriptions and the monuments is decisive, too. It is decisive, how-

ever, only with respect to the series of the princes established by Manetho and the prince lists. Given this series, and not without it, the evidence of the inscriptions and the monuments is decisive. It is Manetho and the prince lists that reduce the evidence of the inscriptions and the monuments to facts. Without Manetho and the prince lists the inscriptions are just words, the monuments are not even that, they are stones.

Also, here as everywhere, the principle must be Frege's: about the reference of words must be asked in their connection in propositions, not in their isolation.

Manetho writes in Greek, transcribing hieroglyphs into letters.

Throughout its first millennium writing is developing, and developing slowly, from pictures into a coherent system of writing. A coherent system of writing in hieroglyphs.

The princes style themselves, as princes would, as they please. In hieroglyphs.

Propositions, not words in their isolation, let alone the various readings of words, let alone the pictures constituting the words, must decide which is in each case the reference of the name of a prince.

Again, the Palermo stone attests these princes:

Djer,
Den,
Ninetjer,
Khasekhemwy,
Sneferu,
Khufu,
Djedefre,
Shepseskaf,
Userkaf,
Sahure,
Neferirkare.

The most important early inscriptions are the series of reliefs at Wadi Maghara in Sinai. They are not very explicit either:

lord of upper Egypt and lower Egypt, favored by the two goddesses, lord of truth, golden Horus, Sneferu, great god, given prosperity, life, health, and joy forever;
Khufu, great god, smiter of troglodytes;
Horus, lord of the crowns, lord of upper Egypt and lower Egypt, Sahure, given life forever, smiter of peoples, great god, smiter of the

easterners and of all countries (*id.*).

The Wadi Maghara inscriptions attest:

Nebka,
Djoser,
Sekhemkhet,
Sneferu,
Khufu,
Sahure,
Niuserre,
Menkauhor,
Djedkare,
Pepi,
Pepi II,

as well as the later princes Amenemhet III, Amenemhet IV, Hatshepsut, Thutmose III.

And below are the first 47 princes in Manetho, the princes corresponding to them in the Abydos prince list, and the princes corresponding to them in the Saqqara prince list, listed and numbered in their order in each source. The corresponding princes in the Turin papyrus are listed also in their order in the source, but are not numbered, nor should they be, given the many lacunae. The evidence of the inscriptions is in the order of Manetho and the prince lists. It is decisive in fixing the names of the princes.

Manetho	Abydos prince list	Saqqara prince list	Turin papyrus	inscriptions,
1. Menes	1. Meni	–	Meni	Narmer,
2. Athothis	2. Teti	–	–	Aha Men,
3. Kenkenes	3. Iti	–	Iti	Djer Itit,
4. Uenephes	4. Ita	–	Ita	Djet Uadji Iterti,
5. Usaphais	5. Zemti	–	Zemti	Den Udimu Zemti,
6. Miebis	6. Merbiapen	1. Merbiapen	Merbiapen	Anedjib Merpibia,
7. Semempses	7. Semsem	–	Semsem	Semerikhet,
8. Bieneches	8. Kebh	2. Kebwe	Kebh	Qaa,
9. Boethos	9. Bedjau	3. Biunutje	Biunutje	Hotepsekhemwy,
10. Kaiechos	10. Kakau	4. Kakau	Kakau	Raneb,
11. Binotiris	11. Banutjeren	5. Banutjeren	Banutjeren	Ninetjer Nutjeren,
12. Tlas	12. Wadjnas	6. Wadjnas	Wadjnas	Weneg,
13. Sethenes	13. Sendi	7. Sendi	Sendi	Send,
14. Chaires	14. Dadjay	8. Neferkare	Aka	–,
15. Nephcheres	–	9. Neferkaseker	Neferkaseker	–,
16. Sesochris	–	10. Hudjefa	Hudjefa	Peribsen,
17. Cheneres	–	11. Bebty	Bebty	Khasekhemwy,
18. Necherophes	15. Nebka	–	Nebka	Nebka Senakhte,
19. Tosorthros	16. Djoser	12. Djoser	Djoser	Djoser,
20. Tureis	17. Teti	13. Djoseri	Djoseri	–,
21. Mesochris	18. Sedjes	14. Nebkare	–	–,
22. Souphis	–	–	–	–,
23. Tosertasis	–	–	–	–,
24. Aches	–	–	–	Sekhemkhet,
25. Sephuris	–	–	–	Khaba,
26. Kerpheres	19. Neferkare	15. Huni	Huni	Huni,
27. Soris	20. Sneferu	16. Sneferu	Sneferu	Sneferu,
28. Suphis	21. Khufu	17. Khufu	–	Khufu,
–	22. Redjedef	18. Redjedef	–	Djedefre Redjedef,
29. Suphis	23. Khafre	19. Khafre	Khafre	Khafre,
30. Mencheres	24. Menkaure	20. Menkaure	–	Menkaure,
31. Rhatoises	–	21. –	–	–,
32. Bicheris	–	22. –	–	–,
33. Sebercheres	25. Shepseskaf	23. –	–	Shepseskaf,

34. Thampthis	–	24. –	–	–,
35. Usercheres	26. Userkaf	25. Userkaf	Userkaf	Userkaf,
36. Sephres	27. Sahure	26. Sahure	–	Sahure,
37. Nephcheres	28. Kakai	27. Neferirkare	–	Neferirkare Kakai,
38. Sisires	–	28. Shepseskare	–	Shepseskare,
39. Cheres	29. Neferefre	29. Khaneferre	–	Neferefre,
40. Rathures	30. Niuserre	–	–	Niuserre,
41. Mencheres	31. Menkauhor	30. Menkauhor	Menkauhor	Menkauhor,
42. Tancheres	32. Djedkare	31. Djedkare	Djed	Djedkare,
43. Onnos	33. Unis	32. Unis	Unas	Unas,
44. Othoes	34. Teti	33. Teti	–	Teti,
–	35. Userkare	–	–	–,
45. Phios	36. Merire	34. Pepi	–	Pepi Merire,
46. Methusuphis	37. Merenre	35. Merenre	–	Merenre,
47. Phiops	38. Neferkare	36. Neferkare	–	Pepi Neferkare.

Given the agreement of Manetho and the Abydos prince list on the fact of the first and the second princes, and the agreement of Manetho, the Abydos prince list, and the Turin papyrus, as well as Herodotus, on the identity of the first prince, it can be concluded that the inscriptions have solved the problem of the identity of the first and the second princes. Narmer is attested with his palette and on a macehead, Aha is attested on an ivory label and on a potsherd. The first prince is Narmer, the second prince is Aha.

On the princes from the third through the thirteenth in Manetho the agreement of Manetho and the lists is complete. The Palermo stone attests the third, the fifth, and the eleventh princes, Djer, Den, and Ninetjer. And the inscriptions and the monuments corroborate Manetho and the lists on the third, the fourth, the fifth, the sixth, the seventh, the eighth, the eleventh, the twelfth, and the thirteenth princes, Djer, Djet, Den, Anedjib, Semerkhet, Qaa, Ninetjer, Weneg, and Send. It can be concluded that the statue of the priest Hotepdip inscribed with the names of the princes: Hotepsekhemwy, Raneb, Ninetjer (*id.*), establishes the identity of the ninth and the tenth princes, Hotepsekhemwy and Raneb. Moreover, beginning with the third prince, the evidence of the inscriptions and the monuments is massive. Djer is attested with his tomb, Djet with his tomb, Den with his tomb, Anedjib with his tomb, Semerkhet with his tomb, Qaa with his tomb, Hotepsekhemwy on seals next to the priests's statue, Raneb on a stele next to the

statue, Ninetjer on the statue, Weneg on bowls, Send with an inscription. It can be concluded that the eleven princes who succeeded Aha are Djer, Djet, Den, Anedjib, Semerkhet, Qaa, Hotepsekhemwy, Raneb, Ninetjer, Weneg, and Send.

Of the next four, the fourteenth through the seventeenth in Manetho, there is agreement on one between Manetho, the Saqqara prince list, and the Turin papyrus, and on two more between the Saqqara prince list and the Turin papyrus. But there is no agreement, not even on the number of princes, between Manetho and the Abydos prince list. The Palermo stone attests Khasekhemwy. The inscriptions and the monuments do not corroborate the sources either, and attest instead Peribsen and Khasekhemwy, Peribsen on a funerary stele, Khasekhemwy with his tomb. The place of the two in the series of the princes can be inferred from the location of their mortuary monuments. It can be concluded that the two important princes who succeeded Send are Peribsen and Khasekhemwy.

On the next two, the eighteenth and the nineteenth in Manetho, the agreement of Manetho and the lists is complete. The Wadi Maghara inscriptions attest both Nebka and Djoser. Djoser has also left behind the oldest pyramid. It can be concluded that the two princes who succeeded Khasekhemwy are Nebka and Djoser.

On the next six in Manetho, the twentieth through the twenty-fifth, or next two in the Abydos prince list, the seventeenth and the eighteenth, there is no agreement on the number of

princes, and it is not clear which name corresponds to which. The Wadi Maghara inscriptions attest Sekhemkhet after Djoser. Sekhemkhet and Khaba are each attested with his pyramid as well. It can be concluded that the two important princes who succeeded Djoser are Sekhemkhet and Khaba.

On the next six, the nineteenth through the twenty-fourth in the Abydos prince list, the agreement of Manetho and the lists is in one case good, in the other five cases complete. Sneferu, Khufu, and Djedefre are attested also by the Palermo stone. The Wadi Maghara inscriptions attest Sneferu and Khufu. Djedefre left behind a tomb, the other five left behind a pyramid each, except Sneferu who left behind two. Huni is attested also by the oldest tomb inscription of a royal official, Metjen, who describes his services to his lord. It can be concluded that the six princes who succeeded Khaba are Huni, Sneferu, Khufu, Djedefre, Khafre, and Menkaure.

On the next prince, the twenty-fifth in the Abydos prince list, the agreement of Manetho and the lists is complete. Shepseskaf is attested also by the Palermo stone. He left behind his tomb as well. To the thirty-first, thirty-second, and thirty-fourth in Manetho, to whom the illegible names of the twenty-first, twenty-second, and twenty-fourth in the Saqqara prince list correspond, nothing corresponds in the Abydos prince list or in the inscriptions or monuments. It can be concluded that the one important prince who succeeded Menkaure is Shepseskaf.

On the next thirteen, the thirty-fifth through the forty-seventh in Manetho – ignoring the thirty-fifth in the Abydos prince list – the agreement of the sources is complete. Userkaf, Sahure, and Neferirkare are also the last princes attested by the Palermo stone. The Wadi Maghara inscriptions attest Sahure, Niuserre, Menkauhor, Djedkare, Pepi, and Pepi II. The inscriptions and the monuments attest all thirteen princes abundantly, from the pyramids of Userkaf, Sahure, and Neferirkare through the temple complex of Niuserre to the pyramids of Unas, Teti, Pepi, and Pepi II. It is at this time, too, that the evidence other than Manetho and the lists becomes more explicit. There is the Palermo stone. The tomb inscription of Niankhsekhmet attests his services to Sahure.

The tomb inscription of Weni attests his services to Teti, Pepi, and Merenre. The tomb inscription of Harkhuf attests his services to Merenre and Pepi II. In the pyramid of Unas the oldest of the spells to take the prince to heaven are inscribed, and the spells are copied and multiplied in the tombs of Teti, Pepi, Merenre, and Pepi II. This is the time also of the composition copied on the Shabaka stone. It can be concluded that the thirteen princes who succeeded Shepseskaf are Userkaf, Sahure, Neferirkare, Shepseskare, Neferefre, Niuserre, Menkauhor, Djedkare, Unas, Teti, Pepi, Merenre, and Pepi II.

A succession of 39 important princes has thus been counted from Narmer through Pepi II. On 34 of the 39 the agreement of Manetho and the prince lists is complete. All 39 are attested by the inscriptions and the monuments. Presuming correlation between the importance of the princes and the stability of their domain, between the importance of the princes, the stability of their domain, and the agreement of Manetho and the prince lists, and between the importance of the princes, the stability of their domain, the agreement of Manetho and the prince lists, and the quantity and quality of the inscriptions and the monuments, it can be concluded that the development of the state begins with one and a half centuries of great stability from Narmer through Qaa, two centuries of relative instability follow from Hotepsekhemwy through Khaba, and then four centuries of great stability from Huni to Pepi II. These centuries are the time also of the greatest advance in the acquisition of knowledge.

Presuming that these 39 are all important princes from the first prince through Pepi II, they can be dated in this way.

Given the length of time separating Manetho from these princes, the numbers he assigns to their reigns are best ignored. Given the large number of lacunae in the Turin papyrus, the few numbers in its fragments are best ignored as well. Instead, 20 years can be postulated as the average length of a reign, and then spacing the middles of the reigns at 20 years has to be most likely to yield the smallest error about the time of any one prince on average. The total for the 39 princes is thus 780 years. The Turin papyrus computes: 955 years and 10 days since Meni (*id.*), at some time

during the time of disorder which followed Pepi II. The number 780 agrees well with this computation of the Turin papyrus.

And postulating *c.* 2240 for the middle of the reign of Pepi II, the dates of the earlier princes follow,

Narmer	prince <i>c.</i> 3000,
Aha	prince <i>c.</i> 2980,
Djer	prince <i>c.</i> 2960,
Djet	prince <i>c.</i> 2940,
Den	prince <i>c.</i> 2920,
Anedjib	prince <i>c.</i> 2900,
Semerkheth	prince <i>c.</i> 2880,
Qaa	prince <i>c.</i> 2860,
Hotepsekhemwy	prince <i>c.</i> 2840,
Raneb	prince <i>c.</i> 2820,
Ninetjer	prince <i>c.</i> 2800,
Weneg	prince <i>c.</i> 2780,
Send	prince <i>c.</i> 2760,
Peribsen	prince <i>c.</i> 2740,
Khasekhemwy	prince <i>c.</i> 2720,
Nebka	prince <i>c.</i> 2700,
Djoser	prince <i>c.</i> 2680,
Sekhemkhet	prince <i>c.</i> 2660,
Khaba	prince <i>c.</i> 2640,

Huni	prince <i>c.</i> 2620,
Sneferu	prince <i>c.</i> 2600,
Khufu	prince <i>c.</i> 2580,
Djedefre	prince <i>c.</i> 2560,
Khafre	prince <i>c.</i> 2540,
Menkaure	prince <i>c.</i> 2520,
Shepseskaf	prince <i>c.</i> 2500,
Userkaf	prince <i>c.</i> 2480,
Sahure	prince <i>c.</i> 2460,
Neferirkare	prince <i>c.</i> 2440,
Shepseskare	prince <i>c.</i> 2420,
Neferefre	prince <i>c.</i> 2400,
Niuserre	prince <i>c.</i> 2380,
Menkauhor	prince <i>c.</i> 2360,
Djedkare	prince <i>c.</i> 2340,
Unas	prince <i>c.</i> 2320,
Teti	prince <i>c.</i> 2300,
Pepi	prince <i>c.</i> 2280,
Merenre	prince <i>c.</i> 2260,
Pepi II	prince <i>c.</i> 2240.

This, then, is the old kingdom.

After Pepi II the first time of disorder follows.

These are the last 2 princes of dynasty VI in Manetho and what corresponds to them in the lists and the inscriptions and monuments.

48. Menthesuphis	39. Merenre	—
49. Nitocris	40. Neterkare	—

—	—
Nitokerti	—.

Manetho and the prince lists agree, and are corroborated also by Herodotus, who notes in particular only 2 of the earliest 330 princes whose names the priests told him, queen Nitocris and Moeris. The inscriptions and the monuments, however, attest no such princes.

Moreover, this is what the sources all have next.

Manetho counts 151 princes of dynasties VII-XI, from Memphis, Heracleopolis, and Thebes, noting but 1 of them, the first prince of dynasty IX, in particular:

Achthoes, he was more cruel than any of his predecessors, he wrought evil on the people of Egypt; he was smitten with madness; he was killed by a crocodile (fr. 2a).

Particularity resumes with Ammenemes.

The Abydos prince list has: 41. Menkare, 42. Neferkare, 43. Neferkare Neby, 44. Djerkaire Sherma, 45. Neferkare Khendu, 46. Merenhor,

47. Sneferka, 48. Nekare, 49. Neferkare Tereru, 50. Neferkahor, 51. Neferkare Pepysonb, 52. Sneferka Anu, 53. Kakare, 54. Neferkaure, 55. Neferkauhor, 56. Neferirkare. After that it has Mentuhotep.

The Saqqara prince list has no princes after Pepi II and before Mentuhotep.

The Turin papyrus has: the child Neferka, Neferes, Ibi, then lacunae, then the total: 955 years and 10 days since Meni (*id.*), then more lacunae, then Neferkare, Akhthoy, then more lacunae. Then it has Mentuhotep.

The inscriptions and the monuments are very scanty, attesting some cartouches, Wadjkare, Qakare Iby, Meryibre Khety, Merykare, Kaneferre, Nebkaure Akhthoy, and a small pyramid of Iby. Then the inscriptions and the monuments attest massively Mentuhotep.

After Pepi II and before Mentuhotep there are thus only 4 princes on whom there is some agree-

ment, on the first between Manetho and the Abydos prince list, on the second between Manetho, the Abydos prince list, and the Turin papyrus, on the third between the Turin papyrus and the inscriptions, on the fourth between Manetho, the Turin papyrus, and the inscriptions,

Merenre II	prince <i>c.</i> 2220,
Neterkare	prince <i>c.</i> 2220,
Iby	prince in the century after <i>c.</i> 2240,
Akhthoy	prince in the century before <i>c.</i> 2040,

It can be concluded also that none of these 4 is important either. In general, it can be concluded that the failure of Manetho and the Saqqara prince list to record particular princes, corroborated by the scantiness of inscriptions and monuments, corroborated by the lack of agreement between the Abydos prince list and the inscriptions and monuments, is a consequence of the lack of important princes after Pepi II and before Mentuhotep.

The conclusion is supported by the fact that the length of time separating Pepi II and Mentuhotep – the length of the first intermediate period – is the gravest part of the gravest chronological problem which the record poses.

The grounds on which it has to be solved are three.

–	57. Mentuhotpe	37. Mentuhotpe	Mentuhotpe	Mentuhotep,
–	58. Mentuhotpe	38. Mentuhotpe	Mentuhotpe	Mentuhotep,
Ammenemes	59. Sehetepibre	39. Sehetepibre	Sehetepibre	Amenemhet Sehetepibre,
Sesonchosis	60. Kheperkare	40. Kheperkare	Kheperkare	Senwosret Kheperkare,
Ammenemes	61. Nubkaure	41. Nubkaure	Nubkaure	Amenemhet Nubkaure,
–	62. Khakheperre	42. Khakheperre	Khakheperre	Senwosret Khakheperre,
Sesostris	63. Khakhaure	43. Khakhaure	Khakhaure	Senwosret Khakhaure.

These are the princes under whom the state rises greatly, and the evidence reflects this fact,

Mentuhotep	prince <i>c.</i> 2069-18,
Mentuhotep II	prince <i>c.</i> 2018-06,
Amenemhet	prince <i>c.</i> 2006-1976,
Senwosret	prince <i>c.</i> 1976-32,

The Abydos prince list counts 18 princes between Pepi II and Mentuhotep.

The Turin papyrus computes 955 years and 10 days from the first prince to some time during that time of disorder. Postulating a total of 780 years for the reigns of the 39 princes from Narmer through Pepi II, the difference is 175 years.

The reigns of the dynasties in Manetho, VII and VIII from Memphis, IX and X from Herculopolis, and XI from Thebes, have to be contemporary. And their reigns range from 70 days for dynasty VII to 409 years for dynasty IX.

Hence, two centuries can be postulated for the length of time separating Pepi II and Mentuhotep.

This is supported, feebly, by analogy with the second intermediate period. That is the time of disorder after Sobeknefru, prince *c.* 1790-86, and before Ahmose, prince *c.* 1570-45. Both these dates are certain within 10 years either way. The second intermediate period continued for two-odd centuries.

And given the date of

Mentuhotep prince *c.* 2069-18, counting two centuries from the middle of his reign, and rounding, the date of Pepi II follows.

Finally, these are the first princes in Manetho after particularity resumes, not numbered now, and the corresponding princes in the other prince lists, and in the inscriptions and the monuments.

Amenemhet II	prince <i>c.</i> 1932-897,
Senwosret II	prince <i>c.</i> 1897-78,
Senwosret III	prince <i>c.</i> 1878-45.

In the 7th year of Senwosret III, 1871 ± 5, the oldest observation was made. The date of Senwosret III is certain within 5 years. The date of

Mentuhotep is certain within 20 years.

These are the princes in the first millennium of the development of the state in the valley of the Nile.

And if on all these particular grounds collected from the Egyptian record it cannot be concluded that the Egyptian record has not lost even 1 important prince, it has to be concluded that the probability that it has lost even 1 important prince is vanishingly small.

The record has not lost Neterkare, the bravest and the most beautiful. It has not lost Akhthoy, he was killed by a crocodile. It has not even lost the child Neferka. All of whom, in its wisdom, the Saqqara prince list ignores.

And if on all these particular grounds it has to be concluded that the probability that the Egyptian record has lost even 1 important prince is vanishingly small, then on general grounds it has to be concluded that it has not lost even 1 important prince.

The number 39, the number of the important princes in the first seven and a half centuries of development of the state in the valley of the Nile, can be compared with the following numbers.

The princes in the valley of the two rivers in the five and a half centuries from Enmebaragesi through Ibbsi-Sin have been collected above. The important princes are 53, gathered from more than 3 times that number of princes in the record. And while the 39 in the valley of the Nile are the princes under whom the state is one in this valley, the 53 in the other valley are the princes of Kish, Uruk, Ur, Lagash, Umma, and Akshak smiting one another, then the princes of Akkad smiting them, then the princes of Lagash, Uruk, the Gutian horde, and Susa smiting one another, then the princes of Ur smiting them.

Hume writes: of the English kings, from the conquest to the succession of his present majesty, we may reckon 28 sovereigns, omitting those who died minors; and 8 of them are princes of great capacity, William, Henry II, Edward, Edward III, Henry V, Henry VII, Elizabeth, and William III.

Including those who died minors, and adding Mary II, Cromwell, and Richard Cromwell, these are the princes of England from the conquest to the succession of his then majesty, the important on the left, the not important on the right,

William	prince 1066-87,
William II	prince 1087-100,
Henry	prince 1100-35,
Stephen	prince 1135-54,
Henry II	prince 1154-89,
Richard	prince 1189-99,
John	prince 1199-216,
Henry III	prince 1216-72,
Edward	prince 1272-307,
Edward II	prince 1307-27,
Edward III	prince 1327-77,
Richard II	prince 1377-99,
Henry IV	prince 1399-413,
Henry V	prince 1413-22,
Henry VI	prince 1422-61,
Edward IV	prince 1461-83,
Edward V	prince 1483,
Richard III	prince 1483-5,
Henry VII	prince 1485-509,
Henry VIII	prince 1509-47,
Edward VI	prince 1547-53,
Mary	prince 1553-8,
Elizabeth	prince 1558-603,
James	prince 1603-25,
Charles	prince 1625-49,
Cromwell	prince 1653-8,
Richard Cromwell	prince 1558-9,
Charles II	prince 1660-85,
James II	prince 1685-8,
Mary II	prince 1689-94,
William III	prince 1689-702,
Anne	prince 1702-14,
George	prince 1714-27.
It is a succession of 33 princes in six and a half-odd centuries. 15 are important. And these princes are like the princes in the valley of the two rivers, not like the first princes in the valley of the Nile, there was no end to the smiting they had to do. For this reason toward the end of that time in the enumeration belong also,	
Marlborough	general 1701-11,
Walpole	minister 1721-42.
It was with the princes of France that the princes of England smote one another most consequentially. These are the princes of France in the same six and a half-odd centuries,	
Philip	prince 1060-108,
Louis VI	prince 1108-37,
Louis VII	prince 1137-80,

Philip II	prince 1180-223,	Henry III	prince 1574-89,
Louis VIII	prince 1223-6,	Henry IV	prince 1589-610,
Louis IX	prince 1226-70,	Louis XIII	prince 1610-43,
Philip III	prince 1270-85,	Louis XIV	prince 1643-715,
Philip IV	prince 1285-314,	Louis XV	prince 1715-74.
Louis X	prince 1314-6,	It is a succession of 29 princes. 17 are important.	
John	prince 1316,	For the same reason toward the end of that time	
Philip V	prince 1316-22,	in the enumeration belong also,	
Charles IV	prince 1322-8,	Richelieu	minister 1621-42,
Philip VI	prince 1328-50,	Mazarin	minister 1642-61,
John II	prince 1350-64,	Turenne	general 1643-75,
Charles V	prince 1364-80,	Colbert	minister 1665-83,
Charles VI	prince 1380-422,	Condé	general 1668-75,
Charles VII	prince 1422-61,	Louvois	minister 1677-91,
Louis XI	prince 1461-83,	Vauban	general 1677-703.
Charles VIII	prince 1483-98,	And all other princes can be collected.	
Louis XII	prince 1498-515,	The record has lost nothing important. Not 1	
Francis	prince 1515-47,	thing.	
Henry II	prince 1547-59,	And all of the record can be examined. And it	
Francis II	prince 1559-60,	has to be. As the striving for truth forces us to	
Charles IX	prince 1560-74,	advance to the reference and the true.	

The certainty of chronology

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Chronology is a *sine qua non* of history.

And chronology is a *sine qua non* of the investigation of knowledge, because it is a *sine qua non* of the investigation of the acquisition of knowledge.

To determine clearly and distinctly the relations of all steps of advance in the acquisition of knowledge, the particulars have to be marshaled in their series and order. Most particularly, their temporal series and order has to be fixed absolutely, and determined in all cases precisely.

The severity of the difficulty can need no recommendation. Counting fifty-one centuries since the 3 calculations of area, the determination of all dates in the first twenty-four of these centuries, the determination of the majority of dates in the following nineteen centuries, and the determination of a number of dates in the following three centuries – forty-six out of the fifty-one – is in each case a problem that has to be formulated and solved. It is only in the last five of the fifty-one

centuries that chronology presents no difficulties.

The solution of the problem of chronology can be traced back to the Palermo stone in the valley of the Nile. The Palermo stone first attests the explicit distinction of one year from another. The next step was taken in this valley eleven-odd centuries later by the Abydos prince list. The Abydos prince list arranges 76 princes in their chronological order. The next step was taken in the following century by the Turin papyrus. The Turin papyrus arranges in their chronological order all princes, records their reign years, and totals the reign years. There was then no further advance in this valley.

In the valley of the two rivers the solution of the problem can be traced back to Sargon, one century-odd after the Palermo stone. Sargon's inscriptions first attest the explicit distinction of one year from another. The advance in the solution of the problem was then faster and greater in this valley.

Sargon has left behind the names of 4 of his reign years. Two-odd generations later Naram-Sin

has left behind the names of 14 of his reign years, his successor Sharkalisharri of 17 of his reign years. One century later Ur-Nammu has left behind the names of 3 of his reign years. His successors have then left behind the names of all of their reign years, Shulgi of his 48, Amar-Sin of his 9, Shu-Sin of his 9, and Ibbi-Sin of his 24. For a total of 90 consecutive years.

The major advance is, three centuries after Sargon, the Sumerian prince list. The Sumerian prince list arranges 120 princes of 10 states in their series and order, records their reign years, totals the reign years for the states, and totals the totals. Its total for the reigns from the beginning of Sargon's to the end of Ibbi-Sin's is 417 years, 6 months, and 47 days. The total is, in fact, 324 years $\pm$ 15 years.

The Sumerian prince list was emulated. First by the Larsa prince list and the Isin prince list, then by the Babylonian prince list. Four centuries separate Ibbi-Sin, the last prince in the Sumerian prince list, and Samsuditana, the last prince in the Babylonian prince list.

The next major advance are the Assyrian princes from Adad-nirari, seven and a half centuries after the Sumerian prince list, through Ashurbanipal, six and a half centuries later, whose inscriptions are steadily more explicit chronicles, and under whom the Assyrian prince list was compiled. The list was compiled under Shalmaneser V. Beginning with Ashur-bel-nisheshu, prince c. 1417-08, with the 4 successors of Shalmaneser V through Ashurbanipal, prince 668-27, the list attests the continuous series of 45 princes of one and the same state over nearly eight centuries. The dates of the 45 princes are corroborated amply by the inscriptions of the princes. Esarhaddon reports: my ancestor Shalmaneser, the son of Adad-nirari, built the temple of Ashur; 586 years passed and the temple fell into ruin. And 586 years, in fact, passed from Shalmaneser, the son of Adad-nirari, to his successor Esarhaddon.

The next major advance is, two centuries after Ashurbanipal, Herodotus. Herodotus describes the deeds of 804 predecessors of his. Lydian princes, Mede princes, Egyptian princes, the great kings, Spartan princes, the magistrates of all other important Greek states. A large number he arranges in their temporal series explicitly. He first

formulates and solves chronological problems: Heracles was 900 years before my time and no more; Homer and Hesiod were 400 years before my time and no more. He reaches back to the first prince, and with barely an error three to four centuries into his past. The father of history is a divide in chronology. Earlier, all dates pose problems, many of them severe. Later, not all dates pose problems, and fewer over time, and the problems are not often severe, and less often over time. There have since been very important historians, beginning with Thucydides in the next generation, and there have been very many not important historians. In the darkest of dark ages, when there was barely anything else, there were chroniclers.

The next advance is, in the generation after Herodotus, Hippias. Hippias compiled the list of the former victors at the Olympic games. Olympiads made time reckoning independent of the reckoning of states by its own magistrates each. The historians began reckoning time by olympiads.

The next advance is, not quite one century after Hippias, Aristotle. With the reviews of his predecessors Aristotle extended the reach of relative chronology to the acquisition of knowledge.

And four and a half centuries after Aristotle Ptolemy took the final step. In the *Handy tables* Ptolemy correlates from the observation of the heavenly bodies the years from 748^{BC} to 137^{AD} with the years of the reigns of 54 princes, Babylonian princes, Assyrian princes, the great kings, the successors of Alexander, Roman princes. Chronology is thus fixed absolutely.

The problem of chronology is solved conclusively.

And the solution of the problem is the ground on which all dates either have been fixed or have to be fixed.

The task, then, is to fix the temporal series and order of the particulars absolutely, and to determine it in all cases precisely.

It is approached in two steps.

First, the dates of the princes back to the first prince are fixed. As the solution of the problem shows, the succession of the princes is the unconditional foundation of chronology. And first,

borrowing the name from the theory of the evolution of stars, the dates of the main sequence of princes are fixed. Then the dates of all other important sequences of princes are fixed.

Next, a number of those dates of the predecessors of the philosophers and the philosophers which present the gravest chronological difficulties is fixed explicitly.

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The earlier dates are the main difficulty.

Beginning, then, with the dates of the earlier sets of princes fixed by Ptolemy, from these dates the dates of earlier princes are fixed set by set back in time, and all the way back to Enmebaragesi. This is the main sequence. Then, with these dates fixed, beginning with Narmer, the dates of all other important sequences of princes are fixed set by set, in their chronological order now.

Everywhere only the most important grounds on which the dates are fixed are presented explicitly. Everywhere there are other grounds.

The numerous more particular difficulties are resolved each when encountered first, then the solution is, whenever it has to be, generalized.

Important and not important princes are listed, the important on the left, the not important on the right.

Main sequence

The sequence is obtained in twenty-two steps. The fourth, sixth, and nineteenth are transitions from the previous step to the next. The remaining steps correspond to a set of princes each, set by set back in time. 1. The great kings. 2. The late Babylonian princes. 3. The later Assyrian princes. 5. The Egyptian princes from Ahmose to Amenhotep IV. 7. The early Hittite princes. 8. The early princes of Babylon. 9. Rim-Sin. 10. The princes of Isin. 11. The princes of Ur. 12. Utuhegal. 13. The Gutian princes. 14. The princes of Akkad. 15. Lugalzagesi. 16. The princes of Lagash. 17. Lugalkignedudu. 18. Enshakushana. 20. The early princes of Ur. 21. The princes of Uruk. 22. The princes of Kish.

1. The great kings.

Ptolemy, in the *Handy tables*, has the sequence, the lengths of the reigns, and the dates of the great kings.

Counting the accession of Cyrus in 559 rather than his conquest of Babylon in 539, as Ptolemy counts it, the beginning of his reign, and including Gaumata, ignored by Ptolemy, the dates are,

Cyrus	9	prince 559-30,
Cambyses	8	prince 530-22, son of Cyrus,
Gaumata		prince 522,
Darius	36	prince 522-486,
Xerxes	21	prince 486-65, son of Darius,
Artaxerxes	41	prince 465-24, son of Xerxes,
Darius II	19	prince 424-05, son of Artaxerxes,
Artaxerxes II	46	prince 405-359, son of Darius II,
Artaxerxes III	21	prince 359-38, son of Artaxerxes II,
Artaxerxes IV	2	prince 338-6, son of Artaxerxes III,
Darius III	4	prince 336-0.

The lengths of the reigns of the princes, in particular, are the unconditional foundation of chronology.

The affiliations are listed next to the dates, because, not relevant in fixing these dates, they are in fixing earlier dates.

2. The late Babylonian princes.

Before the great kings, Ptolemy has the sequence, the lengths of the reigns, and the dates of Babylonian princes from Nabonassar, prince 748-34, to Nabonidus, prince 556-39. These are of two kinds. The earlier princes, through Kandalanu, prince 648-26, are under the sovereignty of the Assyrian

princes, and are either the Assyrian princes themselves or installed by the Assyrian princes. The later princes, beginning with Nabopolassar, prince 626-05, are their own princes.

Counting from the fall of Babylon in 539 back to the rise of these later Babylonian princes with the decline of Assyria after Ashurbanipal, the dates are,

Nabopolassar	21	prince 626-05,
Nebuchadnezzar	43	prince 605-562, son of Nabopolassar,
Awil-Marduk	2	prince 562-0, son of Nebuchadnezzar,
Neriglissar	4	prince 560-56,
Nabonidus	17	prince 556-39.

3. The later Assyrian princes.

The Assyrian prince list has the sequence, the lengths of the reigns, and the affiliations of the Assyrian princes. The last 41 princes in the list are attested abundantly by their inscriptions.

Beginning with Ashur-dan, there are no variant readings in the manuscripts in the lengths of the reigns. Before that there are two variant readings. All earlier dates are thus *circa*.

The list ends with Shalmaneser V. Adding his 4 successors and their reign years, and beginning with the date assigned by Ptolemy to the end of the reign of Shalmaneser V, the dates follow,

Ashur-bel-nisheshu	9	prince <i>c.</i> 1417-08, son of Ashur-nirari II,
Ashur-rim-nisheshu	8	prince <i>c.</i> 1408-0, son of Ashur-bel-nisheshu,
Ashur-nadin-ahhe II	10	prince <i>c.</i> 1400-390, son of Ashur-rim-nisheshu,
Eriba-Adad	27	prince <i>c.</i> 1390-63, son of Ashur-bel-nisheshu,
Ashur-uballit	36	prince <i>c.</i> 1363-27, son of Eriba-Adad,
Enlil-nirari	10	prince <i>c.</i> 1327-17, son of Ashur-uballit,
Arik-den-ili	12	prince <i>c.</i> 1317-05, son of Enlil-nirari,
Adad-nirari	32	prince <i>c.</i> 1305-273, brother of Arik-den-ili,
Shalmaneser	30	prince <i>c.</i> 1273-43, son of Adad-nirari,
Tukulti-Ninurta	37	prince <i>c.</i> 1243-06, son of Shalmaneser,
Ashur-nadin-apli	3, or 4	prince <i>c.</i> 1206-3, son of Tukulti-Ninurta,
Ashur-nirari III	6	prince <i>c.</i> 1203-197, son of Ashur-nadin-apli,
Enlil-kudurri-usur	5	prince <i>c.</i> 1197-2, son of Tukulti-Ninurta,
Ninurta-apil-Ekur	13, or 3	prince <i>c.</i> 1192-79,
Ashur-dan	46	prince 1179-33, son of Ninurta-apil-Ekur,
Ninurta-Tukulti-Ashur	same year	prince 1133, son of Ashur-dan,
Mutakil-Nusku	same year	prince 1133, brother of Ninurta-Tukulti-Ashur,
Ashur-resh-ishi	18	prince 1133-15, son of Mutakil-Nusku,
Tiglath-pileser	39	prince 1115-076, son of Ashur-resh-ishi,
Ashared-apil-Ekur	2	prince 1076-4, son of Tiglath-pileser,
Ashur-bel-kala	18	prince 1074-56, son of Tiglath-pileser,
Eriba-Adad II	2	prince 1056-4, son of Ashur-bel-kala,
Shamshi-Adad IV	4	prince 1054-0, son of Tiglath-pileser,
Ashur-nasirpal	19	prince 1050-31, son of Shamshi-Adad IV,
Shalmaneser II	12	prince 1031-19, son of Ashur-nasirpal,
Ashur-nirari IV	6	prince 1019-3, son of Shalmaneser II,
Ashur-rabi II	41	prince 1013-972, son of Ashur-nasirpal,
Ashur-resh-ishi II	5	prince 972-67, son of Ashur-rabi II,
Tiglath-pileser II	32	prince 967-35, son of Ashur-resh-ishi II
Ashur-dan II	23	prince 935-12, son of Tiglath-pileser II,
Adad-nirari II	21	prince 912-891, son of Ashur-dan II,
Tukulti-Ninurta II	7	prince 891-84, son of Adad-nirari II,
Ashur-nasirpal II	25	prince 884-59, son of Tukulti-Ninurta II,

Shalmaneser III	35	prince 859-24, son of Ashur-nasirpal II,
Shamshi-Adad V	13	prince 824-11, son of Shalmaneser III,
Adad-nirari III	28	prince 811-783, son of Shamshi-Adad V,
Shalmaneser IV	10	prince 783-73, son of Adad-nirari III,
Ashur-dan III	18	prince 773-55, brother of Shalmaneser IV,
Ashur-nirari V	10	prince 755-45, son of Ashur-dan III,
Tiglath-pileser III	18	prince 745-27, son of Ashur-nirari V,
Shalmaneser V	5	prince 727-2, son of Tiglath-pileser III,
Sargon II	17	prince 722-05, younger son of Tiglath-pileser III,
Sennacherib	25	prince 705-680, son of Sargon II,
Esarhaddon	12	prince 680-68, son of Sennacherib,
Ashurbanipal	41	prince 668-27, younger son of Esarhaddon.

4. The state rose in the valley of the two rivers under the Assyrian princes beginning with Ashur-uballit. It had risen earlier under the Babylonian princes through Samsuditana. In the two and a half centuries separating Samsuditana and Ashur-uballit great disorder prevailed in the valley. The prince lists and the inscriptions of the princes reflect this fact. And the dates of the princes in these two and a half centuries are the first of the three gravest chronological problems.

In particular, the problem is to correlate the last princes in the Babylonian prince list with the 41 princes in the Assyrian prince list beginning with the immediate predecessors of Ashur-uballit.

The Babylonian prince list has the sequence, the lengths of the reigns, and the affiliations of the Babylonian princes through:

Ammisaduqa, son of Ammiditana, 21 years;

Samsuditana, son of Ammisaduqa, 31 years (*id.*).

The Venus tablet of Ammisaduqa, recording the synodic period of Venus, fixes the years of the reign of Ammisaduqa at – ignoring earlier and later possibilities – 1702-681, or 1646-25, or 1638-17, or 1582-61.

The reign of Samsuditana thus ended in 1650, or 1594, or 1586, or 1530.

The Babylonian chronicle, recorded on the tablets BM 26472 and BM 96152, reports: in the time of Samsuditana the Hittites marched on Akkad (*id.*).

The Hittite prince Telipinu, in his edict, reports:

Mursili went to Babylon and destroyed Babylon (*id.*).

Akkad is Babylon. Mursili destroyed Babylon in 1650, or 1594, or 1586, or 1530.

The problem is to fix this year, and its solution can only be to fix the date of the reign of Mursili.

And in the two and a half centuries of disorder in the valley of the two rivers, in the valley of the Nile order prevails. The record of the Egyptian princes is at its most explicit. The second observation of Sirius is from this time as well, and an observation of a star, it fixes its own date absolutely. This is the time also of the first rise of the Hittite princes, as the destruction of Babylon all by itself attests. And not nearly as abundant or explicit as that of the Egyptian princes, the record of the Hittite princes is yet abundant and explicit enough to fix their sequence.

Hence, the series of the Assyrian princes, the series of the Egyptian princes, the series of the Hittite princes, and the series of the Babylonian princes can be correlated with one another, and the two and a half centuries of disorder in the valley of the two rivers reduced to chronological order.

5. The Egyptian princes from Ahmose to Amenhotep IV.

The Abydos prince list and the Saqqara prince list both have the sequence of 8 princes, Ahmose, Amenhotep, Thutmose, Thutmose II, Thutmose III, Amenhotep II, Thutmose IV, and Amenhotep III. Manetho corroborates their sequence and adds Amenhotep IV. The inscriptions and the monuments attest abundantly the sequence of the 9, as well as the successor of Thutmose II and predecessor of Thutmose III Hatshepsut. The inscriptions attest also high years of the reigns of the princes. The high years corroborate the reign years which can be recovered from Manetho. The high years are on the left,

corrections on the ground of Manetho's assignments on the right.

The list of feasts beginning in the 9th year of Amenhotep records the second observation of Sirius in 1536 ± 10 .

Beginning with Amenhotep, the dates follow,

Ahmose	22	25	prince <i>c.</i> 1570-45,
Amenhotep	21	24	prince <i>c.</i> 1545-21,
Thutmose	9	12	prince <i>c.</i> 1521-09,
Thutmose II	18		prince <i>c.</i> 1509-491, son of Thutmose,
Hatshepsut	21		prince <i>c.</i> 1491-70, daughter of Thutmose,
Thutmose III	33		prince <i>c.</i> 1470-37, son of Thutmose II,
Amenhotep II	23	26	prince <i>c.</i> 1437-11, son of Thutmose III,
Thutmose IV	8	9	prince <i>c.</i> 1411-02, son of Amenhotep II,
Amenhotep III	37	38	prince <i>c.</i> 1402-364, son of Thutmose IV,
Amenhotep IV	17		prince <i>c.</i> 1364-47, son of Amenhotep III.

6. The Amarna archive collects the correspondence of Amenhotep III, Amenhotep IV, and Smenkhkare. There are two letters of Ashur-uballit in the archive (15-6). The name of the Egyptian prince to whom he writes is lost in lacunae. The prince of the Kassites Burnaburiash, however, writes to Amenhotep IV:

I did not send to you my Assyrian servants, they came to you of their own; and if you are my friend, send them away without gifts (9).

It can be concluded that Ashur-uballit is the Assyrian servant of Burnaburiash who sent his envoys to the Egyptian prince, and the Egyptian prince to whom he sent them is Amenhotep IV. Nor did Amenhotep IV send them away without gifts. Ashur-uballit writes: you sent me gold, but it is not even enough to pay for my envoys (16).

The date of Ashur-uballit's reign, fixed independently by the Assyrian prince list, corroborates the conclusion.

The series of the Assyrian princes and the series of the Egyptian princes are thus correlated with one another.

7. The early Hittite princes.

The most important inscriptions of the early Hittite princes are the annals and the testament of Hattusili, and the edict of Telipinu.

The edict of Telipinu begin with a preamble recording the deeds of his predecessors. And the preamble establishes the sequence of the princes and their affiliations such as these are:

once Labarna was the great prince;

then Hattusili was prince in Hattusa;

then Mursili was prince in Hattusa;

Hantili was his cupbearer; he was the husband of the sister of Mursili; Hantili and Zidanta killed

Mursili; Hantili became prince;

when Hantili was old and about to die, Zidanta killed the sons of Hantili; Zidanta became prince;

Ammuna was the son of Zidanta; he killed Zidanta; Ammuna became prince;

when Ammuna died, Huzziya killed the sons of Ammuna; Huzziya became prince;

then I, Telipinu, became prince; the cupbearers of Huzziya killed him (*id.*).

In his testament Hattusili reports also:

my son Labarna is not my son anymore;

his son Mursili is my son (*id.*).

The sequence is,

Labarna,

Hattusili,

Mursili, grandson of Hattusili,

Hantili,
 Zidanta,
 Ammuna, son of Zidanta,
 Huzziya,
 Telipinu.

After Telipinu the Hittite state falls apart and disorder prevails for one and a half centuries, until Suppiluliuma. Suppiluliuma is attested by the Amarna archive. Suppiluliuma writes to Smenkhkare: I wrote to your father before you (41).

And to fix the dates of the early Hittite princes, first, Thutmose provides a *terminus ad quem* for their sequence.

The Tombos stele of Thutmose reports: he has joined the ends, there is no one to stand against him; he brought the ends of the earth under his rule; he reached lands his ancestors did not know; his southern border is in this land, his northern border is at the river which goes downstream by going upstream (*id.*). The Nile is the river which goes downstream by going downstream. The river which goes downstream by going upstream is the Euphrates. The successors of Thutmose maintained their northern border at the river which goes downstream by going upstream for the following one and a half centuries, through Amenhotep III, very firmly, after him more or less firmly. And the inscriptions of these princes never note a Hittite prince in the north. The reign of Thutmose, prince *c.* 1521-09, is thus a *terminus ad quem* for the reign of Telipinu. And presuming that his campaigns in the north are a cause, if not the cause, of the fall of the Hittite state, *c.* 1510 can be postulated for the middle of the reign of Telipinu.

4 princes separate Mursili and Telipinu in the succession of the Hittite princes. If Telipinu was prince *c.* 1510, this precludes either 1530 or 1650 for the year of Mursili's destruction of Babylon. Mursili destroyed Babylon in 1594 or 1586.

Next, the lengths of the reigns of the princes are not attested. But their sequence is attested.

And when a sequence of princes is attested, but not the lengths of their reigns, there are two ways to assign dates.

When affiliations are attested, and they are of the kind, a prince, son of a prince, generations can be counted, counting 1 generation 30 years.

When affiliations are not attested, or they are of the kind, a prince, killed by a prince, reigns can be counted, counting 1 reign 20 years. In a sequence without attested affiliations this average has to be the most likely to yield the smallest error about the date of any one of the princes in the sequence on average.

The average is obtained by counting princes and reigns.

For instance. The 11 great kings from Cyrus to Darius III reigned 229 years, for an average of 20.8 years. The 5 Babylonian princes from Nabopolassar to Nabonidus reigned 87 years, for an average of 17.4 years. The 45 Assyrian princes from Ashur-bel-nisheshu to Ashurbanipal reigned 790 years, for an average of 17.6 years. The 10 Egyptian princes from Ahmose to Amenhotep IV reigned 223 years, for an average of 22.3 years. The total is now 71 princes and 1 329 reign years, for an average of 18.7 years. The 11 Babylonian princes from Sumuabum to Samsuditana reigned 300 years, for an average of 27.3 years. The 5 princes of Ur from Ur-Nammu to Ib-bi-Sin reigned 108 years, for an average of 21.6 years. The total is now 87 princes and 1 737 reign years, for an average of 19.9 years. The 33 princes of England from William to George reigned 661 years, for an average of 20.0 years. The 29 princes of France from Philip to Louis XV reigned 714 years, for an average of 24.6 years. The total is now 149 princes and 3 112 reign years, for an average of 20.9 years.

Counting reigns of 20 years each on average, then, counting the middles of the reigns, and beginning with the date assigned to Telipinu, the dates of the Hittite princes follow,

Labarna	prince <i>c.</i> 1650,
Hattusili	prince <i>c.</i> 1630,
Mursili	prince <i>c.</i> 1610, grandson of Hattusili,

Hantili	prince <i>c.</i> 1590,
Zidanta	prince <i>c.</i> 1570,
Ammuna	prince <i>c.</i> 1550, son of Zidanta,
Huzziya	prince <i>c.</i> 1530,
Telipinu	prince <i>c.</i> 1510.

Mursili thus destroyed Babylon *c.* 1594 rather than *c.* 1586.

And the series of the Assyrian princes, the series of the Egyptian princes, the series of the Hittite princes, and the series of the Babylonian princes are thus correlated with one another.

8. The early princes of Babylon.

The Babylonian prince list has the sequence, the lengths of the reigns, and the affiliations of the Babylonian princes. The lengths of the reigns, on the left, are corrected from the high years attested by the names of the years of the princes and their inscriptions, on the right. And beginning with Samsuditana, the dates follow,

Sumuabum	15	14	prince <i>c.</i> 1894-80,
Sumulael	35	36	prince <i>c.</i> 1880-44,
Sabium	14	14	prince <i>c.</i> 1844-30, son of Sumulael,
Apil-Sin	18	18	prince <i>c.</i> 1830-12, son of Sabium,
Sinmuballit	30	20	prince <i>c.</i> 1812-792, son of Apil-Sin,
Hammurabi	55	43	prince <i>c.</i> 1792-49, son of Sinmuballit,
Samsuiluna	35	38	prince <i>c.</i> 1749-11, son of Hammurabi,
Abieshuh	25	28	prince <i>c.</i> 1711-683, son of Samsuiluna,
Ammiditana	25	37	prince <i>c.</i> 1683-46, son of Abieshuh,
Ammisaduqa	21	21	prince <i>c.</i> 1646-25, son of Ammiditana,
Samsuditana	31	31	prince <i>c.</i> 1625-594, son of Ammisaduqa.

9. Rim-Sin.

The name of the 31st year of Hammurabi is:
conquered Larsa and its prince Rim-Sin (*id.*).

The Larsa prince list has the length of the reign of the prince, and the date follows,

Rim-Sin	60	prince <i>c.</i> 1821-761.

10. The princes of Isin.

The name of the 30th year of Rim-Sin is:
conquered Isin (*id.*).

The Isin prince list has the sequence, the lengths of the reigns, and the affiliations of the princes of Isin. The last prince is Damaqilishu, and beginning with him, the dates follow,

Ishbi-Erra	33, or 32	prince <i>c.</i> 2027-1994,
Shu-Ilishu	20, or 10, or 15	prince <i>c.</i> 1994-74, son of Ishbi-Erra,
Idin-Dagan	21	prince <i>c.</i> 1974-53, son of Shu-Ilishu,
Ishme-Dagan	20	prince <i>c.</i> 1953-33, son of Idin-Dagan,
Lipit-Ishtar	11	prince <i>c.</i> 1933-22, son of Ishme-Dagan,
Ur-Ninurta	28	prince <i>c.</i> 1922-894,
Bur-Sin	21	prince <i>c.</i> 1894-73, son of Ur-Ninurta,
Lipit-Enlil	5	prince <i>c.</i> 1873-68, son of Bur-Sin,
Erra-Imiti	8, or 7	prince <i>c.</i> 1868-0,
Enlil-Bani	24	prince <i>c.</i> 1860-36,
Zambia	3	prince <i>c.</i> 1836-3,
Iter-Pisha	4	prince <i>c.</i> 1833-29,
Ur-Dukuga	4	prince <i>c.</i> 1829-5,
Sinmagir	11	prince <i>c.</i> 1825-14,
Damaqilishu	23	prince <i>c.</i> 1814-791, son of Sinmagir.

11. The princes of Ur.

The Ur archive collects the correspondence of Shulgi, Shu-Sin, and Ibbi-Sin. Ishbi-Erra writes to Ibbi-Sin:

you sent me to Isin to buy grain; but the Amorites have seized the cities (*id.*).

Ibbi-Sin writes to Ishbi-Erra:

I gave you 20 talents of silver to buy grain; you bought 2 bur per shekel, but sent me only 1 bur per shekel; and why did you let the Amorites enter my land (*id.*)?

And Puzur-Numushda writes to Ibbi-Sin:

Ishbi-Erra writes to me, Enlil has given me the princeship; and it is as he says; he has built a wall around Isin; he leads his own troops; he has seized the banks of the Tigris and the Euphrates (*id.*).

First an official of Ibbi-Sin, then, Ishbi-Erra became the independent prince of Isin.

The names of the years of Ibbi-Sin were abandoned in Eshnunna, Susa, Lagash, Umma, and Nippur from his 2nd to his 8th year. It can be concluded that Ishbi-Erra became the independent prince of Isin in about the 10th year of Ibbi-Sin.

The Sumerian prince list has the sequence, the lengths of the reigns, and the affiliations of the princes of Ur. The princes are attested abundantly by their inscriptions. The reign years in the list are corroborated everywhere by the number of the names of the years of the princes. Beginning with Ibbi-Sin, the dates follow,

Ur-Nammu	18	18	prince <i>c.</i> 2121-03,
Shulgi	48	48	prince <i>c.</i> 2103-055, son of Ur-Nammu,
Amar-Sin	9	9	prince <i>c.</i> 2055-46, son of Shulgi,
Shu-Sin	9	9	prince <i>c.</i> 2046-37, son of Amar-Sin,
Ibbi-Sin	24	24	prince <i>c.</i> 2037-13, son of Shu-Sin.

12. Utuhegal.

A votive inscription for Utuhegal reports:

for Utuhegal, prince of Uruk, lord of the four quarters, Ur-Nammu, governor of Ur (ins. 2001).

In the Sumerian prince list Ur-Nammu follows Utuhegal.

Presuming that his governor Ur-Nammu succeeded Utuhegal, the date follows,

Utuhegal	7	prince <i>c.</i> 2128-1.

The date is consistent with the fact, attested by the inscriptions of the princes, that victories of Utuhegal over the princes of the Gutian horde were followed by Ur-Nammu's conquest of all Sumer.

13. The Gutian princes.

Utuhegal reports:

Utuhegal vanquished Tirigan, the men of Utuhegal captured Tirigan (ins. 4).

The Sumerian prince list has the sequence and the lengths of the reigns of the princes of the Gutian horde.

Counting the middle of the reign of Utuhegal the end of the reign of Tirigan, and beginning with him, the dates follow,

Imta	3	prince <i>c.</i> 2215-2,
Inkishush	6	prince <i>c.</i> 2212-06,
Sarlagab	6	prince <i>c.</i> 2206-0,
Shulme	6	prince <i>c.</i> 2200-194,
Silulumesh	6	prince <i>c.</i> 2194-88,
Inimabakesh	5	prince <i>c.</i> 2188-3,
Igeshaush	6	prince <i>c.</i> 2183-77,
Yarlagab	15	prince <i>c.</i> 2177-62,
Ibate	3	prince <i>c.</i> 2162-59,
Yarla	3	prince <i>c.</i> 2159-6,
Kurum	1	prince <i>c.</i> 2156-5,

Apilkin	3	prince <i>c.</i> 2155-2,
Laerab	2	prince <i>c.</i> 2152-0,
Irarum	2	prince <i>c.</i> 2150-48,
Ibranum	1	prince <i>c.</i> 2148-7,
Hablum	2	prince <i>c.</i> 2147-5,
Puzur-Sin	7	prince <i>c.</i> 2145-38, son of Hablum,
Yarlagan	7	prince <i>c.</i> 2138-1,
Sium	7	prince <i>c.</i> 2131-24,
Tirigan	40 days	prince <i>c.</i> 2124.

The short reigns are consistent with the fact, attested by the inscriptions of the princes as well as the Sumerian prince list, that these are the princes of a horde with whom disorder descended for the first time on the valley of the two rivers. All these 20 princes have left behind 3 inscriptions, reporting not more than this:

Laerab, prince of the Gutians (ins. 1);

Namhani, governor of Umma, when Yarlagan was prince of the Gutians (ins. 1);

Lugalanatuma, governor of Umma, when Sium was prince of the Gutians (ins. 1).

14. The princes of Akkad.

The name of one of the reign years of Sharkalisharri is:
the year he captured Sarlagab, prince of the Gutians (ins. D-27).

Given the stability of Sharkalisharri's reign, attested by his inscriptions as well as the fact that he has left behind the names of 17 of his years, it can be concluded that he captured Sarlagab toward the end of his reign.

The Sumerian prince list has the sequence, the lengths of the reigns, and the affiliations of the princes of Akkad. Presuming that Sharkalisharri captured Sarlagab some 5 years before the end of his reign, and beginning with him, the dates follow,

Sargon	56	prince <i>c.</i> 2337-281,
Rimush	9	prince <i>c.</i> 2281-72, son of Sargon,
Manishtushu	15	prince <i>c.</i> 2272-57, son of Sargon, older brother of
Naram-Sin	37	prince <i>c.</i> 2257-20, son of Manishtushu, Rimush,
Sharkalisharri	25	prince <i>c.</i> 2220-195, son of Naram-Sin,
Igigi		
Nanum		
Imi		
Eluldan	3 years all 4	princes <i>c.</i> 2195-2,
Dudu	21	prince <i>c.</i> 2192-71,
Shudurul	15	prince <i>c.</i> 2171-56, son of Dudu.

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15. Lugalzagesi.

The dates of the princes in the valley of the two rivers before Sargon are the second of the three gravest chronological problems, and graver than the first.

Sargon reports:

Sargon brought Lugalzagesi, prince of Uruk, in a dog collar to the temple of Enlil (ins. C-1).

Sargon reports also:

Sargon, lord of the earth, won 34 battles (ins. C-2).

It can be concluded that Sargon brought Lugalzagesi in a dog collar to the temple of Enlil early in his reign. The date, for the middle of the reign, follows,

Lugalzagesi prince *c.* 2340.

16. The princes of Lagash.

Urukagina reports:

the prince of Umma sacked Lagash; Urukagina, prince of Lagash, did not transgress; Lugalzagesi, prince of Umma, bears the guilt (ins. 5).

Urukagina and Lugalzagesi are thus contemporary.

The inscriptions of the princes of Lagash attest their affiliations. Ur-Nanshe reports:

Ur-Nanshe, prince of Lagash (ins. 1).

Akurgal reports:

Akurgal, prince of Lagash, son of Ur-Nanshe (ins. 1).

Eanatum reports:

Eanatum, prince of Lagash, son of Akurgal (ins. 4).

Enanatum reports:

Enanatum, prince of Lagash, son of Akurgal, brother of Eanatum (ins. 2).

Enmetena reports:

Enmetena, prince of Lagash, son of Enanatum (ins. 5).

Enanatum II reports:

Enanatum, prince of Lagash, son of Enmetena (ins. 1).

Lugalanda reports:

Lugalanda, prince of Lagash, son of Enentarzi, prince of Lagash (ins. 2).

Urukagina reports:

Urukagina, prince of Lagash (ins. 1).

The sequence of the princes follows. Counting generations when son succeeds father, counting 5 years when brother succeeds brother on the same presumption, that this will minimize the error with respect to the reign of either brother, counting reigns otherwise, and beginning with Urukagina, the dates follow,

Ur-Nanshe	prince <i>c.</i> 2535,
Akurgal	prince <i>c.</i> 2505, son of Ur-Nanshe,
Eanatum	prince <i>c.</i> 2475, son of Akurgal,
Enanatum	prince <i>c.</i> 2470, son of Akurgal, brother of Eanatum,
Enmetena	prince <i>c.</i> 2440, son of Enanatum,
Enanatum II	prince <i>c.</i> 2410, son of Enmetena,
Enentarzi	prince <i>c.</i> 2390,
Lugalanda	prince <i>c.</i> 2360, son of Enentarzi,
Urukagina	prince <i>c.</i> 2340.

17. Lugalkignedudu.

Enmetena reports:

Enmetena, prince of Lagash, and Lugalkignedudu, prince of Uruk, swore to their brotherhood (ins. 3).

The date follows,

Lugalkignedudu	prince <i>c.</i> 2440.

18. Enshakushana.

In the Sumerian prince list Lugalkignedudu follows Enshakushana. Both are princes of Uruk in the list, which is consistent with their reports. Enshakushana reports:

Enshakushana, lord of Sumer (ins. 1),

Lugalkignedudu reports:

Lugalkignedudu, prince of Kish, prince of Uruk, prince of Ur (ins. 2).

Counting one reign before Lugalkignedudu, the date follows,

Enshakushana	prince <i>c.</i> 2460.

19. The Sumerian prince list arranges the princes into groups by their cities. The sequence is, first princes of Kish, then princes of Uruk, then princes of Ur. Princes of Awan follow. The sequence is then again, princes of Kish, princes of Uruk, princes of Ur, where the princes of Kish and Uruk are separated

by 1 prince of Hamazi. Princes of Adab and Mari follow. The sequence is then again, princes of Kish, princes of Uruk, princes of Ur, where the princes of Kish are divided into two groups by 1 prince of Akshak, and the princes of Uruk are divided into two groups by the princes of Akkad and of the Gutian horde.

The dates of the princes of Ur, Uruk, and Kish thus have to be fixed in this order.

20. The early princes of Ur.

The princes of Ur are divided into three groups in the list. The third group are Ur-Nammu and his successors.

The 4 princes of the first group are:

Mesanepada,

Meskiagnuna, son of Mesanepada,

Elili,

Balulu.

The 3 princes of the second group are:

Aanepada,

Meskiagnuna, son of Aanepada,

and a prince whose name is lost in a lacuna.

The inscriptions of the princes attest these princes and affiliations. Meskalamdug reports:

Meskalamdug, prince (ins. 1).

Mesanepada reports:

Mesanepada, prince of Ur, son of Meskalamdug, prince of Kish (ins. 1).

Aanepada reports:

Aanepada, prince of Ur, son of Mesanepada, prince of Ur (ins. 3).

A votive inscription for Meskiagnuna reports:

for Meskiagnuna, prince of Ur (ins. 1).

Elili reports:

Elili, prince of Ur (ins. 1)

Enshakushana reports:

Enshakushana, lord of Sumer, son of Elili (ins. 3).

The corrected sequence of the princes follows. Counting generations and reigns, respectively, and beginning with Enshakushana, the dates follow,

Meskalamdug	prince <i>c.</i> 2600,
Mesanepada	prince <i>c.</i> 2570, son of Meskalamdug,
Aanepada	prince <i>c.</i> 2540, son of Mesanepada,
Meskiagnuna	prince <i>c.</i> 2510, son of Aanepada,
Elili	prince <i>c.</i> 2490,
Enshakushana	prince <i>c.</i> 2460, son of Elili.

Enshakushana, lord of Sumer, is the son of Elili, prince of Ur, and is in the Sumerian prince list among the princes of Uruk.

21. The princes of Uruk.

The princes of Uruk are divided into five groups in the list. The 1 prince of the fifth group is Utuhegal. The 5 princes of the fourth group are contemporary with the princes of the Gutian horde.

The first group has 12 princes. The 8 beginning with Gilgamesh are:

Gilgamesh,

Ur-Nungal, son of Gilgamesh,

Utulkalama, son of Ur-Nungal,

Labashir,

Enundarana,

Meshe,

Melamana,

Lugalkigin.

The 3 princes of the second group are:

Enshakushana,

Lugalkiginedudu,

Argandea.

The 1 prince of the third group is:

Lugalzagesi.

Inscriptions have left behind Enshakushana, Lugalkiginedudu, and Lugalzagesi. Lugalkisalsi also reports:

Lugalkisalsi, prince of Uruk and prince of Ur, son of Lugalkiginedudu, prince of Uruk and prince of Ur (ins.1).

This corrects the sequence of the princes beginning with Enshakushana, and the dates of his successors follow.

Gilgamesh is attested, other than the list, by the two oldest chronicles, *Gilgamesh and Aka* and the Tummal chronicle. Ur-Nungal is attested, other than the list, by the Tummal chronicle.

Given that the series of the princes of Uruk begins before the series of the princes of Ur, it can be presumed that Ur-Nungal predates Meskalamdug. And counting one reign before Meskalamdug, the dates of Gilgamesh and Ur-Nungal follow.

The dates are,

Gilgamesh	prince c. 2650,
Ur-Nungal	prince c. 2620, son of Gilgamesh,

Enshakushana	prince c. 2460, son of Elili,
Lugalkiginedudu	prince c. 2440,
Lugalkisalsi	prince c. 2410, son of Lugalkiginedudu,

Lugalzagesi	prince c. 2340.

The dates thus assigned to Gilgamesh and Ur-Nungal are consistent with the list's count of 6 princes of Uruk between Ur-Nungal and Enshakushana.

22. The princes of Kish.

The princes of Kish are divided into four groups in the list.

The first group has 23 princes. The last 2 are:

Enmebaragesi,

Aka, son of Enmebaragesi.

The 8 princes of the second group are:

Susuda,

Dadasig,

Mamagal,

Kalbum, son of Mamagal,

Tuge,

Menuna, son of Tuge,

Enbi-Eshtar,

Lugalmu.

The 1 prince of the third group is:

Ku-Baba.

The 7 princes of the fourth group are:

Puzur-Sin, son of Ku-Baba,

Ur-Zababa, son of Puzur-Sin,

Simudar,
 Usiwatar, son of Simudar,
 Eshtarmuti,
 Ishme-Shamash,
 Nannia.

Enmebaragesi is the first prince to leave his inscriptions behind. He is attested, other than the list, by the three oldest chronicles, *Gilgamesh and Aka*, the Tummal chronicle, and the Esagil chronicle. Aka is attested, other than the list, by all three chronicles as well.

Given that the series of the princes of Kish begins before the series of the princes of Uruk, and consistent with the fact that Aka and Gilgamesh are contemporary, it can be presumed that Enmebaragesi predates Gilgamesh by one generation. The dates of Enmebaragesi and Aka follow.

Mesalim is not one of the princes in the list. But he has left behind three inscriptions. He reports: Mesalim, prince of Kish, built the temple of Ningirsu; Lugalshaengur, governor of Lagash (ins. 1).

Enmetena reports:

Enlil, father of the gods, drew the border between Lagash and Umma; Mesalim, prince of Kish, measured the border and set up a monument there (ins. 1).

On the one hand, Mesalim appointed governor of Lagash and fixed the border of Lagash. On the other hand, Lagash rises with Ur-Nanshe. He has left behind more than 2 dozen inscriptions. He reports: Ur-Nanshe, prince of Lagash, he vanquished the prince of Ur; he vanquished the prince of Umma; he made burial mounds for them (ins. 6).

Mesalim predates Ur-Nanshe. And counting one reign, the date of Mesalim follows.

Enshakushana reports:

Enshakushana, lord of Sumer, captured Enbi-Eshtar, prince of Kish (ins. 1).

The date of Enbi-Eshtar follows.

The dates assigned to Enmebaragesi and Aka are thus consistent with the list's count of 6 princes of Kish between Aka and Enbi-Eshtar.

The list reports:

Sargon, he was a cupbearer of Ur-Zababa.

The date of Ur-Zababa follows, and hence the dates also of Ku-Baba and Puzur-Sin.

The dates thus assigned to Enbi-Eshtar and Ku-Baba are consistent with the list's count of 1 prince between them. Moreover, on the one hand: Enshakushana captured Enbi-Eshtar, on the other hand: Ku-Baba, she made Kish firm.

The dates are,

Enmebaragesi	prince c. 2680,
Aka	prince c. 2650, son of Enmebaragesi,

Mesalim	prince c. 2555,

Enbi-Eshtar	prince c. 2460,

Ku-Baba	prince c. 2400,
Puzur-Sin	prince c. 2370, son of Ku-Baba,
Ur-Zababa	prince c. 2340, son of Puzur-Sin.

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And the dates are certain. So much so, their certainty can be assessed.

Everywhere above only the most important grounds on which the dates are fixed have been presented explicitly. But to assess the certainty of the dates the record in its entire abundance must be considered. The princes are a system, all in relations to one another, and so are their dates.

Twenty-three and a half centuries separate the first prince in the sequence, Enmebaragesi, prince *c.* 2680, and the last, Darius III, prince 336-0. And this is how the certainty of the dates can be assessed.

1-3. The dates of the princes in the last eight and a half of these centuries, those of the great kings, of the Babylonian princes before them, and of the Assyrian princes before them beginning with Ashur-dan, prince 1179-33, should be certain without qualification. The dates of the Assyrian princes in the preceding two-odd centuries, back to Ashur-uballit, prince *c.* 1363-27, and his immediate predecessors should be certain within 5 years either way. The abundance of the record of the Assyrian princes has been presented above. The record of their successors the Babylonian princes is abundant and explicit as well. And the great kings are contemporary with the father of history and his successors.

4-6. The dates of the Egyptian princes in the preceding not quite two centuries, from Ahmose, prince *c.* 1570-45, to Amenhotep IV, prince *c.* 1364-47, should be certain within 10 years either way. With these princes the Egyptian record is at its most explicit. In the Amarna archive alone there are some 380 documents, including the correspondence of Amenhotep III, Amenhotep IV, and Smenkhkare with the Kassite princes Kadashman-Enlil and Burnaburiash, the Assyrian prince Ashur-uballit, the Mittani prince Tushratta, and the Hittite prince Suppiluliuma. And the dates are fixed by the observation of Sirius on one side, by correlation with Ashur-uballit, on the other.

7. The dates of the Hittite princes in the preceding century, from the predecessors of Mursili, prince *c.* 1610, to Telipinu, prince *c.* 1510, should be certain within 20 years either way. The record of these princes is not so abundant or explicit. The dates are fixed, however, by correlation with Samsuditana and thus the observation of Venus on one side, by correlation with Thutmose and thus the observation of Sirius on the other.

8. The dates of the Babylonian princes in the preceding two centuries, from Hammurabi, prince *c.* 1792-49, to Samsuditana, prince *c.* 1625-594, should be certain within 10 years either way. The record of these princes is abundant and explicit. They have left behind the names of nearly all of their reign years. And the synodic period of Venus was observed in either 1646-25 or 1638-17, and very probably in 1646-25 rather than 1638-17. The record of the predecessors of Hammurabi in the century before him is not abundant or explicit. The dates should be certain, back to Sumuabum, prince *c.* 1894-80, within 20 years either way, and steadily more certain as they approach Hammurabi.

9-11. The dates of the princes in the preceding three and a half centuries, those of the princes of Larsa, of the princes of Isin before them, and of the princes of Ur before them, from Ur-Nammu, prince *c.* 2121-03, to Rim-Sin, prince *c.* 1821-761, should be as certain as those of the Babylonian princes beginning with Hammurabi, within 10 years either way. Before Ibbi-Sin the princes of Ur dominated the valley, beginning with Hammurabi the princes of Babylon dominated it. In the intervening two-odd centuries the princes of Isin, Larsa, Ashur, Eshnunna, Mari, Yamhad, and Babylon – to note only the most important – kept smiting one another, and attesting one another. The inscriptions are abundant and explicit. The princes have left behind many of the names of their reign years, including 90 consecutive years of the princes of Ur. The oldest archive, the Ur archive, collects 23 documents, including the correspondence of Shulgi, Shu-Sin, and Ibbi-Sin, as well as letters of Ishbi-Erra. The second oldest archive, the Mari archive, collects some hundreds of documents, including the correspondence of the princes of Mari Yasmah-Addu and Zimri-Lim, as well as letters of the prince of Ashur Shamshi-Adad. And there are the Sumerian prince list, the Larsa prince list, the Isin prince list, the Babylonian prince list, and the Assyrian prince list, all attesting the lengths of the reigns and the affiliations of the princes.

12-4. The dates of the princes in the preceding two-odd centuries, that of Utuhegal, those of the princes of the Gutian horde before him, and those of the princes of Akkad before them, from Sargon, prince *c.* 2337-281, to Utuhegal, prince *c.* 2128-1, should be certain toward the end of that time within 10 years either way, toward the beginning of that time within 20 years either way. The record of these princes has been considered in some detail above. Sargon has left behind more than 2 dozen inscriptions, Rimush 2 dozen, Manishtushu 1 dozen, Naram-Sin 8+ dozen, Sharkalisharri 7+ dozen. Sargon has left behind 4 of the names of his years, Rimush 1, Naram-Sin 14, Sharkalisharri 17.

The presumption that certainty within 10 years toward the end of that time has remained certainty within 20 years toward the beginning of that time depends on the certainty of the dates of the princes of the Gutian horde, correlating the princes of Akkad with the princes of Ur. The lengths of the reigns of the princes of the Gutian horde are from the Sumerian prince list. Composed under Ib-bi-Sin, the list reaches back to the beginning of the reign of Ur-Nammu, 108 years before the end of the reign of Ib-bi-Sin, without an error. There are 82 years in the list from the beginning of the reign of Sarlagab to the end of the reign of Tirigan, then 7 years for the reign of Utuhegal, then Ur-Nammu follows, for a total of 89 years before him. The probability that this count of the list has reduced certainty by more than 10 years, if it has reduced it at all, can be judged minimal.

15-22. The dates of the princes in the preceding three and a half centuries, the first of the twenty-three and a half from Enmebaragesi to Darius III, those of the princes of Kish, of the princes of Uruk, of the princes of Ur, and of the princes of Lagash, from Enmebaragesi, prince *c.* 2680, to Lugalzagesi, prince *c.* 2340, Urukagina, prince *c.* 2340, and Ur-Zababa, prince *c.* 2340, should be certain toward the end of that time within 20 years either way, toward the beginning of that time within 30 years either way. The record of these princes has also been considered above in some detail. Enmebaragesi has left behind 1 inscription, Meskalamdug 1, Mesanepada 3, Aanepada 6, Ur-Nanshe 2 and a half dozen, Akurgal a half dozen, Eanatum 1 dozen, Enanatum 1 and a half dozen, Enmetena 2 and a half dozen. There are also the oldest chronicles. There is also the Sumerian prince list. Of the princes of the list 27 have left behind their inscriptions.

The presumption that certainty within 20 years toward the end of that time has remained certainty within 30 years toward the beginning of that time depends on the sheer number of princes. 32 important princes have been counted in the valley before Sargon. All princes attested by the record, important and not important, are not less than 3 times that number. Given the dates *c.* 2680 and *c.* 2340, this is 11-odd generations, and this yields an average of close to 3 important princes per generation, and not less than 9 princes, important or not important, per generation. The probability that these princes are distributed over a smaller number of generations can be judged minimal. Given the fact of continuous smiting, the probability that they are distributed over a larger number of generations can be judged small. And if so, the probability that certainty has decreased by more than 10 years over the 11-odd generations can be judged small as well.

Everywhere these should be the widest limits of the certainty of the dates. Very probably the dates should be certain everywhere within one half of these limits.

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This is the main sequence of princes. Hence, the dates of all other important sequences of princes can also be fixed. Set by set, in their chronological order now.

Other sequences

1. The princes in the valley of the Nile.

These princes can be divided into seven parts. 1.1. The princes through Pepi II. 1.2. The princes after Pepi II and before Mentuhotep. 1.3. The princes from Mentuhotep through Sobeknefru. 1.4. The princes after Sobeknefru and before Ahmose. 1.5. The princes from Ahmose through Ramesses II. 1.6. The princes after Ramesses II and before Psamtik. 1.7. The princes beginning with Psamtik.

The first part is the old kingdom. The second part is the first intermediate period. The third part is the middle kingdom. The fourth part is the second intermediate period. The fifth part is the rise and continuing stability of the new kingdom. The sixth and the seventh parts are the decline of the new kingdom and the late period.

The first two parts are the gravest chronological problem.

1.1. The princes through Pepi II.

The evidence is abundant. It includes the Palermo stone, the Karnak prince list, the Abydos prince

list, the Saqqara prince list, the Turin papyrus, Herodotus, and Manetho, the inscriptions of the princes, the inscriptions of lesser officials, and the other monuments. The evidence has been presented above.

This sequence has been obtained,

Narmer	prince <i>c.</i> 3000,
Aha	prince <i>c.</i> 2980,
Djer	prince <i>c.</i> 2960,
Djet	prince <i>c.</i> 2940,
Den	prince <i>c.</i> 2920,
Anedjib	prince <i>c.</i> 2900,
Semerkhjet	prince <i>c.</i> 2880,
Qaa	prince <i>c.</i> 2860,
Hotepsekhemwy	prince <i>c.</i> 2840,
Raneb	prince <i>c.</i> 2820,
Ninetjer	prince <i>c.</i> 2800,
Weneg	prince <i>c.</i> 2780,
Send	prince <i>c.</i> 2760,
Peribsen	prince <i>c.</i> 2740,
Khasekhemwy	prince <i>c.</i> 2720,
Nebka	prince <i>c.</i> 2700,
Djoser	prince <i>c.</i> 2680,
Sekhemkhet	prince <i>c.</i> 2660,
Khaba	prince <i>c.</i> 2640,
Huni	prince <i>c.</i> 2620,
Sneferu	prince <i>c.</i> 2600,
Khufu	prince <i>c.</i> 2580, son of Sneferu,
Djedefre	prince <i>c.</i> 2560, son of Khufu,
Khafre	prince <i>c.</i> 2540, son of Khufu,
Menkaure	prince <i>c.</i> 2520, son of Khafre,
Shepseskaf	prince <i>c.</i> 2500, son of Menkaure,
Userkaf	prince <i>c.</i> 2480,
Sahure	prince <i>c.</i> 2460,
Neferirkare	prince <i>c.</i> 2440,
Shepseskare	prince <i>c.</i> 2420,
Neferefre	prince <i>c.</i> 2400,
Niuserre	prince <i>c.</i> 2380,
Menkauhor	prince <i>c.</i> 2360,
Djedkare	prince <i>c.</i> 2340,
Unas	prince <i>c.</i> 2320,
Teti	prince <i>c.</i> 2300,
Pepi	prince <i>c.</i> 2280, son of Teti,
Merenre	prince <i>c.</i> 2260, son of Pepi,
Pepi II	prince <i>c.</i> 2240, son of Pepi.

The evidence is abundant, but not very explicit. Because of the length of time separating Manetho from these princes, the numbers he assigns to their reigns are ignored. Because of the many lacunae, the few numbers in the fragments of the Turin papyrus are ignored as well. The attested affiliations are also ignored. Instead, average reigns of 20 years are assigned on the presumption that this is most likely to yield the smallest error about the date of any one of the 39 princes in the sequence on average. It is a sequence of 39 important princes over many centuries, attesting the differential development of the state over these centuries, from great stability from Narmer to Qaa, through relative instability from

Hotepsekhemwy to Khaba, through great stability again from Huni to Pepi II.

The date *c.* 2240 for Pepi II is obtained by counting two centuries back from the middle of the reign of Mentuhotep.

1.2. The princes after Pepi II and before Mentuhotep.

This is the first time of disorder and the gravest part of the gravest chronological difficulty.

Without the Palermo stone now, the sources are the same. They are now very much less explicit, however, and there is little agreement between them. They have been presented above.

The sequence has been obtained,

Merenre II	prince <i>c.</i> 2220,
Neterkare	prince <i>c.</i> 2220,

Iby	prince in the century after <i>c.</i> 2240,

Akhthoy	prince in the century before <i>c.</i> 2040,

In particular, the gravest part of the gravest difficulty is the length of this time, the first intermediate period. On the grounds that the Abydos prince list counts 18 princes between Pepi II and Mentuhotep, that the Turin papyrus counts 955 years from the first prince to some time during the time of disorder, and that Manetho assigns to the five dynasties he has for this time, from Memphis, from Heracleopolis, and from Thebes, respectively, reigns ranging from 70 days to 409 years, two centuries can be postulated for the length of time separating Pepi II and Mentuhotep. There is also the analogy with the second intermediate period, which continued for two-odd centuries.

Given that two centuries separate Pepi II and Mentuhotep, the dates follow.

1.3. The princes from Mentuhotep through Sobeknefru.

The sources are the same. But they are now at their most abundant and most explicit yet. For the first 7 of these 10 princes the sources have been presented. For the last 3 of the 10, Amenemhet III is attested by Manetho, the Abydos prince list, and the Saqqara prince list, Amenemhet IV by Manetho, the Abydos prince list, the Saqqara prince list, and the Turin papyrus, Sobeknefru by Manetho, the Saqqara prince list, and the Turin papyrus. All 3 princes are attested by the inscriptions and monuments. High years, on the left, are corrected from the Turin papyrus and Manetho, on the right. The oldest observation of Sirius, in the 7th year of Senwosret III, was made in 1871 ± 5 . Beginning with him, the dates follow,

Mentuhotep	51	prince <i>c.</i> 2069-18,
Mentuhotep II	12	prince <i>c.</i> 2018-06, son of Mentuhotep,
Amenemhet	30	prince <i>c.</i> 2006-1976,
Senwosret	44	45 prince <i>c.</i> 1976-32, son of Amenemhet,
Amenemhet II	35	prince <i>c.</i> 1932-897, son of Senwosret,
Senwosret II	6	19 prince <i>c.</i> 1897-78, son of Amenemhet II,
Senwosret III	33	prince <i>c.</i> 1878-45, son of Senwosret II,
Amenemhet III	45	prince <i>c.</i> 1845-00, son of Senwosret III,
Amenemhet IV	6	10 prince <i>c.</i> 1800-790,
Sobeknefru	4	prince <i>c.</i> 1790-86.

1.4. The princes after Sobeknefru and before Ahmose.

That this is a time of disorder is indicated unambiguously by the sources.

In Manetho particularity stops with Sobeknefru and resumes with Ahmose. The Abydos prince list has no princes between Amenemhet IV and Ahmose. The Saqqara prince list has no princes between Sobeknefru and Ahmose. The inscriptions and monuments become as scanty and fragmentary as during the first time of disorder.

The length of this second time of disorder is not a difficulty. The date of Sobeknefru, a successor of

Senwosret III, is fixed by the first observation of Sirius, the date of Ahmose, a predecessor of Amenhotep, is fixed by the second. Two-odd centuries separate Sobeknefru and Ahmose.

A time of disorder is indicated unambiguously also by the fact that not more than 3 princes of any importance can be recovered from the record, all 3 at the end of this time, in the one generation before Ahmose.

Manetho has five dynasties:

dynasty XIII – 60 princes from Thebes reigned 453 years;

dynasty XIV – 76 princes from Xoïs reigned 184 years;

dynasty XV – 6 Hyksos princes reigned 284 years;

dynasty XVI – 32 Hyksos princes reigned 518 years;

dynasty XVII – 43 Hyksos princes from Thebes reigned 151 years (fr. 2a).

Of all these 217 princes, he has names and reign years only for the 6 Hyksos princes of dynasty XV, and of these 6 princes only 1 is attested independently.

The Turin papyrus is increasingly fragmentary after Sobeknefru. Names or parts of names of some 100 princes are legible. Of all these 100 princes, only a half dozen are attested independently, none of them by more than his cartouche on an artifact or two. Then the Turin papyrus ends.

The last of the 6 Hyksos princes for whom Manetho has names and reign years is:

Apophis, reigned 61 years (fr. 2a).

Apophis is Apepi, and Apepi is the only well attested Hyksos prince. The book of 87 problems reports: this book was copied in the 33rd year of Apepi, the prince of all Egypt, from an old book written in the time of Amenemhet III, the prince of all Egypt; the scribe Ahmose copied it.

And the prince of Thebes Kamose reports:

3rd year of the mighty prince of Thebes Kamose, appointed by Re to be the true prince;

to what end is this might of mine, if a chieftain sits in Avaris and another in Kush, and I sit here a friend of the Asiatic and the Nubian, and they each hold a piece of Egypt?

I will smite the Asiatic and deliver the land;

and I was upon him like a hawk, I overthrew him, I razed his walls, I slew his people;

and I captured a messenger sent from Avaris to Kush; this is what the message said; the son of Re, Apepi, to my son, the chieftain of Kush; have you not seen what the chieftain of Egypt Kamose the mighty has done to me? come, hasten, I will hold him until you come (Karnak stele).

Apepi is chieftain in Avaris. Kamose is chieftain in Thebes. And there is another chieftain in Thebes before Kamose.

In his tomb inscription Ahmose son of Abana records his services to Ahmose and his successors. His were distinguished military services. Ahmose son of Abana begins:

my father was a soldier of the lord of upper Egypt and lower Egypt Seqenenre;

a youth not yet married, I became a soldier in the service of the lord of the two lands Ahmose (*id.*).

The father of Ahmose was a soldier of Seqenenre, Ahmose himself was a soldier of Ahmose. And that Kamose belongs between Seqenenre and Ahmose can be concluded from the report of an inspection of the tombs of the princes, conducted under Ramesses IX. In the report of the inspection the tombs of these 3 princes are listed in this order: Seqenenre, Kamose, Ahmose (*id.*).

The mummy of Seqenenre also survives, with four wounds to the head.

Given the date of Ahmose, given the sequence Seqenenre, then Kamose, then Ahmose, given that Kamose and Apepi are contemporary, and given the length of the reign of Apepi, the dates follow,

Apepi	prince c. 1590,
Seqenenre	prince c. 1590,
Kamose	prince c. 1580.

1.5. The princes from Ahmose through Ramesses II.

Without the Turin papyrus now, the sources are the same. And they are at their most abundant and

most explicit. For the first 10 of these 17 princes the sources have been presented. The last of these first 10, Amenhotep IV, and the following 3, Smenkhkare, Tutankhamun, and Ay, are ignored by the Abydos prince list and the Saqqara prince list. This reflects the introduction by Amenhotep IV of the cult of Aten in place of the venerable cult of Amun, and the failure of his successors to maintain the new cult against the old. Amenhotep IV, styling himself Akhenaten, reports:

the living Aten is my father (boundary stelae).

The successor of Ay Horemheb reports:

Amun, lord of the gods, is my father (coronation inscription).

All 4, Amenhotep IV, Smenkhkare, Tutankhamun, and Ay, are attested by Manetho, and abundantly by the inscriptions and monuments. Among the monuments is the tomb of Tutankhamun, unearthed in 1922, having for thirty-two and a half centuries defied the robbers of the princely tombs better than any other tomb. Of the last 4 of the 17, the Abydos prince list, the Saqqara prince list, and Manetho have Horemheb, Ramesses, and Seti, Manetho and the Saqqara prince list have Ramesses II, and the inscriptions and monuments are abundant, those of Ramesses II the most abundant.

The second observation of Sirius, in the 9th year of Amenhotep, was made in 1536 ± 10 . The dates follow,

Ahmose	22	25	prince <i>c.</i> 1570-45,
Amenhotep	21	24	prince <i>c.</i> 1545-21,
Thutmose	9	12	prince <i>c.</i> 1521-09,
Thutmose II	18		prince <i>c.</i> 1509-491, son of Thutmose,
Hatshepsut	21		prince <i>c.</i> 1491-70, daughter of Thutmose,
Thutmose III	33		prince <i>c.</i> 1470-37, son of Thutmose II,
Amenhotep II	23	26	prince <i>c.</i> 1437-11, son of Thutmose III,
Thutmose IV	8	9	prince <i>c.</i> 1411-02, son of Amenhotep II,
Amenhotep III	37	38	prince <i>c.</i> 1402-364, son of Thutmose IV,
Amenhotep IV	17		prince <i>c.</i> 1364-47, son of Amenhotep III,
Smenkhkare	3		prince <i>c.</i> 1347-4,
Tutankhamun	9		prince <i>c.</i> 1344-35,
Ay	4		prince <i>c.</i> 1335-1,
Horemheb	27		prince <i>c.</i> 1331-04,
Ramesses	2		prince <i>c.</i> 1304-2,
Seti	11		prince <i>c.</i> 1302-291, son of Ramesses,
Ramesses II	67		prince <i>c.</i> 1291-24, son of Seti.

1.6. The princes after Ramesses II and before Psamtik.

The Abydos prince list ends with Seti. The Saqqara prince list ends with Ramesses II. Herodotus writes in detail on the Egyptian princes beginning with Psamtik.

For the princes after Ramesses II and before Psamtik the sources are Manetho and the inscriptions and monuments. The lack of sources other than these, the fact that Manetho is not everywhere explicit, and the scarcity of inscriptions and monuments, all reflect the decline of the new kingdom and the following prolonged disorder. Counting from the end of the reign of Ramesses II to the beginning of the reign of Psamtik, decline and disorder continued for five and a half centuries.

The princes of this time are a grave chronological problem, too. Not nearly as important, however, as the three gravest chronological problems.

According to the quantity and quality of the sources, these princes can themselves be divided into four parts. 1.6.1. The princes from Merneptah through Twosret. 1.6.2. The princes from Sethakhte through Ramesses XI. 1.6.3. The princes from Herihor through Sheshonq II. 1.6.4. The princes from Piye through Taharqa.

1.6.1. From Merneptah through Twosret.

Manetho attests these 4 princes. On the last of the 4 he writes:

Thouoris reigned 7 years; in Homer he is called Polybus, husband of Alcandra; he was prince when Troy fell (fr. 2a).

All 4 are attested by the inscriptions and monuments. Thouoris is Twosret, the widow of Seti II, attested by her tomb. And given the affiliation of Merneptah, the dates follow,

Merneptah	10	prince c. 1224-14, son of Ramesses II,
Seti II	6	prince c. 1214-08, son of Merneptah,
Siptah	6	prince c. 1208-2, son of Seti II,
Twosret	8	prince c. 1202-194.

1.6.2. The princes from Sethakhte through Ramesses XI.

Manetho is not explicit. He has:

dynasty XX – 12 princes from Thebes reigned 135 years (*id.*),
and lists none of these princes in particular.

From this time is the papyrus recording the deeds of Ramesses III. Also unseemly, it goes by the name Harris papyrus, having been purchased by Harris in 1855. The papyrus recording the deeds of Ramesses III is the largest papyrus, 40.5 m long, 117 columns of 12-3 lines each. In somewhat more than nine tenths of its bulk, the papyrus inventories in great detail the gifts of Ramesses III to the main temples of Amun, Re, and Ptah, then in less detail his gifts to all other temples in the land. In the concluding less than one tenth, in less detail still, the papyrus describes the campaigns of Ramesses III. This part of the papyrus begins:

the land of Egypt was in turmoil; every man was his own lord; they had no lord; and when empty years came, the Asiatic became their lord; they defiled the gods;

but when the gods inclined to peace, and resolved to bring order to the land, they established their son Sethakhte; he brought order to the land; he became the lord of the two lands;

Sethakhte made me rather than Keb his heir; he made me the lord of the land; I became the lord of the entire land (*id.*).

Ramesses III then reviews his campaigns, and concludes:

I have now joined the great gods in heaven; and Amun has established my son to be the lord of the two lands; he is the firstborn of Re; he is Ramesses (*id.*).

This establishes the sequence and affiliations of the first 3 of these 10 princes.

And from their mortuary remains, including mummies such as the princes have been leaving behind since the beginning of the new kingdom, the sequence and affiliations of the next 7 princes can be inferred.

The difficulty is whether the turmoil preceding Sethakhte, which the papyrus describes, implies an interregnum between Twosret and Sethakhte. Given the stability of the state under Ramesses II and again under Ramesses III, it can be presumed that the turmoil described by the papyrus refers to the reigns between Ramesses II and Sethakhte. Presuming that there is no interregnum between Twosret and Sethakhte, the dates follow,

Sethakhte	3	prince c. 1194-1,
Ramesses III	32	prince c. 1191-59, son of Sethakhte,
Ramesses IV	6	prince c. 1159-3, son of Ramesses III,
Ramesses V	4	prince c. 1153-49, son of Ramesses III,
Ramesses VI	8	prince c. 1149-1, son of Ramesses III,
Ramesses VII	8	prince c. 1141-33, son of Ramesses VI,
Ramesses VIII	1	prince c. 1133-2, son of Ramesses III,
Ramesses IX	18	prince c. 1132-14,
Ramesses X	3	prince c. 1114-1,
Ramesses XI	28	prince c. 1111-083.

1.6.3. The princes from Herihor through Sheshonq II.

After Ramesses III the new kingdom falls apart. The subsequent disorder is attested by the dynasties

in Manetho. After the 12 princes from Thebes of dynasty XX, he has:

dynasty XXI – 7 princes from Tanis reigned 130 years;

dynasty XXII – 9 princes from Bubastis reigned 120 years;

dynasty XXIII – 4 princes from Tanis reigned 89 years;

dynasty XXIV – 2 princes from Sais reigned 12 years (fr. 2a).

He lists the names and reign years of 16 of these 22 princes.

The inscriptions and monuments, however, are scanty and at their least explicit.

The difficulty is to establish the sequence of the most important of all these princes of Thebes, Tanis, Bubastis, and Sais.

From this time is *The story of Wenamun*. Emulating the tomb inscriptions reporting the services of officials to their princes, it is an artistic masterpiece. Still, Wenamun serves the high priest Herihor before the end of the reign of Ramesses XI, and in the course of his services encounters the ruler of Tanis Smendes (*id.*). Inscriptions and monuments attest well all 3, Ramesses XI, the high priest Herihor, and the ruler of Tanis Smendes.

In Manetho the first 7 princes from Tanis are: Smendes, Amenemnisu, Psusennes, Amenemope, Osorkon, Siamun, and Psusennes II (fr. 2a). Inscriptions and monuments attest all these princes, all of them scantily.

From *The story of Wenamun* it can be concluded that the reigns of Ramesses XI from Thebes, of the high priest Herihor also from Thebes, and of Smendes from Tanis follow on one another. And counting reigns, the dates of the princes from Herihor through Psusennes II follow.

The dates thus assigned are consistent with the fact that Sheshonq succeeded Psusennes II.

On his Abydos stele, Sheshonq asks Osiris:

will you let the great prince of princes Sheshonq join the feasts of his majesty Psusennes? the great god agreed; and his majesty said, Sheshonq, you are the great prince of princes (*id.*).

Manetho lists the 9 princes from Bubastis in this way:

Sheshonq, Osorkon, 3 other princes, Takelot, 3 other princes (fr. 2a).

Inscriptions and monuments attest well Sheshonq, including a high year. From scantier evidence the 5 princes after him can be collected.

After that, great as it has been, the disorder intensifies. The last 4 princes of Tanis and 2 princes of Sais in Manetho can thus be ignored.

In his Karnak inscription, Sheshonq reports:

I smote the Asiatics in the north; I raged over them like a fire (*id.*).

Kings agrees:

in the 5th year of Rehoboam, Sheshonq, prince of Egypt, seized Jerusalem, and took the treasures from the house of the lord and from the palace of the king (I, 14).

Given that Rehoboam was prince c. 923-10, and assigning his 5th year to the middle of the reign of Sheshonq, his date follows, and the dates of his successors also follow.

The dates are,

Herihor		prince c. 1080,
Smendes		prince c. 1060,
Amenemnisu		prince c. 1040,
Psusennes		prince c. 1020,
Amenemope		prince c. 1000,
Osorkon		prince c. 980,
Siamun		prince c. 960,
Psusennes II		prince c. 940,
Sheshonq	21	prince c. 928-07,
Osorkon II	36	prince c. 907-871, son of Sheshonq,
Takelot	7	prince c. 871-64, son of Osorkon II,

Osorkon III	29	prince c. 864-35,
Takelot II	19	prince c. 835-16, son of Osorkon III,
Sheshonq II	39	prince c. 816-777, son of Takelot II.

1.6.4. The princes from Piye through Taharqa.

Manetho has:

dynasty XXV – 3 princes from Ethiopia reigned 40 years (fr. 2a),

and lists the princes:

Shabaka, Shebitku, and Taharqa (*id.*).

Inscriptions and monuments attest the 3 princes, and attest better the conquest of all Egypt by Piye from Nubia in the south.

Esarhaddon and Ashurbanipal campaigned in Egypt from 674 through 664. Esarhaddon reports:

Taharqa, the prince of Egypt and Kush, I smote five times (ins. II, 574/81).

Ashurbanipal reports:

I destroyed Taharqa, the prince of Egypt and Kush, and death overtook him (ins. II, 765/840).

The date of the end of the reign of Taharqa follows, and beginning with him, the other dates follow,

Piye	21	prince c. 729-08,
Shabaka	15	prince c. 708-693, brother of Piye,
Shebitku	3	prince c. 693-90, son of Piye,
Taharqa	26	prince 690-64, son of Piye.

1.7. The princes beginning with Psamtik.

Ashurbanipal continues:

I had mercy for Necho; I gave him Sais, where my father had set him up as a prince;

Nabu-shezibanni, his son, I set up in Athribis, and showed him more favor even than my father (*id.*).

Nabu-shezibanni is Psamtik. Installed by Ashurbanipal in Athribis, Psamtik became gradually independent and the lord of all Egypt.

Manetho lists the names and reign years of 9 princes from Sais in dynasty XXVI. The third is Necho, followed by Psamtik, followed by the 5 successors of Psamtik. Herodotus is the main source for these princes. The reign years in Manetho, on the left, and Herodotus, in the middle, are corrected, in two cases, by the inscriptions of the princes, on the right.

Psamtik	54	54	54	prince 664-10, son of Necho,
Necho	6	16	15	prince 610-595, son of Psamtik,
Psamtik II	6	6	6	prince 595-89, son of Necho,
Apries	19	25	19	prince 589-70, son of Psamtik II,
Amasis	44	44	44	prince 570-26,
Psamtik III	6 mo	6 mo	1	prince 526, son of Amasis.

In 526 Cambyses conquered Egypt.

And the dates of the Egyptian princes are also certain.

Not quite twenty-five centuries separate the first prince in the sequence, Narmer, prince c. 3000, and the last, Psamtik III, prince 526.

The dates of the princes in the last one and a half-odd of these centuries, back to Taharqa, prince 690-64, should be certain without qualification. Another generation back to Piye, prince c. 729-08, the dates should be certain within 5 years either way.

In the preceding two centuries, given that the date of Rehoboam should be certain within 10 years either way, the date of Sheshonq, prince c. 928-07, should be certain within 10 years either way. In the century after Sheshonq the dates of his immediate successors should be certain within 20 years either way, the dates of their successors through Sheshonq II, prince c. 816-777, should be certain within 30 years either way.

In the preceding not quite three centuries, given that the date of Twosret, prince c. 1202-194, should

be certain within 20 years either way, the dates of the princes between her and Sheshonq should be certain within 30 years either way, and of the immediate predecessors of Sheshonq within 20 years either way.

In the preceding three and a half-odd centuries back to Ahmose, prince *c.* 1570-45, the early dates are fixed by the observation of Sirius within 10 years either way, and given the abundance of the record of these princes, the dates should remain certain within 20 years either way through Twosret.

In the generation before Ahmose, the dates of the Hyksos princes back to Apepi, prince *c.* 1590, should also be certain within 10 years either way.

In the preceding five centuries, back to Mentuhotep, prince *c.* 2069-18, two centuries after him the date of Senwosret III, prince *c.* 1878-45, is fixed by the observation of Sirius within 5 years either way, and given the abundance of the record of these princes, the dates of the successors of Senwosret III through Sobeknefru, prince *c.* 1790-86, should be certain within 10 years either way, the dates of the immediate predecessors of Senwosret III should be certain within 10 years either way, and the dates of their predecessors back to Mentuhotep should be certain within 20 years either way.

The not quite nine and a half centuries before Mentuhotep are the gravest chronological problem.

39 important princes have been collected from this time, and 4 not important have been dated.

All in all, the sequence above is of 85 important princes, and 26 not important princes, for a total of 111 princes. Counting 2 484 years from the beginning of the reign of Narmer, postulating *c.* 3000 for its middle, to the end of the reign of Psamtik III, prince 526, the distribution of the princes over this time is 1 prince per 22.4 years.

The record has not lost even 1 important prince.

Counting from Shebitku, prince *c.* 693-0, whose is the latest date certain with some qualification, back to Mentuhotep, the two princes are separated by thirteen and a half-odd centuries. In these thirteen and a half-odd centuries the dates of the princes have, upon losing some certainty, recovered much of the loss, upon again losing some certainty, again recovered much of the loss, and upon again losing some certainty, again recovered much of the loss. The dates of the princes have remained certain within 30 years throughout.

It can be concluded that the dates of the princes should be certain within 30 years either way all the way back to Narmer, prince *c.* 3000.

And again, everywhere these should be the widest limits of the certainty of the dates. Everywhere the dates should be certain very probably within one half of these limits.

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2. The princes of Umma.

Kish is on the Euphrates. Uruk is 170 km southeast of Kish, downstream on the Euphrates. Ur is 60 km southeast of Uruk, further downstream on the Euphrates. Lagash is 60 km northeast of Uruk. Umma is 50 km northwest of Lagash.

The state begins in the valley of the two rivers with the princes of Kish, Uruk, and Ur, and their smiting one another. Then the princes of Lagash rise, and smite one another the most with the princes of Umma.

Enmetena reports:

Ush, prince of Umma, smashed the monument, and marched into the plain of Lagash; Lagash defeated Umma, made burial mounds for it; Eanatum, prince of Lagash, marked the border with Enakale, prince of Umma; Ur-Luma, prince of Umma, diverted the water; Enanatum, prince of Lagash, made war on him; Enmetena, son of Enanatum, defeated him; Ur-Luma was killed; Il took the princeship of Umma; he diverted the water; Enmetena, prince of Lagash, sent envoys to Il, prince of Umma; he said, the border is mine (ins. 1).

Of the princes of Umma themselves, Ur-Luma reports:

Ur-Luma, prince of Umma, son of Enakale, prince of Umma (ins. 1),

Il reports:

Il, prince of Umma, grandson of Enakale, prince of Umma (ins. 1),

Gishakidu reports:

Barairnun, wife of Gishakidu, prince of Umma, daughter of Ur-Luma, prince of Umma, daughter-in-law of Il, prince of Umma (ins. 1).

This establishes the sequence and affiliations of the princes of Umma. Enmetena establishes also the fact that Eanatum and Enakale are contemporary.

Given the date of Eanatum, prince *c.* 2475, beginning with Enakale, and counting generations and reigns, respectively, the dates of the princes of Umma follow,

Ush	prince <i>c.</i> 2495,
Enakale	prince <i>c.</i> 2475,
Ur-Luma	prince <i>c.</i> 2445, son of Enakale,
Il	prince <i>c.</i> 2415, grandson of Enakale,
Gishakidu	prince <i>c.</i> 2395.

Lugalzagesi reports:

Lugalzagesi, prince of Uruk, son of Uu, prince of Umma (ins. 1).

The date follows,

Uu	prince <i>c.</i> 2370, father of Lugalzagesi.

And the date is consistent with the earlier dates.

3. The princes of Akshak.

Akshak has not been unearthed. It was not far from Kish.

The important states in the valley of the two rivers before Sargon are Kish, Uruk, Ur, Lagash, and Umma. Akshak is also important, just.

Eanatum reports:

Eanatum vanquished Zuzu, prince of Akshak; he destroyed Akshak (ins. 5).

The date of Zuzu follows.

Puzur-Nirah is 1 of the 6 princes of Akshak in the Sumerian prince list. He is also 1 of the princes attested by the Esagil chronicle. In particular, the list has Ku-Baba, then the 6 princes of Akshak, then Puzur-Sin, son of Ku-Baba. In the Esagil chronicle Puzur-Nirah is the immediate predecessor of Ku-Baba. Presuming, then, that Puzur-Nirah predates Ku-Baba rather than postdates her, given the date of Ku-Baba, prince *c.* 2400, and counting one reign before her reign, the date of Puzur-Nirah follows.

The dates are,

Zuzu	prince <i>c.</i> 2475,

Puzur-Nirah	prince <i>c.</i> 2420.

4. The later princes of Lagash.

Sargon conquered the entire valley, and his successors dominated it through Sharkalisharri. Then the Gutian hordes descended on the valley. Order was restored beginning with Utuhegal, and Ur-Nammu established the dominion of the princes of Ur over the valley. From the time of disorder, the two-odd generations between Sharkalisharri and Utuhegal, inscriptions have left behind, other than the last princes of Akkad and the princes of the Gutian horde, princes of Lagash, of Uruk, and of Elam.

From Lagash inscriptions have left behind Ur-Baba and Gudea.

The Lagash chronicle is an artistic emulation of the Sumerian prince list, composed in the century before *c.* 1694. Still, it ends:

Ur-Baba, he reigned 30 years;

Gudea, younger brother of Ur-Baba, he reigned . . . (*id.*).

Given the date of Utuhegal, prince *c.* 2128-1, beginning one reign before the middle of his reign, and counting reigns, the dates follow,

Ur-Baba	prince <i>c.</i> 2165,

Gudeaprince *c.* 2145, younger brother of Ur-Baba.

The dates thus assigned are consistent with the date of the last prince of Akkad, Shudurul, prince *c.* 2171-56.

Ur-Baba has left behind half a dozen inscriptions. Gudea has left behind more than 2 and a half dozen. On one of his statues is the drawing of the Eninnu.

5. The later princes of Uruk.

Inscriptions have left behind Ur-Nigin and Ur-Gigir.

They are also the first 2 of the 5 princes in the fourth group of princes of Uruk in the Sumerian prince list. In the list the fourth group of princes of Uruk is separated by the princes of the Gutian horde from Utuhegal, the 1 prince in the fifth group of princes of Uruk.

The list has the lengths of the reigns of the princes.

Presuming that, contemporary with the princes of the Gutian horde, the 5 princes in the fourth group of princes of Uruk are immediate predecessors of Utuhegal, and beginning with him, the dates follow,

Ur-Nigin	7	prince <i>c.</i> 2158-1,
Ur-Gigir	6	prince <i>c.</i> 2151-45, son of Ur-Nigin,
Kuda	6	prince <i>c.</i> 2145-39,
Puzur-Ili	5	prince <i>c.</i> 2139-4,
Ur-Utu	6	prince <i>c.</i> 2134-28,
Utuhegal	7	prince <i>c.</i> 2128-1.

6. The princes of Elam.

Elam is the country around Susa, Susa is 260 km east northeast of Uruk.

Inscriptions has left behind Puzur-Inshushinak.

Ur-Nammu reports:

Ur-Nammu, prince of Ur, prince of Sumer and Akkad . . . ; . . . marched against Elam; Puzur-Inshushinak, prince . . . ; . . . brought the booty to Enlil (ins. 29).

Given the date of Ur-Nammu, prince *c.* 2121-03, assigning the middle of his reign the middle of the reign of Puzur-Inshushinak, and rounding, the date follows,

Puzur-Inshushinak	prince <i>c.</i> 2110.

7. The princes of Larsa.

The state of Ur lost its dominion over the valley under Ibbi-Sin. Two-odd centuries later Hammurabi brought the entire valley under one state again. In the meantime Amorite hordes descended on the valley from the north. In the first of these centuries Isin dominated the lower valley, in the second Larsa dominated the lower valley. And, here as everywhere, order, disorder, rise, and decline are attested by the quantity and quality of the inscriptions of the princes.

Isin is 130 km northwest of Ur. First an official of Ibbi-Sin, Ishbi-Erra became the independent prince of Isin. In the not quite one century from Ishbi-Erra, prince *c.* 2027-1994, to Lipit-Ishtar, prince *c.* 1933-22, Isin was the dominant state in the lower valley. Lipit-Ishtar has left behind the second oldest code of laws. Ur-Nammu has left behind the oldest, with some 40 laws. The code of Lipit-Ishtar has some 50 laws.

Larsa is 90 km southeast of Isin.

Larsa rose under Gungunum, and in the following not quite one century, through Sin-Iddinam, Larsa was the dominant state in the lower valley.

The Larsa prince list has the sequence and the lengths of the reigns of the princes of Larsa. Given the date of Rim-Sin, the dates follow,

Naplanum	20	prince <i>c.</i> 2024-04,
Emisum	28	prince <i>c.</i> 2004-976,
Samium	35	prince <i>c.</i> 1976-41,
Zabaya	9	prince <i>c.</i> 1941-32,
Gungunum	27	prince <i>c.</i> 1932-05,

Abisare	11	prince <i>c.</i> 1905-894,
Sumuel	29	prince <i>c.</i> 1894-65,
Nur-Adad	16	prince <i>c.</i> 1865-49,
Sin-Iddinam	7	prince <i>c.</i> 1849-2,
Sin-Eribam	2	prince <i>c.</i> 1842-0,
Sin-Iqisham	6	prince <i>c.</i> 1840-34,
Silli-Adad	1	prince <i>c.</i> 1834-3,
Warad-Sin	12	prince <i>c.</i> 1833-21, son of Kudur-Mabuk,
Rim-Sin	60	prince <i>c.</i> 1821-761, son of Kudur-Mabuk.

Amorite hordes had been descending on the valley from the north for two centuries before Warad-Sin. Like all hordes earlier and later they eventually began to settle. But they settled more consequentially than most earlier and later hordes. Amorites installed themselves princes of Larsa twice. The first princes of Ashur are Amorites. And the first princes of Babylon are Amorites.

8. The Amorite princes.

Warad-Sin reports:

Kudur-Mabuk, father of the Amorites, Warad-Sin, his son, prince of Larsa (ins. 5).

Counting one reign back from the middle of the reign of Warad-Sin, and rounding, the date of the father of the Amorites follows,

Kudur-Mabuk	prince <i>c.</i> 1845.

9. The early princes of Ashur.

Sargon and his successors had campaigned to the source of the Euphrates in the north and to the Mediterranean in the west. In the century and a half before Kudur-Mabuk the first independent state appeared in the north, Ashur.

Ashur is on the Tigris, 520 km north northwest of Larsa.

The early princes of Ashur have been presented above. They are,

Puzur-Ashur	prince <i>c.</i> 1980,
Shallim-ahhe	prince <i>c.</i> 1960, son of Puzur-Ashur,
Ilushuma	prince <i>c.</i> 1940, son of Shallim-ahhe,
Erishu	prince <i>c.</i> 1920, son of Ilushuma,
Ikunu	prince <i>c.</i> 1900, son of Erishu II,
Sargon	prince <i>c.</i> 1880, son of Ikunu,
Puzur-Ashur II	prince <i>c.</i> 1860, son of Sargon,
Naram-Sin	prince <i>c.</i> 1840, son of Puzur-Ashur II,
Erishu II	prince <i>c.</i> 1820, son of Naram-Sin,
Shamshi-Adad	33 prince <i>c.</i> 1809-776,
Ishme-Dagan	prince <i>c.</i> 1776-59, son of Shamshi-Adad.

The sequence and affiliations of the princes, and the length of the reign of Shamshi-Adad, are from the Assyrian prince list.

A letter of Yasmah-Addu to Nergal in the Mari archive reports:

Shamshi-Adad set me up, his son Yasmah-Addu, prince of Mari (931).

Nergal is the lord of the netherworld.

Hence, given the date of Yasmah-Addu, prince *c.* 1779-4, and the fact that his reign ended with his deposition, it can be presumed that the reign of Shamshi-Adad ended in the middle of the reign of Yasmah-Addu. The date of Shamshi-Adad follows, and counting reigns, the dates of his predecessors follow.

The Assyrian prince list assigns 40 reign years to Ishme-Dagan. Instead, given the date of Hammurabi, prince *c.* 1792-49, and the name of his 33rd year: conquered Mari, and conquered Ashur (*id.*), the date of Ishme-Dagan follows.

10. The princes of Eshnunna.

Eshnunna is east of the Tigris, close to the river, and halfway between Ashur and Larsa, 260 km south southeast of Ashur, 270 km north northwest of Larsa.

The inscriptions of the princes attest their sequence and affiliations. Ibal-pi-El reports:

Ibal-pi-El, prince of Eshnunna (ins. 1).

Ipiq-Adad reports:

Ipiq-Adad, prince of Eshnunna, son of Ibal-pi-El (ins. 1).

Naram-Sin reports:

Naram-Sin, prince of Eshnunna, son of Ipiq-Adad (ins. 1).

Dadusha reports:

Dadusha, son of Ipiq-Adad, prince of Eshnunna (ins. 2).

Ibal-pi-El reports:

Ibal-pi-El, prince of Eshnunna, son of Dadusha (ins. 1).

Dadusha also reports:

I defeated Qattara, I brought its treasures to Eshnunna; what remained I gave to Shamshi-Adad, prince of Ashur (stele).

Counting a decade before the end of the reign of Shamshi-Adad the middle of the reign of Dadusha, rounding, and counting reigns before and after Dadusha, the dates follow,

Ibal-pi-El	prince <i>c.</i> 1845,
Ipiq-Adad	prince <i>c.</i> 1825, son of Ibal-pi-El,
Naram-Sin	prince <i>c.</i> 1805, son of Ipiq-Adad,
Dadusha	prince <i>c.</i> 1785, son of Ipiq-Adad,
Ibal-pi-El II	prince <i>c.</i> 1765, son of Dadusha.

The dates are consistent with the fact that Eshnunna fell to Hammurabi in his 32nd year.

Dadusha has left behind the third oldest code of laws. This code of laws now has some 60 laws.

11. The princes of Mari.

Mari is in the west, on the Euphrates, 370 km west northwest of Eshnunna.

The same letter of Yasmah-Addu to Nergal reports:

Yagid-Lim offended Ila-kabkaru;

Ila-kabkaru defeated him, and captured his son Yahdun-Lim;

the son of Yahdun-Lim Sumu-Yamam drove Yahdun-Lim from Mari;

Sumu-Yamam offended Shamshi-Adad;

Shamshi-Adad captured Mari and set me up, his son Yasmah-Addu, prince of Mari (931).

Ila-kabkaru is the father of Shamshi-Adad.

This establishes the sequence and affiliations of the 4 princes through Yasmah-Addu, all 4 attested as well by their inscriptions.

The Mari archive collects some hundreds of documents from the reigns of Yasmah-Addu and his successor Zimri-Lim. The documents cover 20 reign years. About 5 are reign years of Yasmah-Addu, about 15 are reign years of Zimri-Lim who deposed Yasmah-Addu.

Mari fell to Hammurabi in his 33rd year. Counting 15 reign years of Zimri-lim, 5 reign years of Yasmah-Addu, counting 10 years before the middle of his reign the middle of the reign of Sumu-Yamam, rounding, and counting reigns before that, the dates follow,

Yagid-Lim	prince <i>c.</i> 1825,
Yahdun-Lim	prince <i>c.</i> 1805, son of Yagid-Lim,
Sumu-Yamam	prince <i>c.</i> 1785, son of Yahdun-Lim,
Yasmah-Addu	prince <i>c.</i> 1779-4, son of Shamshi-Adad.
Zimri-Lim	prince <i>c.</i> 1774-59.

12. The princes of Yamhad.

Yamhad is between the Euphrates and the Mediterranean, 380 km west northwest of Mari.

Yamhad is the first state in the far west.

Yarim-Lim reports:

Yarim-Lim, son of Sumu-Epuh (ins. 1).

This establishes the sequence and affiliations of the princes.

Yahdun-Lim reports:

Yahdun-Lim, prince of Mari, defeated Sumu-Epuh, prince of Yamhad (ins. 2).

Shamshi-Adad writes to Yasmah-Addu:

when you march against Sumu-Epuh, he will give me back my lands (Mari archive, 492).

Counting the middle between the reigns of Yahdun-Lim and Yasmah-Addu the middle of the reign of Sumu-Epuh, the dates follow,

Sumu-Epuh	prince <i>c.</i> 1790,
Yarim-Lim	prince <i>c.</i> 1770, son of Sumu-Epuh.

The dates are consistent with the report of Zimri-Lim:

Shibtu, daughter of Yarim-Lim, wife of Zimri-Lim (ins. 8).

And then Hammurabi brought all states in the valley of the two rivers under one state. Hammurabi has also left behind the most important code of laws. The code of Hammurabi has some 280 laws.

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13. The early Kassite princes of Babylon.

Mursili destroyed Babylon *c.* 1594. The Assyrian princes rose with Ashur-uballit, prince *c.* 1363-27. The two-odd centuries in between are one of the three gravest chronological problems. Kassite hordes descended on the valley from the east, Hurrian hordes descended on the valley from the north, and the great disorder which followed is reflected by the quantity and quality of the sources.

The Kassites settled twice, both times in Babylon.

The Babylonian chronicle reporting the Hittite raid on Babylon ends:

in the time of Samsuditana the Hittites marched on Akkad;

Eagamil, prince of the sea land, fled to Elam;

after he had fled, Ulamburiash, brother of Kashtiliashu, the Kassite, mustered an army and conquered the sea land;

Agum, son of Kashtiliashu, mustered an army and marched on the sea land; he captured Dur-Enlil, and destroyed the temple of Enlil (*id.*).

Kashtiliashu, Ulamburiash, and Agum are the best attested early Kassite princes.

Counting one reign after the fall of Babylon, rounding, and counting reigns, the dates follow,

Kashtiliashu	prince <i>c.</i> 1570,
Ulamburiash	prince <i>c.</i> 1550, brother of Kashtiliashu,
Agum	prince <i>c.</i> 1530, son of Kashtiliashu.

14. The princes of Ashur.

The princes of Ashur fell to Hammurabi under Ishme-Dagan.

After Ishme-Dagan the Assyrian prince list has 18 princes, 8 of them the sons of nobodies. Then it has Shamshi-Adad III, Ashur-nirari, Puzur-Ashur III, and Enlil-nasir, who have left behind between 2 inscriptions and 1 dozen inscriptions each. Then it has 6 princes who have left behind between them 1 inscription. Then it has the series of 41 princes beginning with Ashur-bel-nisheshu, prince *c.* 1417-08, who have left behind steadily more and more inscriptions.

Shamshi-Adad III, Ashur-nirari, Puzur-Ashur III, and Enlil-nasir are the princes whose dates have to be fixed.

The 6 princes after Enlil-nasir and before Ashur-bel-nisheshu in the list are:

Nurili, son of Enlil-nasir, 12 years;

Ashur-shaduni, son of . . . , 1 month;

Ashur-rabi, son of Enlil-nasir, . . . ;

Ashur-nadin-ahhe, son of Ashur-rabi, . . . ;

Enlil-nasir, son of Ashur-rabi, 6 years;

Ashur-nirari, son of Enlil-nasir, 7 years (*id.*).

Ashur-bel-nisheshu, next, is the son of Ashur-nirari II.

Thus, 6 reigns and 4 generations separate Enlil-nasir and Ashur-bel-nisheshu. The reign years can also be consistent with the affiliations only if the 2 reigns whose lengths are lost in lacunae are both very long.

Ashur-uballit also reports:

Ashur-uballit, prince of Ashur, son of Eriba-Adad, prince of Ashur, son of Ashur-bel-nisheshu, prince of Ashur, son of Ashur-nirari, prince of Ashur, son of Ashur-rabi, prince of Ashur, son of Enlil-nasir, prince of Ashur, son of Puzur-Ashur, prince of Ashur (ins. 1).

Thus, 3 generations rather than 4 separate Enlil-nasir and Ashur-bel-nisheshu.

In any case, then, if either 3 or 4 generations separate them, and 6 reigns separate them, it can be presumed that 120 years separate them.

Counting, then, 120 years back from the middle of the reign of Ashur-bel-nisheshu, rounding, and counting reigns, even if the reign years of the princes are consistent with their affiliations, the dates follow,

Shamshi-Adad III	16	prince c. 1590, son of Ishme-Dagan II,
Ashur-nirari	26	prince c. 1570, son of Ishme-Dagan II,
Puzur-Ashur III	24, or 14	prince c. 1550, son of Ashur-nirari,
Enlil-nasir	13	prince c. 1530, son of Puzur-Ashur III.

The dates are consistent with the raid of Babylon c. 1594.

The synchronistic chronicle correlates the princes of Ashur with princes of Babylon. It reports:

Puzur-Ashur, prince of Ashur, and Burnaburiash, prince of Karduniash, took an oath and determined their boundary (*id.*).

Presuming that these princes are Puzur-Ashur III and Ulamburiash, the dates assigned to the Assyrian princes are consistent with the dates assigned to the Kassite princes.

15. The later Kassite princes of Babylon.

With Thutmose, prince c. 1521-09, the one and a half centuries of firm control of the Asian Mediterranean littoral by the princes of Egypt begin. The best attested princes in the valley of the two rivers are the princes who sent gifts to the princes of Egypt.

The Amarna archive includes the letters of the princes and the inventories of their gifts for the prince of Egypt. It includes, in particular:

5 letters (1-5) from Kadashman-Enlil to Amenhotep III, prince c. 1402-364,

1 letter (6) from Burnaburiash to Amenhotep III,

8 letters and inventories (7-14) from Burnaburiash to Amenhotep IV, prince c. 1364-47.

The synchronistic chronicle also reports:

Ashur-uballit set up in Babylon Kurigalzu, son of Burnaburiash (*id.*).

Beginning in the decade before the reign of Amenhotep IV, and counting generations, the dates follow,

Kadashman-Enlil	prince c. 1400,
Burnaburiash	prince c. 1370, son of Kadashman-Enlil,
Kurigalzu	prince c. 1340, son of Burnaburiash.

16. The princes of Mittani.

Mittani is the country northwest of Ashur, between the Tigris and the Mediterranean, straddling the Euphrates.

The Amarna archive includes 13 letters and inventories from Tushratta to the Egyptian princes. In particular:

9 letters and inventories (17-25) from Tushratta to Amenhotep III,

1 letter (26) from Tushratta to queen Tiy, wife of Amenhotep III,

3 letters (27-9) from Tushratta to Amenhotep IV.

And Tushratta writes to Amenhotep IV:

your grandfather wrote to my grandfather Artatama; your father wrote to my father Shuttarna; and he wrote also to me (29).

The grandfather of Amenhotep IV is Thutmose IV, his father is Amenhotep III.

The dates of the 3 princes follow,

Artatama	prince c. 1400,
Shuttarna	prince c. 1380, son of Artatama,
Tushratta	prince c. 1360, son of Shuttarna.

In the following century Mittani was dominated by the princes of Hattusa, then it was destroyed by the princes of Ashur.

17. The late Hittite princes.

Hattusa is in central Asia Minor, northwest of Mittani.

After Telipinu, prince c. 1510, the Hittite state disappears for one and a half centuries. Then it rises again for one and a half centuries.

The inscriptions of the princes establish their sequence and affiliations. In particular, the deeds of Suppiluliuma recorded by Mursili II begins:

thus speaks Mursili, prince of Hattusa, son of Suppiluliuma, prince of Hattusa, son of Tudhaliya, prince of Hattusa (*id.*).

In his annals Mursili II reports:

when my father Suppiluliuma became a god, my brother Arnawanda succeeded him; and when he became a god, I succeeded him (*id.*).

In his testament Hattusili III reports:

my father Mursili had three sons, Halpashulupi, Muwatali, and Hattusili; I was the youngest;

my bother Muwatali succeeded my father;

when he became a god, his son Mursili succeeded him; and he sought to kill me;

I am Hattusili, prince of Hattusa, son of Mursili, prince of Hattusa, grandson of Suppiluliuma, prince of Hattusa (*id.*).

And the treaty of Tudhaliya IV with Kurunta, son of Muwatali, reports:

I, Tudhaliya, succeeded my father Hattusili (*id.*)

The reign years are extracted from the inscriptions and from feast lists, rounding to the nearest 5 years.

The Amarna archive includes a letter from Suppiluliuma to Smenkhkare, prince c. 1347-4. Suppiluliuma writes:

I wrote to your father; and he said, let us be friends (41).

Presuming that the reign of Suppiluliuma begins shortly before that, the dates follow,

Tudhaliya III	15	prince c. 1365-50,
Suppiluliuma	25	prince c. 1350-25, son of Tudhaliya III,
Arnawanda	0	prince c. 1325, son of Suppiluliuma,
Mursili II	25	prince c. 1325-00, son of Suppiluliuma,
Muwatali	20	prince c. 1300-280, son of Mursili II,
Mursili III	5	prince c. 1280-75, son of Muwatali,
Hattusili III	30	prince c. 1275-45, son of Mursili II,
Tudhaliya IV	30	prince c. 1245-15, son of Hattusili III.

The dates are consistent with all the following.

Suppiluliuma, in his treaty with Shattiwaza, reports defeating Tushratta, prince c. 1360, and installing in Mittani Shattiwaza, son of Tushratta (*id.*).

The battle of Kadesh between Muwatali and Ramesses II, prince c. 1291-24, attested by both Ramesses II and the testament of Hattusili III (*id.*), was fought in the 5th year of Ramesses II.

The treaty of Hattusili III and Ramesses II, attested by both Ramesses II (*id.*) and Hattusili III (*id.*), was concluded in the 21st year of Ramesses II (*id.*).

Then there are the reports of the Assyrian princes.

Adad-nirari, prince *c.* 1305-273, reports:
the Hittites did not support Mittani against me (ins. 3).

Shalmaneser, prince *c.* 1273-43, reports:
the Hittites supported Mittani against me; and I slaughtered the Hittites like sheep (ins. 1).

Tukulti-Ninurta, prince *c.* 1243-06, reports:
I defeated 40 princes of Nairi (ins. 20);
I carried off 28 800 Hittites from beyond the Euphrates (ins. 23);
I conquered all the lands of Nairi and all the lands on the upper sea (ins. 25).
Then the Hittite state disappears altogether.

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18. The Amarna archive attests the relations of the Egyptian princes, the Babylonian princes, and the Hittite princes. The distances are, along the great circle, from Thebes to Babylon 1 400 km, from Babylon to Hattusa 1 200 km, from Hattusa to Thebes 1 600 km.

The Amarna archive attests also Ashur-uballit.

And under the Assyrian princes from
Ashur-uballit prince *c.* 1363-27,
and

Adad-nirari prince *c.* 1305-273,
Shalmaneser prince *c.* 1273-43,
Tukulti-Ninurta prince *c.* 1243-06,

through
Tiglath-pileser prince 1115-076,

through
Adad-nirari II prince 912-891,
Ashur-nasirpal II prince 884-59,
Shalmaneser III prince 859-24,

through
Tiglath-pileser III prince 745-27,
Shalmaneser V prince 727-2,
Sargon II prince 722-05,
Sennacherib prince 705-680,
Esarhaddon prince 680-68,
Ashurbanipal prince 668-27,

the state acquired permanence. These princes maintained a state one and the same for seven and a half centuries, and tried to build it into the only one on earth, and again, and again, and succeeded.

In these seven and a half centuries there are states of importance only at the times of decline of the Assyrian princes. In the not quite one century between Tukulti-Ninurta and Tiglath-pileser Babylon asserted itself briefly. After Tiglath-pileser Aramean hordes descended on the valley from the north. The second of the not quite two centuries between Tiglath-pileser and Adad-nirari II is the time when independent states appeared on the Mediterranean littoral, most important among them Tyre and the state of David. In the two-odd generations between Shalmaneser III and Tiglath-pileser III Urartu asserted itself north of Ashur.

And in these seven and a half centuries the record of the Assyrian princes is the foundation of chronology.

19. The prince of Babylon Nebuchadnezzar.

There have been five discontinuous series of princes of Babylon.

First, the most important, from Sumuabum, prince *c.* 1894-80, to Samsuditana, prince *c.* 1625-594, including Hammurabi and Ammisaduqa.

Next, the Kassite princes from Kashtiliashu, prince *c.* 1570, to Agum, prince *c.* 1530.

Next, the princes from Kadashman-Enlil, prince *c.* 1400, to Kurigalzu, prince *c.* 1340, Kassite princes themselves.

Next, the series of whom the one important prince is Nebuchadnezzar, prince *c.* 1125.

Finally, the second most important series, from Nabopolassar, prince 626-05, to Nabonidus, prince 556-39. The most important prince of this series is the successor of Nabopolassar, himself Nebuchadnezzar.

At issue here is the earlier Nebuchadnezzar.

In the not quite one century between Tukulti-Ninurta and Tiglath-pileser Babylon rose briefly under Nebuchadnezzar. Nebuchadnezzar conquered Elam.

Nevertheless, the synchronistic chronicle reports:

Nebuchadnezzar marched on Zanqi; Ashur-resh-ishi, prince of Ashur, mustered his chariots and marched against him; Nebuchadnezzar returned to his country;

Nebuchadnezzar marched on Idi with his chariots and foot; Ashur-resh-ishi mustered his chariots and foot, defeated Nebuchadnezzar, slaughtered his men, and carried off his treasures and 40 of his chariots (*id.*).

Ashur-resh-ishi, prince *c.* 1133-15, is the predecessor of Tiglath-pileser.

The date follows,

Nebuchadnezzar prince *c.* 1125.

20. The princes of Judah and Israel.

In the second of the not quite two centuries between Tiglath-pileser and Adad-nirari II independent states appeared on the Mediterranean littoral. The state of David. Byblos. Tyre. Damascus. Moab.

The state of David was built around the city of Jerusalem. After David's successor Solomon it split into the two states of Judah in the south, around Jerusalem, and Israel in the north, around Samaria.

Kings has the sequences, the lengths of the reigns, and the affiliations of the princes.

11 inscriptions of the princes who destroyed Israel and Judah attest particular princes of Israel and Judah,

- 2 inscriptions of Shalmaneser III,
- 1 inscription of Adad-nirari III,
- 3 inscriptions of Tiglath-pileser III,
- 1 inscription of Sargon II,
- 1 inscription of Sennacherib,
- 1 inscription of Esarhaddon,
- 1 inscription of Ashurbanipal,
- and 1 inscription of Nebuchadnezzar, prince of Babylon 605-562.

Presuming that the reports of these princes are the ground on which the dates of the princes of Judah and Israel have to be fixed, the difficulty is to make the reports of *Kings* consistent with the reports of these princes. It is a minor difficulty. The reports of *Kings* are abundant and explicit.

After the fall of Israel, and thus closer to the time of writing, *Kings* is consistent with the reports of the Assyrian princes and Nebuchadnezzar.

Before that it is not.

It is not consistent with itself either. *Kings* correlates the year of accession of each prince of either Judah or Israel with a year of the reign of the prince of the other principality. And from the death of Solomon (I, 11) to the last correlation:

Samaria fell in the 6th year of Hezekiah, prince of Judah, which was the 9th year of Hoshea, prince of Israel (II, 18),

Kings calculates 260 years in Judah, 241 years, 6 months, and 7 days in Israel.

Presuming that the numbers assigned to the lengths of the reigns of the princes are much less likely to be in error than the calculations correlating years of their reigns, these correlations are best ignored.

The later princes are attested better than the earlier. And the princes of Israel, which was destroyed first, are attested better than the princes of Judah.

Hence, in order to fix the dates of the princes on the ground of the reports of the Assyrian princes and Nebuchadnezzar, and sort out the minor inconsistencies of *Kings*, the sequence of the princes can be divided into four parts. Each part corresponds to a set of princes, once again set by set back in time. 20.1. The princes of Judah from Hezekiah to Zedekiah. 20.2. The princes of Israel. 20.3. The princes of Judah from Rehoboam to Ahaz. 20.4. David and Solomon.

The corrected dates are the following. On the left are the lengths of the reigns assigned by *Kings*. On the right are the corrections from which the dates are obtained. In particular, the dates of the later princes of Judah, from Hezekiah to Zedekiah, do not have to be corrected. The dates of all princes of Israel, from Jeroboam to Hoshea, can be corrected uniformly, except in the case of Menahem, where the uniform correction has to be itself further corrected, and hence the length of the reign of Pekah has to be adjusted as well. And the dates of the earlier princes of Judah, from Rehoboam to Ahaz, can all be corrected uniformly.

The dates of David and Solomon are,

David	40	prince c. 1003-963,
Solomon	40	prince c. 963-23, son of David.

The dates of the princes of Israel are,

Jeroboam	22	18	prince c. 923-05,
Nadab	2	2	prince c. 905-3, son of Jeroboam,
Baasha	24	20	prince c. 903-883,
Elah	2	2	prince c. 883-1, son of Baasha,
Zimri	7 d		prince c. 881,
Omri	12	10	prince c. 881-71,
Ahab	22	18	prince c. 871-53, son of Omri,
Ahaziah	2	2	prince c. 853-1, son of Ahab,
Jehoram	12	10	prince c. 851-41, son of Ahab,
Jehu	28	24	prince c. 841-17,
Jehoahaz	17	14	prince c. 817-03, son of Jehu,
Jehoash	16	13	prince c. 803-790, son of Jehoahaz,
Jeroboam II	41	34	prince c. 790-56, son of Jehoash,
Zechariah	6 mo		prince c. 756, son of Jeroboam II,
Shallum	1 mo		prince c. 756,
Menahem	10	8 $\Rightarrow$ 15	prince c. 756-41,
Pekahiah	2	2	prince c. 741-39, son of Menahem,
Pekah	20	17 $\Rightarrow$ 10	prince c. 739-29,
Hoshea	9	8	prince c. 729-1.

The dates of the princes of Judah are,

Rehoboam	17	13	prince c. 923-10, son of Solomon,
Abijah	3	2	prince c. 910-08, son of Rehoboam,
Asa	41	32	prince c. 908-876,
Jehoshaphat	25	19	prince c. 876-57, son of Asa,
Jehoram	8	6	prince c. 857-1, son of Jehoshaphat,
Ahaziah	1	1	prince c. 851-0, son of Jehoram,
Athaliah	6	5	prince c. 850-45, mother of Jehoash,
Jehoash	40	31	prince c. 845-14, son of Ahaziah,

Amaziah	29	23	prince c. 814-791, son of Jehoash,
Uzziah	52	41	prince c. 791-50, son of Amaziah,
Jotham	16	12	prince c. 750-38, son of Uzziah,
Ahaz	16	12	prince c. 738-26, son of Jotham,
Hezekiah	29		prince 726-697, son of Ahaz,
Manasseh	55		prince 697-42, son of Hezekiah,
Amon	2		prince 642-0, son of Manasseh,
Josiah	31		prince 640-09, son of Amon,
Jehoahaz	3 mo		prince 609,
Jehoiakim	11		prince 609-598,
Jehoiachin	3 mo		prince 598, son of Jehoiakim,
Zedekiah	11		prince 598-87.

And this is why and how the lengths of the reigns are corrected.

20.1. The princes of Judah from Hezekiah to Zedekiah.

In his 1st year, Sargon II, prince 722-05, reports:

I conquered Samaria, and I took 27 290 of its people (ins. II, 53/75).

Sargon II thus conquered Samaria in 721.

In his 7th year, Nebuchadnezzar, prince 605-562, reports:

the prince of Akkad laid siege to Jerusalem; he took Jerusalem; and he installed a prince to his liking (chronicle 5).

Nebuchadnezzar thus took Jerusalem and installed a prince to his liking in 598.

There are thus 123 years from the fall of Samaria to the installation of Zedekiah. *Kings* agrees, assigning to the reign years of the princes of Judah from the fall of Samaria to the installation of Zedekiah a total of 122 years and 6 months.

Counting by the reign years assigned by *Kings*, and beginning with the installation of Zedekiah, the dates of the princes of Judah from Hezekiah, prince 726-697, to Zedekiah, prince 598-87, follow.

Fixed from the reports of Sargon II and Nebuchadnezzar, the dates are consistent also with the reports of Sennacherib, Esarhaddon, and Ashurbanipal.

Sennacherib, prince 705-680, reports:

in the 3rd year of my reign Hezekiah did not submit to my yoke; I took 200 150 people from his cities; I shut him in Jerusalem like a bird in a cage; and he gave me 30 talents of gold and 800 talents of silver (ins. II, 232/54).

Esarhaddon, prince 680-68, reports:

I called 22 princes of the Hatti to bring materials for my palace in Nineveh (ins. II, 690), and lists among the 22:

Manasseh of Judah (*id.*).

Ashurbanipal, prince 668-27, reports:

I took with me on my campaign in Egypt 22 princes (ins. II, 875/6), and lists among the 22:

Manasseh (*id.*).

As to *Kings*, it reports:

Nebuchadnezzar took Jehoiachin prisoner in his 8th year (II, 24), and:

Nebuchadnezzar burned the temple in his 19th year (25),

and these numbers are consistent with the assigned dates within 1 year.

Kings also notes Necho, prince of Egypt 610-595, in the reigns of Josiah, Jehoahaz, and Jehoiakim (23), and this is consistent with the dates assigned to them.

Kings also reports:

Sennacherib marched against the strong cities of Judah and took them in the 14th year of Hezekiah

(18),

and this is inconsistent, both, with the 122 years and 6 months *Kings* calculates from the fall of Samaria to the installation of Zedekiah and with its report:

Shalmaneser V besieged Samaria in the 4th year of Hezekiah (*id.*).

Shalmaneser V was prince 727-2. Ignoring the correlation of Sennacherib's march with the 14th year of Hezekiah, the assigned dates are consistent with a siege of Samaria by Shalmaneser V and a campaign of Sennacherib in Judah during the reign of Hezekiah.

20.2. The princes of Israel.

In his 6th year, describing the battle of Qarqar, Shalmaneser III, prince 859-24, reports:

Ahab brought 2 000 chariots and 10 000 foot (ins. 2).

The battle of Qarqar was thus fought, and Ahab was prince, in 853.

In his 18th year, Shalmaneser III reports:

I received the tribute of Jehu of the house of Omri (ins. 8).

Shalmaneser III thus received his tribute, and Jehu was prince, in 841.

Jehu was thus prince 120 years before the fall of Samaria. *Kings* calculates 143 years from the beginning of his reign to the fall of Samaria, 115 years from the end of his reign to the fall of Samaria.

Ahab was prince 132 years before the fall of Samaria. *Kings* calculates 179 years from the beginning of his reign to the fall of Samaria, 157 years from the end of his reign to the fall of Samaria.

The error will be minimal, if it is presumed that 853, the 6th year of Shalmaneser III, is the last year of Ahab, and 841, the 18th year of Shalmaneser III, is the first year of Jehu. The presumption is supported by the fact that the error of calculating 143 years instead of 120, and of calculating 157 years instead of 132, is the same, in both cases 1 year is calculated instead of 0.84. Hence, presuming also that the error will be minimal with respect to any one prince on average, if it is distributed over the entire sequence of the princes, recalculating the lengths of the reigns of the princes assigned by *Kings*, on the left, in the ratio of 1:0.84 and rounding to the nearest year, on the right, and beginning with any of the 3, Hoshea or Jehu or Ahab, the dates of the princes of Israel from Jeroboam, prince *c.* 923-05, to Hoshea, prince *c.* 729-1, follow.

In the case of Menahem, however, where the date *c.* 756-48 follows, this date has to be further corrected. And hence the dates which the uniform correction yields for Pekahiah and Pekah have to be also adjusted.

The dates are fixed uniformly from the reports of Shalmaneser III. And there are 3 further reports of the Assyrian princes, 1 of Adad-nirari III, and 2 of Tiglath-pileser III, and the dates obtained from the uniform correction are consistent with 2 of these reports, but not with the third, and this demands the further correction.

The assigned dates are consistent with the report of Adad-nirari III, prince 811-783:

I received the tribute of Jehoash, the Samarian (ins. 7).

And they are consistent with 1 of the 2 reports of Tiglath-pileser III, prince 745-27: in the land of Omri, when they removed Pekah, I installed Hoshea (ins. I, 815/9).

But not with his other report. At some time between his 4th and his 8th year Tiglath-pileser III reports: I received the tribute of Menahem, the Samarian (ins. I, 761/79).

His 4th year is 741. The date *c.* 756-48 thus has to be corrected to *c.* 756-41, and hence also the date of Pekahiah corrected to *c.* 741-39, and of Pekah to *c.* 739-29.

As to *Kings*, it reports:

Shalmaneser V marched against Israel in the reign of Hoshea (II, 17), and this is consistent with the date assigned to Hoshea.

Kings also reports:

in the days of Pekah Tiglath-pileser III marched into Israel (15), and this is consistent with the date assigned to Pekah.

Kings also reports:

Tiglath-pileser III marched into Israel, and Menahem gave him 1 000 talents of silver (*id.*), and this is consistent with the adjusted date of Menahem.

20.3. The princes of Judah from Rehoboam to Ahaz.

There is but one report of the Assyrian princes. Tiglath-pileser III reports: I received the tribute of Ahaz of Judah (ins. I, 787/804). There is no reign year.

The dates of the princes of Israel are thus fixed by the reports of the Assyrian princes back to Ahab, but the dates of the princes of Judah only back to Hezekiah. Hence, presuming that the calculation of *Kings* of 260 years from the death of Solomon to the 6th year of Hezekiah in Judah has to accommodate its calculation of 241 years, 6 months, and 7 days from the death of Solomon to the 9th year of Hoshea in Israel, and given that this calculation has to correspond to 202 years assigned to the princes of Israel from the death of Solomon to the 9th year of Hoshea, the error of calculating 260 years instead of 202 is of 1 year instead of 0.78. Hence, recalculating the lengths of the reigns assigned by *Kings* in the ratio of 1:0.78 and rounding to the nearest year, and beginning with either Rehoboam or Ahaz, the dates of the princes of Judah from Rehoboam, prince c. 923-10, to Ahaz, prince c. 738-26, follow.

The date of Ahaz is thus consistent with the report of Tiglath-pileser III.

Kings reports:

Ahaz sent a messenger to Tiglath-pileser III (II, 16), and:

Ahaz went to Damascus to pay homage to Tiglath-pileser III (*id.*), and this is consistent with the date assigned to Ahaz.

20.4. David and Solomon.

Given the lengths of the reigns assigned by *Kings*, the dates follow.

The dates back to Hezekiah, prince 726-697, should be certain without qualification, the dates back to Ahab, prince c. 871-53, and Jehoshaphat, prince c. 876-57, should be certain within 5 years either way, and the dates back to David, prince c. 1003-963, should be certain within 10 years either way. And again, these should be the widest limits.

21. The princes of Byblos.

The Phoenician city of Byblos is 260 km north of Jerusalem, on the coast.

Ittobaal reports:

Ittobaal, son of Ahiiram, prince of Byblos, for Ahiiram, his father (sarcophagus ins.).

It is the oldest alphabetic inscription.

Alphabets developed from Ugaritic to Phoenician to Hebrew.

Tyre became the dominant among the Phoenician cities, and Tyre rose to its peak under Hiram. It can be presumed that the oldest Phoenician inscription predates Hiram. Given the date of Hiram, prince c. 969-35, counting one generation from the middle of his reign, and rounding, the dates follow,

Ahiiram

prince c. 1000,

Ittobaal

prince c. 980, son of Ahiiram.

22. The princes of Tyre.

Tyre is 100 km south of Byblos, 160 km north of Jerusalem, on the coast.

The princes of Tyre first ventured far on the sea. The colonization of the Mediterranean littoral began under them.

Manetho wrote the *Egyptian history*. In the generation after him Berossus wrote the *Babylonian history*. Menander of Ephesus wrote the *Phoenician history*. The *Suda* lists three students of Eratosthenes (s. v.), one of them Menander. Presuming that Menander of Ephesus is the student of Eratosthenes, he wrote the *Phoenician history* three-odd generations after Manetho.

And Josephus, quoting Menander of Ephesus, has the sequence of the princes of Tyre, their affiliations, and beginning with Hiram the lengths of their reigns (*Apion*, I, 18).

Josephus also calculates:

there were 155 years and 8 months from the beginning of the reign of Hiram to the foundation of Carthage; and Carthage was founded in the 7th year of Pygmalion (*id.*).

Dionysius of Halicarnassus reports: Timaeus, I do not know on what grounds, sets the foundation of Rome at the same time as the foundation of Carthage in the 38th year before the first olympiad (*Antiquities*, I, 74).

The 38th year before the first olympiad is 814. The dates follow,

Abibaal		prince c. 980, father of Hiram,
Hiram	34	prince c. 969-35
Baal-Ezar	17	prince c. 935-18, son of Hiram,
Abdastartus	9	prince c. 918-09,
Methusastartus	12	prince c. 909-897,
Astarymus	9	prince c. 897-88, brother of Methusastartus,
Phelles	8 mo	prince c. 888, brother of Astarymus,
Ithobaal	32	prince c. 888-56,
Baal-Ezar II	6	prince c. 856-0, son of Ithobaal,
Matten	29	prince c. 850-21, son of Baal-Ezar II,
Pygmalion	47	prince c. 821-774.

Samuel notes Hiram in the reign of David (II, 5), *Kings* notes him in the reign of Solomon (I, 5, 7, 9-10), and this is consistent with the dates assigned to the 3 princes.

Josephus writes also:

the temple was built in the 12th year of Hiram (*id.*),

Kings writes:

the building of the temple began in the 4th year of Solomon and was completed in his 11th year (I, 6), and both reports are consistent with the dates assigned to the princes.

23. The princes of Damascus.

Damascus is inland, 110 km east northeast of Tyre.

In his 6th year, describing the battle of Qarqar, Shalmaneser III reports also:

Hadadezer of Damascus brought 1 200 chariots, 1 200 horse, and 20 000 foot (ins. 2).

Shalmaneser III notes Hadadezer also in his 14th year (ins. 10), and in his 18th year reports:

Hazael of Damascus rose for battle; I besieged him in Damascus (ins. 16).

Hadadezer was thus prince in 853 and still in 845. Hazael was prince in 841.

Kings reports that Hadadezer was allied with Baasha (I, 15), that he fought Ahab (20), and that he died in the reign of Jehoram, son of Ahab (II, 8). It reports that Hazael became prince at the death of Hadadezer (*id.*), and notes him in the reign of Jehoash, son of Athaliah (12), and in the reign of Jehoahaz (13).

Given the dates of Baasha, prince c. 903-883, Jehoram, son of Ahab, prince c. 851-41, and Jehoahaz, prince c. 817-03, beginning with the years fixed by Shalmaneser III, and rounding to the nearest 5 years, the dates follow,

Hadadezer	prince c. 885-45,
Hazael	prince c. 845-10.

24. The princes of Moab.

The country of Moab is on the far side of the Dead Sea, some 60 km east southeast of Jerusalem along the great circle.

Mesha reports:

Omri humbled Moab; and the son of Omri said, I will also humble Moab; but I, Mesha, vanquished the son of Omri and his house, and Israel has perished forever (stone).

The stone of Mesha is the oldest independent record of events described by the writings collected in the Hebrew scriptures.

Given the date of Ahab, prince c. 871-53, the date follows,

Mesha prince c. 860.

Israel did not perish forever, and *Kings* describes the events described by Mesha differently: prince Mesha of Moab was a breeder of sheep; he paid 100 000 lambs and the wool of 100 000 rams in tribute to the prince of Israel; but when Ahab died, Mesha rebelled; so Jehoram, son of Ahab, mustered all Israel and called on Jehoshaphat to follow him (II, 3).

And together Jehoram, son of Ahab, and Jehoshaphat slaughter the Moabites.

On the dates assigned to them, Jehoram, son of Ahab, prince c. 851-41, and Jehoshaphat, prince c. 876-57, can have each slaughtered the Moabites, but cannot have slaughtered them together. Nor need they have slaughtered them together, given that *Kings* also reports:

after Ahab Ahaziah, son of Ahab, became prince of Israel in the 17th year of Jehoshaphat (I, 22);

after Ahaziah Jehoram, son of Ahab, became prince of Israel in the 2nd year of Jehoshaphat (II, 1).

25. The princes of Urartu.

Urartu rose in the two-odd generations between Shalmaneser III and Tiglath-pileser III.

The inscriptions of the princes attest their sequence and affiliations.

Sarduri reports:

Sarduri, son of Lutipri (ins. 1),

Ishpuini reports:

Ishpuini, son of Sarduri (ins. 4-10),

Menua reports:

Menua, son of Ishpuini (ins. 28),

Argishti reports:

Argishti, son of Menua (ins. 127),

Sarduri II reports:

Sarduri, son of Argishti (ins. 155-6),

Rusa reports:

Rusa, son of Sarduri (ins. 264).

In his 27th year Shalmaneser III reports:

I defeated Sarduri, prince of Urartu (ins. 14).

In his 2nd year Shamshi-Adad V reports:

I took 11 strong cities and 200 small cities of Ishpuini (ins. 1).

Shamshi-ilu was a general of Adad-nirari III (ins. 2) and of Shalmaneser IV (ins. 1), and Shamshi-ilu campaigned against Argishti (Adad-nirari III, ins. 2010). The inscription does not attest whether the campaign was under Adad-nirari III or Shalmaneser IV.

In his 3rd year Tiglath-pileser III reports:

I defeated Sarduri (ins. I, 762/79),

and in his 17th year Tiglath-pileser III reports also his earlier deed:

I defeated Sarduri and shut him in Tushpa (ins. I, 808/14).

Thus, Sarduri was prince in 832, Ishpuini was prince in 822, Argishti was prince at some time between 811 and 773, and Sarduri II was prince in 742 and at some time before 730.

Presuming that the reign of the best attested prince, Argishti, is the longest, distributing the other reigns accordingly, and rounding, the dates follow,

Lutipri	prince c. 850,
Sarduri	prince c. 830, son of Lutipri,
Ishpuini	prince c. 810, son of Sarduri,
Menua	prince c. 790, son of Ishpuini,
Argishti	prince c. 765, son of Menua,
Sarduri II	prince c. 740, son of Argishti,
Rusa	prince c. 720, son of Sarduri II.

Sargon II completed the destruction of Urartu in his 8th year (ins. II, 4/51). In 714.

26. The Phrygian princes.

The country of Phrygia is in Asia Minor, further north and west.

And Midas is attested by both the Assyrian princes and Herodotus.

In his 5th year Sargon II reports:

Pisiri of Carchemish rose against me and sent an envoy to Midas of Muski (*id.*).

and in his 13th year:

my governor in the west raided the land of Midas of Muski (*id.*).

The years are 717 and 709, and the date follows,

Midas prince c. 710.

Herodotus reports: after Midas Gyges was the first barbarian to send gifts to Delphi (I, 14).

The date of Gyges, prince c. 680-45, fixed from Herodotus, is consistent with the date of Midas, fixed from Sargon II.

And thus far the Assyrian princes are the foundation of chronology. Further on the father of history and his successors are the foundation. Chronological problems are minor and steadily fewer.

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The following states have all been presented above in some detail as well.

27. The Lydian princes.

The country of Lydia is also in Asia Minor, further west.

Herodotus has the sequence, the lengths of the reigns, and the affiliations of the princes (I, 15, 16, 25, 86).

The lengths of the reigns have to be corrected.

Gyges is also attested by both the Assyrian princes and Herodotus. In his 3rd year Ashurbanipal reports:

Gyges, prince of Lydia, a land beyond the sea, a distant land of which my fathers had never heard, kept sending envoys with lavish gifts to kiss my feet and beg for help against the Cimmerian hordes ravaging his land; then he sent men to the prince of Egypt who had rebelled against me; but then the Cimmerians descended on his land again, and again he sent messengers with gifts to kiss my feet and beg for help (ins. II, 765/840).

Herodotus also reports: Archilochus mentions Gyges in a poem of iambic trimeters (I, 12). And in a poem of trochaic tetrameters Archilochus mentions a solar eclipse (fr. 122). A solar eclipse visible in the Cyclades at the time of Ashurbanipal and Psamtik occurred on 6 Apr 648.

Gyges was thus prince in 665 and in 648.

Hence, presuming that Gyges reigned until c. 645, rounding the lengths of the reigns Herodotus assigns to him and to Alyattes to the nearest 5 years, and ignoring those he assigns to Ardys and Sadyattes, the dates follow,

Gyges	38	prince c. 680-45,
Ardys	49	prince c. 635, son of Gyges,
Sadyattes	12	prince c. 625, son of Ardys,
Alyattes	57	prince c. 615-560, son of Sadyattes,
Croesus	14	prince 560-46, son of Alyattes.

28. The Mede princes.

The country of Media is beyond the Tigris, in the east.

The Babylonian, the Egyptian, the Lydian, and the Mede kingdoms rose after the fall of Assyria. Then the great kings conquered them all.

Herodotus has the sequence, the lengths of the reigns, and the affiliations of the princes (I, 107, 130).

And beginning with the fall of Astyages to Cyrus in 550, the dates follow,

Cyaxares	40	prince c. 625-585,
Astyages	35	prince c. 585-50, son of Cyaxares.

In his 14th year Nabopolassar, prince 626-05, reports:
Nabopolassar, prince of Akkad, and Cyaxares, prince of the Medes, sacked Nineveh (chronicle 3),
and this is consistent with the date assigned to Cyaxares.

29. Sparta.

The only difficulty is the date of Theopompus. It is a grave difficulty, however.

The grounds on which it has to be resolved are two.

Herodotus has the sequence and affiliations of the Spartan princes, the Agiads (VII, 204) and the Eurypontids (VIII, 131).

Theopompus is a Eurypontid. The events Herodotus describes fix the end of the reign of the Eurypontid Demaratus precisely, fix the beginning of his reign within a couple of years either way, and fix the beginning of the reign of his predecessor Ariston within 5 years either way. And 6 reigns and 6 generations separate Ariston from his predecessor Theopompus.

Also, Tyrtaeus sings:

our king Theopompus, dear to the gods, won Messenia,
Messenia good for ploughing, good for planting,
for Messenia nineteen years incessantly fought
the fathers of our fathers (fr. 5).

There are two dates for the earliest Greek poets. Terpander won a citharodic contest in 676/3 (Athenaeus, XIV, 635e). Archilochus sings of the eclipse which occurred in 648. This is the time also of Tyrtaeus, and closer to Archilochus rather than Terpander.

Hence, counting two generations before Tyrtaeus, the date of Theopompus follows. And when dates are assigned to the following 6 reigns, distributing them evenly over the time before Ariston, the dates are consistent with the count of 6 generations as well.

The dates are,

Theopompus

Anaxandridas
Archidamus
Anaxilas
Leotychidas
Hippocratides
Agasicles

prince c. 710,
prince c. 685, son of Theopompus,
prince c. 660, son of Anaxandridas,
prince c. 635, son of Archidamus,
prince c. 610, son of Anaxilas,
prince c. 585, son of Leotychidas,
prince c. 560, son of Hippocratides,
prince c. 550-15, son of Agasicles,
prince c. 515-491, son of Ariston.

Ariston

Demaratus

30. Argos.

Pausanias of Magnesia reports:
the Argives defeated the Spartans at Hysiae in 669 (II, 24.7).

Given that Pheidon led the Argives, the date follows,

Pheidon prince c. 669.

31. Corinth.

Herodotus reports:
Cypselus ruled for 30 years (V, 92).

Aristotle reports:
Cypselus ruled for 30 years, Periander ruled for 40 years and a half (*Politics*, V, 12).

Laertius reports:
Periander flourished in 628/5, and ruled for 40 years (I, 98).

The dates follow,

Cypselus tyrant c. 658-28,
Periander tyrant c. 628-588, son of Cypselus.

32. Megara.

Thucydides reports that a daughter of Theagenes was married to Cylon, and Theagenes lent Cylon troops to set himself up tyrant in Athens (I, 126). Plutarch reports that this was in the archonship of Megacles (*Solon*, 5). Given that Megacles was archon *c.* 632, the date follows,

Theagenes tyrant *c.* 632.

33. Athens.

Aristotle reports:

Draco enacted his laws in the archonship of Aristaechnus (*Constitution*, 4).

The dates of the Athenian archons are certain without qualification back to this time. A decade earlier they are certain within a couple of years either way.

Thus,

Megacles archon *c.* 632,

Draco laws in 621.

Athens is the best attested Greek state. It presents no chronological difficulties.

34. Miletus.

Herodotus reports that Thrasybulus was contemporary with Periander (I, 20).

Rounding from the middle of the reign of Periander, the date follows,

Thrasybulus tyrant *c.* 610.

35. Mytilene.

Aristotle reports: the Mytileneans elected Pittacus tyrant (*Politics*, III, 14).

Herodotus reports that Periander arbitrated between Mytilene and Athens in their quarrel over Sigeum (V, 95), and that later Pisistratus captured Sigeum (94). Pisistratus was tyrant 560-27.

The war in which the wise man Pittacus slew the Olympic victor Phrynon, and won Sigeum for Mytilene, was thus fought from late in the tyranny of Periander to early in the tyranny of Pisistratus.

Laertius reports:

Pittacus died in 578 having lived more than 70 years (I, 79).

It can be concluded that the date is,

Pittacus tyrant *c.* 590.

36. Sicyon.

Herodotus reports that Cleisthenes of Sicyon was the grandfather of Cleisthenes (VI, 131).

Cleisthenes was archon in 525. Counting two generations, the date is,

Cleisthenes of Sicyon tyrant *c.* 585.

37. Locri.

Eusebius dates the laws of Zaleucus to 663 (*Chronicle*, II).

Thus,

Zaleucus laws in 663.

38. Catana.

The laws of Zaleucus are the *terminus post quem* of Charondas. Hiero's conquest of Catana in 476 is the *terminus ad quem*. The error will be minimal if the date is assigned to the middle of this time,

Charondas laws in the generation around *c.* 570.

39. Acragas.

The date of Phalaris is also difficult.

Thucydides reports:

Gela was founded 45 years after the foundation of Syracuse; and to the best of our reckoning Acragas was founded 108 years after the foundation of Gela;

the first Greeks to come to Sicily were Chalcidians from Euboea, they founded Naxos; the following year Corinthians founded Syracuse; 5 years after that the Chalcidians founded Catana; at the same time colonists from Megara came, and founded Megara Hyblaea; they lived there for 245 years, until Gelon drove them out (VI, 3-4).

Gelon was tyrant 491-78. He seized Syracuse in 485, and defeated Carthage at Himera in 480. He

temporal series and order has to be determined unambiguously. The only way to do so is to assign dates to all particulars uniformly.

And to do so, years of birth have to be assigned to all particulars.

The acquisition of knowledge is the steps of advance in the acquisition of knowledge, exclusively. The acquisition of knowledge is the winning of propositions.

And the sheer number of propositions won by Aristotle, or by Ptolemy, or by Galileo, or by Kepler, or by Descartes, or by Newton, or by Leibniz, or by Laplace, in each case all propositions always won in their relation to other propositions, in each case won in a number of important and very important treatises, the treatises distributed in each case over many years, should suffice to show that these are the particulars, Aristotle, Ptolemy, Galileo, Kepler, Descartes, Newton, Leibniz, Laplace, which have to be collected in order to collect the steps of advance in the acquisition of knowledge. These are the particulars which have to be arranged uniformly. And the years of birth provide the uniformity,

384 - 322^{BC} **Aristotle,**

87^{AD} **Ptolemy,**

1564 - 1642 **Galileo,**

1571 - 1630 **Kepler,**

1596 - 1650 **Descartes,**

1642 - 1727 **Newton,**

1646 - 1716 **Leibniz,**

1749 - 1827 **Laplace.**

When the years of birth are not recorded, as in the case of Ptolemy, they have to be inferred.

Whether there is a man – or a pig, or a baboon – to attach to a year of birth is irrelevant. Relevant is whether there are propositions to attach.

Nor are years of birth difficult to assign. There are many chronological difficulties. Once a difficulty is resolved, however, and a date is assigned to a predecessor of the philosophers or philosopher, to infer a year of birth is not difficult. Nor will the inference diminish the certainty of the date.

Laertius reports: Pythagoras divided man's life into quarters, 20 years a boy, 20 years a young man, 20 years a mature man, 20 years an old man, corresponding to the seasons, the boy to spring, the young man to summer, the mature man to autumn, the old man to winter (VIII, 10).

And as years of birth were seldom recorded, as they are hardly ever worth recording, when the philosophers began researching their predecessors, they counted the autumn equinox, the end of summer and beginning of autumn, at 40, the apex of the labors of a philosopher. Aristoxenus, in the generation after Aristotle, wrote on Pythagoras and the Pythagoreans, and counting 40 the apex of a philosopher can be traced back to him. In the *Life of Pythagoras*, Porphyry reports: Pythagoras adapted a cave for the study of philosophy, and he lived there day and night, teaching a few of his followers; he was then 40, Aristoxenus says (9). Six centuries after Aristoxenus, Laertius counts 40 the apex of a philosopher whenever his predecessors have not recorded the year of his birth.

Nor can counting 40 the apex be improved upon. When Pythagoras divided man's life into quarters, spring, summer, autumn, winter, he did explicitly what nature had done implicitly, and when his successors counted the autumn equinox the apex, they also did explicitly what nature had done implicitly.

Nor need it be improved upon.

Galileo published *The two main systems of the world* at 68 and the *Two new sciences* at 74, but the *Starry messenger* at 46. Kepler published *The cosmographic mystery* at 25 and the *Rudolphine tables* at 56, but the *New astronomy* at 38. Descartes wrote the *Rules for the search for truth* at 32 and published *The principles of philosophy* at 48, but the *Discourse on the method* at 39. Newton wrote *On analysis by equations of infinite number of terms* at 27 and published the *Optics* at 62, but *The mathematical principles* at 45. Leibniz wrote *The art of combination* at 20 and published the *Monadology* at 68, but *A new method for maxima and minima* at 38. Laplace proved that Uranus is a

2720	Imhotep	under Djoser, prince <i>c.</i> 2680,
2660	Metjen	under Huni, prince <i>c.</i> 2620,
2620	Hemiuunu	under Khufu, prince <i>c.</i> 2580,
2500	Niankhsekhmet	under Sahure, prince <i>c.</i> 2460,
2480	Palermo stone	under Neferirkare, prince <i>c.</i> 2440,
2325	Weni	first office under Teti, prince <i>c.</i> 2300,
2285	Harkhuf	first office under Merenre, prince <i>c.</i> 2260,
2185	drawing of the Eninnu	under Gudea, prince <i>c.</i> 2145,
2077	Sumerian prince list	under Ibbsi-Sin, prince <i>c.</i> 2037-13,

2077	Ur archive	under Ibbi-Sin,
2067	Tummal chronicle	under Ishbi-Erra, prince <i>c.</i> 2027-1994,
2016	account of work on a building including calculations – under Senwosret, prince	<i>c.</i> 1976-32,
1920	Esagil chronicle	under Sumulael, prince <i>c.</i> 1880-44,
1885	book of 87 problems	under Amenemhet III, prince <i>c.</i> 1845-00,
1861	Larsa prince list	under Rim-Sin, prince <i>c.</i> 1821-761,
1854	Isin prince list	under Damaqilishu, prince <i>c.</i> 1814-791,
1814	Mari archive	under Zimri-Lim, prince <i>c.</i> 1774-59,
1686	Venus tablet of Ammisaduqa	– under Ammisaduqa, prince <i>c.</i> 1646-25,
1686	<i>When the gods were men</i>	under Ammisaduqa,
1665	Babylonian prince list	under Samsuditana, prince <i>c.</i> 1625-594,
1595	Ahmoose son of Abana	first office under Ahmoose, prince <i>c.</i> 1570-45,
1570	Babylonian chronicle reporting the Hittite raid on Babylon	– under Agum, prince <i>c.</i> 1530,
1510	Karnak prince list	under Thutmose III, prince <i>c.</i> 1470-37,
1387	Amarna archive	under Smenkhkare, prince <i>c.</i> 1347-4,
1342	Abydos prince list	under Seti, prince <i>c.</i> 1302-291,
1331	Saqqara prince list	under Ramesses II, prince <i>c.</i> 1291-24,
851	synchronistic chronicle	under Adad-nirari III, prince 811-783,
810	<i>Amos</i>	prophecy between <i>c.</i> 791 and <i>c.</i> 750,
800	<i>Hosea</i>	prophecy between those of <i>Amos</i> and <i>Isaiah</i> ,
790	<i>Isaiah</i>	prophecy began <i>c.</i> 750,
767	Assyrian prince list	under Shalmaneser V, prince 727-2,
763	<i>Micah</i>	prophecy between <i>c.</i> 750 and <i>c.</i> 697.
667	<i>Jeremiah</i>	prophecy began in 627,
662	<i>Deuteronomy</i>	the law promulgated in 622,
650	circumnavigation of Africa under Necho	– Necho, prince 610-595,
633	<i>Ezekiel</i>	prophecy began in 593.

Imhotep built the pyramid of Djoser, the oldest pyramid, Hemiunu built the pyramid of Khufu, the largest pyramid. Both are well attested. Later on, Imhotep was also venerated as a god. Manetho writes: in the reign of Djoser lived Imhotep, who was venerated for his medical skills as Asclepius by the Egyptians; he discovered the art of building with cut stone; he also studied writing (fr. 2a). Other than the largest pyramid, Hemiunu has left behind his statue.

Metjen, Niankhsekhmet, Weni, Harkhuf, and Ahmoose son of Abana describe their services to their princes. Metjen and Niankhsekhmet describe services to one prince each, Weni, Harkhuf, and Ahmoose son of Abana describe long careers, Weni served three successive princes, Harkhuf served two, Ahmoose son of Abana served also three. Years of birth are thus assigned counting back from the reigns of the princes, and in the case of Ahmoose son of Abana from the beginning of the reign of the prince, and counting 40 years in the cases of Metjen and Niankhsekhmet, but counting 25 years, presuming that long careers begin early in the summer, in the cases of Weni, Harkhuf, and Ahmoose son of Abana.

The Palermo stone, the Sumerian prince list, the Larsa prince list, the Isin prince list, the Babylonian prince list, the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Assyrian prince list, or what is the same, the predecessors of the philosophers who composed these lists, are dated from the last prince in each list. Only three of the dates require further comment. The Palermo stone survives in seven fragments. The configuration of the fragments has suggested continuation for a couple of reigns after Neferirkare. When the stone is dated under Neferirkare, the presumption is that the record should be dated, not lamentations about what may be lost. When the stone is dated under Neferirkare, the oldest annals left behind are dated, and the presumption that the oldest annals left behind should be dated is

supported by the fact, attested by all later and less important annals, that annals end in their own time. The Sumerian prince list survives in more than one dozen manuscripts, and in some of them it is amplified by the antediluvian prince list, in some by the Isin prince list. The dating of the most important prince list, or what is the same, of the grandfather of history, under Ib-bi-Sin is supported by the fact of the great abundance of the Sumerian record under the princes of Ur through Ib-bi-Sin and its scarcity after them, as well as the fact of the important divide which the fall of Ur under Ib-bi-Sin is. The Babylonian prince list also survives in several manuscripts, and in some of them it includes all five discontinuous series of princes of Babylon. The dating of the early Babylonian prince list under Samsudutana is supported by the same facts, the great abundance of the Babylonian record under the princes of Babylon through Samsudutana and its scarcity after them, and the important divide which the fall of Babylon under Samsudutana is.

The Tummal chronicle, the Esagil chronicle, the Babylonian chronicle reporting the Hittite raid on Babylon, and the synchronistic chronicle are dated from the last prince whose deeds each chronicle records. As in the case of the Palermo stone, the presumption is that the record left behind by the oldest chronicles should be dated. In this case as well the presumption is supported by the fact, attested by all later and less important chronicles, that chronicles end in their own time.

The Ur archive, the Mari archive, and the Amarna archive, or the predecessors of the philosophers who collected them, are dated from the last prince whose correspondence is collected in each archive.

Among the predecessors of the philosophers, as among the philosophers, the mathematicians and physicists are the most likely to have left behind nothing concerning their individualities, with the attendant chronological difficulties. The drawing of the Eninnu, however, the account of work on a building including calculations, the book of 87 problems, the Venus tablet of Ammisaduqa, and the circumnavigation of Africa under Necho are each associated explicitly with a prince. The dates follow. And fixing the date of the discovery of Venus depends on fixing the date of Ammisaduqa not less than fixing the date of Ammisaduqa depends on fixing the date of the discovery of Venus.

When the gods were men has a colophon:

when the gods were men; 1 245 lines; Nur-Aya, junior scribe; . . . year of Ammisaduqa (*id.*).

The date follows.

And the prophetic books collected in the Hebrew scriptures date themselves by explicit association with princes, and *Deuteronomy* can be dated by an implicit association. *Amos* begins:

the breeder of sheep Amos prophesied about Israel in the reigns of Uzziah, king of Judah, and Jeroboam, son of Jehoash, king of Israel (1).

Given the dates of Uzziah, prince *c.* 791-50, and Jeroboam II, prince *c.* 790-56, the breeder of sheep Amos prophesied between *c.* 791 and *c.* 750. And a year of birth can be assigned counting 40 years back from the middle of this time. The dates of *Hosea* and *Isaiah* are more difficult. *Hosea* begins:

the word of the lord came to Hosea in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah, and the reign of Jeroboam, son of Jehoash, king of Israel (1).

Isaiah begins:

Isaiah prophesied about Judah and Jerusalem in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah (1).

The difficulty is that the reigns of the princes of Judah from Uzziah to Hezekiah, prince 726-697, span more than three generations. Isaiah, however, did not prophesy in the reign of the prince of Israel Jeroboam II. *Isaiah* reports also:

in the year of the death of king Uzziah, I saw the lord, seated on a throne, high and exalted, the skirt of his robe filling the temple, six-winged seraphim standing in attendance (6).

It can be presumed that Isaiah began prophesying when he saw the lord, six-winged seraphim standing in attendance, in the year of the death of Uzziah, *c.* 750. The date of *Isaiah* follows, prophecy began *c.* 750. To Hosea, on the other hand, the word of the lord cannot have first come later than the end of the reign of Jeroboam II, *c.* 756. And if it came to him after it came to Amos, the date of *Hosea* follows,

prophecy between those of *Amos* and *Isaiah*. The sequence *Amos*, then *Hosea*, then *Isaiah* is consistent with the growing alarm from *Amos* to *Hosea* to *Isaiah*, with which the prophets prophesy the doom of Israel, corresponding precisely to the advances of the Assyrian princes. Years of birth can be assigned in the same way, counting 40 years back from the time assigned to the prophecies, the middle of that time in the case of *Hosea*, the beginning of the prophecy in the case of *Isaiah*. *Micah* begins:

the word of the lord came to Micah and he prophesied about Samaria and Jerusalem in the reigns of Jotham, Ahaz, and Hezekiah, kings of Judah (1).

Given the dates of Jotham, prince c. 750-38, and Hezekiah, the date follows. *Jeremiah* begins:

the word of the lord came to the priest Jeremiah in the 13th year of the reign of Josiah, king of Judah (1).

The date follows. *Ezekiel* begins:

it was in the 5th year of the exile of king Jehoiachin that the word of the lord came to the priest Ezekiel (1).

The date follows. And *Kings* reports:

in the 18th year of the reign of Josiah, during repairs in the house of the lord, the high priest Hilkiah found the book of the law; Hilkiah gave it to the scribe Shaphan, who read it; Shaphan then read it to the king; when the king heard what was in the book, he rent his clothes; the king called the men of Judah and of Jerusalem, all the priests and all the prophets, all the people, young and old; he read the entire book to them; and he made a covenant before the lord that they will obey the lord and will keep his law (II, 22-3).

Spinoza showed that the book of the law found during repairs in the house of the lord is *Deuteronomy*. And the date of the promulgation of the law of the book of the law can be assigned to the book of the law. All seven, *Amos*, *Hosea*, *Isaiah*, *Micah*, *Jeremiah*, *Deuteronomy*, and *Ezekiel*, contain much spurious material, *Isaiah*, for one, contains more spurious material than not spurious. The presumption is the same, in these seven cases as in the cases of the Palermo stone and the oldest chronicles, that the record of the prophets should be dated, not, in these cases, postprophetic prophets pretending to be the prophets.

Next, given the dates of the Sumerian prince list and the Isin prince list, this date can be fixed, 1965 antediluvian prince list between the Sumerian prince list and the Isin prince list.

Next, the dates of these predecessors of the philosophers are the most difficult,

3120 **3 calculations of area** the century around c. 3080,

2620 **division of grain among 164 571 men** – the century around c. 2580,

2620 **table of areas of squares with sides from 10×60 to $\frac{1}{12} \times 60$** – the century around c.

2580,

2330 **Shabaka stone** the century before c. 2240,

2246 **quadrilateral with sides 2 , $1\frac{1}{6}$, 2 , and $2\frac{5}{6}$** – the century before c. 2156,

2246 **width of a quadrilateral with length $67\frac{1}{2}$ and area 100** – the century before c. 2156,

2103 ***Gilgamesh and Aka*** the century before c. 2013,

2103 **Sumerian *Gilgamesh*** the century before c. 2013,

1884 **24 problems, beginning with the sum of the area and side of a square** – the century before c. 1794

1884 **8 problems, beginning with the sum of the area and difference of sides of a rectangle** – the century before c. 1794

1826 **Moscow papyrus** the century around c. 1786,

1826 Berlin papyrus the century around c. 1786,

1784 **286 problems** the century before c. 1694,

1784 44 problems, beginning with an excavation in the shape of a prism – the century before

1450 The method of history does not differ from the method of physics at all

c. 1694

1784 **15 Pythagorean triples** the century before c. 1694,

1784 **14 problems, beginning with a triangle divided into 5 areas** – the century before c. 1694,

1784 **1 problem, a triangle divided into 4 smaller triangles** – the century before c. 1694

1784 **calculation of the diagonal of the square** – the century before c. 1694,

1784 calculation of the area of the circle – the century before c. 1694,

1684 early Akkadian *Gilgamesh* the century before c. 1594,

1634 **When on high** the century around c. 1594,

1560 **48 treatments of injuries** the century after c. 1570,

1490 **map of Nippur** the century before c. 1400,

1296 **Sin-liqe-unninni** the century before c. 1206,

1281 **Turin papyrus** the century after c. 1291,

860 **Yahwistic document** the century before c. 791/50,

764 **Homer** the century before 676/3,

717 **When Anu and Enlil** the century before 627.

Faute de mieux, these predecessors of the philosophers are dated from their language and subject matter. More particularly, from the development of language and the advance in subject matters, and the development of language and the advance in subject matters in their relation to one another. The development of language includes the development of writing, and there is thus also paleographic evidence. Early on, there is also the evidence of the stratification of finds in excavations.

The giants who attest the very great advance of mathematics in the valley of the two rivers, the giants on whose shoulders all subsequent giants stand, have had to go by the names of tablets, and in some of these cases the names of those who purchased the tablets, too, and have been dated with reference to archeological and paleographic evidence. The 3 calculations of area are recorded on the tablets W 20044/20 and W 19409/76. From the levels of the stratification of finds in excavations at Uruk, Uruk III is the name of the last two centuries of the fourth millennium. And W 20044/20 and W 19409/76 are from Uruk III. The division of grain among 164 571 men is recorded on TSS 50, the table of areas of squares with sides from 10×60 to $\frac{1}{12} \times 60$ on VAT 12593. The century around c. 2600

is early dynastic IIIa. And TSS 50 and VAT 12593 are from early dynastic IIIa. The quadrilateral with sides 2, $1\frac{1}{6}$, 2, and $2\frac{5}{6}$ is recorded on IM 58045, the width of a quadrilateral with length $67\frac{1}{2}$ and area

100 on HS 815. Akkad is early and late. And IM 58045 and HS 815 are from late Akkad. The 24 problems, beginning with the sum of the area and side of a square, are recorded on BM 13901, the 8 problems, beginning with the sum of the area and difference of sides of a rectangle, on AO 8862, the 286 problems on YBC 4668+4713+4712, the 44 problems, beginning with an excavation in the shape of a prism, on YBC 5037, the 15 Pythagorean triples on Plimpton 322, the 14 problems, beginning with a triangle divided into 5 areas, on Strasbourg 364, the 1 problem, a triangle divided into 4 smaller triangles, on IM 55357, the calculation of the diagonal of the square on YBC 7289, the calculation of the area of the circle on YBC 7302. Babylon I is early Babylon I, middle Babylon I, and late Babylon I. And BM 13901 and AO 8862 are from early Babylon I, YBC 4668+4713+4712, YBC 5037, Plimpton 322, Strasbourg 364, IM 55357, YBC 7289, and YBC 7302 from middle Babylon I. The map of Nippur is on HS 197. Kassite is also early and late, and HS 197 is from late Kassite. Presuming that it is better to date the giants with reference to the princes, the giants who have left behind the division of grain among 164 571 men and the table of areas of squares with sides from 10×60 to $\frac{1}{12} \times 60$ can

be dated, given the date of Enmebaragesi, prince c. 2680, and counting one century after him, to the century around c. 2580. Counting five centuries back, the first giant, who has left behind the 3

calculations of area, can be dated to the century *c.* 3080. Given the dates of the princes of Akkad from Sargon, prince *c.* 2337-281, to Shudurul, prince *c.* 2171-56, the giants who have left behind the quadrilateral with sides $2, 1\frac{1}{6}, 2,$ and $2\frac{5}{6}$ and the width of a quadrilateral with length $67\frac{1}{2}$ and area 100

can be dated to the century before *c.* 2156. Given the dates of the princes of Babylon from Sumuabum, prince *c.* 1894-80, to Samsuditana, prince *c.* 1625-594, the three centuries of their reigns can be divided into the century before *c.* 1794, the century before *c.* 1694, and the century before *c.* 1594, and the giants who have left behind the 24 problems, beginning with the sum of the area and side of a square, and the 8 problems, beginning with the sum of the area and difference of sides of a rectangle, can be dated to the century before *c.* 1794, the giants who have left behind the 286 problems, the 44 problems, beginning with an excavation in the shape of a prism, the 15 Pythagorean triples, the 14 problems, beginning with a triangle divided into 5 areas, the 1 problem, a triangle divided into 4 smaller triangles, the calculation of the diagonal of the square, and the calculation of the area of the circle can be dated to the century before *c.* 1694. Given the date of Kadashman-Enlil, prince *c.* 1400, with whom the third series of princes of Babylon begins, the giant who has left behind the map of Nippur can be dated to the century before *c.* 1400. Counting in each case 40 years back from the middle of time assigned, years of birth follow.

The Shabaka stone is dated, given the date of Pepi II, prince *c.* 2240, to the century before *c.* 2240. *Gilgamesh and Aka* and the Sumerian *Gilgamesh* are dated, given the date of Ib-bi-Sin, prince *c.* 2037-13, to the century before *c.* 2013. The Moscow papyrus and the Berlin papyrus are dated, given the date of Sobeknefru, prince *c.* 1790-86, to the century around *c.* 1786. The early Akkadian *Gilgamesh* and *When on high* are dated, given the division of the three centuries of the reigns of the princes of Babylon, to the century before *c.* 1594 and the century around *c.* 1594, respectively. The 48 treatments of injuries are dated, given the date of Ahmose, prince *c.* 1570-45, to the century after *c.* 1570. Sin-liqe-uninni is dated, given the date of Tukulti-Ninurta, prince *c.* 1243-06, to the century before *c.* 1206. The Turin papyrus is dated, given the date of Ramesses II, prince *c.* 1291-24, to the century after *c.* 1291. *When Anu and Enlil* is dated, given the date of Ashurbanipal, prince 668-27, to the century before 627.

The Yahwistic document and Homer are dated from their *termini ad quem*. The Yahwistic document is dated, given the date of *Amos*, prophecy between *c.* 791 and *c.* 750, to the century before *c.* 791/50. Homer is dated, given the date of Terpander, won a citharodic contest in 676/3, to the century before 676/3.

And all these dates are also certain. They should each be certain within 50 years either way, and after the first mathematician, beginning with the mathematicians who have left behind the division of grain among 164 571 men and the table of areas of squares with sides from 10×60 to $\frac{1}{12} \times 60$, they should

be certain very probably within narrower limits. And the certainty of this last proposition can itself be readily tested. To note only some of the modern languages of only some of the philosophers recently noted once again, a few paragraphs of the English of Bacon, of the English of Hume, and of the English of Darwin can be compared with one another and then the English of any number of philosophers in between compared with them, or a few paragraphs of the German of Kepler, of the German of Kant, and of the German of Frege with one another and then the German of any number of philosophers in between with them, or a few paragraphs of the French of Descartes and of the French of Laplace with one another and then the French of any number of philosophers in between with them. The subject matters can be compared, too.

Given the dates of the Yahwistic document and Homer, as well as the date of the Priestly code, the century before 445/33, these dates can be fixed,

734	Hesiod	one generation after Homer,
694	Psalms	from the time of the Yahwistic document to that of the Priestly code.

In the last case those are the *termini post quem* and *ad quem* of the composition of psalms in the collection.

And in the century before Thales already chronological difficulties are fewer, relatively minor, and their resolution yields certainty within narrower limits.

The date of Epimenides is among the most difficult. Plato writes: Epimenides went to Athens to perform sacrifices 10 years before the Persians came (*Laws*, I, 642d). Counting 10 years from Marathon, in 500. Aristotle, Plutarch, and Laertius explain why Epimenides went to Athens to perform sacrifices, and disagree with Plato on when he did. After Cylon's failed attempt to set himself up tyrant in Athens, some of his supporters were killed while suppliants at an altar, the city was thus polluted, and Epimenides was called to purify it. Aristotle assigns the purification to the time of the incident (*Constitution*, I), c. 632. Plutarch assigns it to the archonship of Solon (*Solon*, 12), 594, and Laertius agrees with Plutarch, assigning it to 596/3 (I, 110). It can be concluded that, as the good Homer occasionally nodded (Horace, *Art*, 359), so the good Plato did. On the authority of Aristotle, Plutarch, and Laertius, the date is

653 Epimenides purified Athens between c. 632 and 594.

The date is consistent with the fact, with which Plato's report is not either, that Xenophanes notes Epimenides.

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Beginning with Thales.

These are the dates of the first philosophers, including the great kings in the enumeration, with the grounds on which the dates are assigned, on the right,

625	Thales	predicted an eclipse which occurred in 585,
611 - 541	Anaximander	611 - the decade after 546,
590	Anaximenes	between Anaximander and Xenophanes,
584 - 530	Cyrus	prince 559-30,
570 - 495	Pythagoras	c. 570 - the decade after c. 500,
570 - 473	Xenophanes	c. 570 - the decade after 478,
566		observation of Jupiter from 526 to 490,
562	Hecataeus	under Darius, prince 522-486,
555 - 522	Cambyses	prince 530-22, son of Cyrus,
550 - 486	Darius	c. 550 - 486,
540	Heracitus	one generation after Pythagoras,
532	Alcmaeon	between Pythagoras and Empedocles,
520 - 465	Xerxes	c. 520 - 465,
519	Hippasus	between Pythagoras and Philolaus,
515 - 445	Parmenides	c. 515 - the decade after c. 450,
500 - 428	Anaxagoras	c. 500 - c. 428,
495 - 435	Empedocles	c. 495 - c. 435.

And to begin with, philosophy cannot have begun more auspiciously, as in all other ways, so chronologically, too. Herodotus reports: in the middle of the battle of Alyattes and Cyaxares, in the sixth year of their war, a solar eclipse occurred, day became night before their eyes, the kings stopped their battle and made peace; and this was the eclipse that Thales had predicted to the Ionians, he had said that it will occur not later than that year (I, 74). Pliny assigns a date: Thales first predicted an eclipse in the 4th year of the 48th olympiad (II, 53). Pliny's authority is Apollodorus of Athens. The 4th year of the 48th olympiad is 585. And a solar eclipse began to be visible in central Asia Minor, where Alyattes and Cyaxares fought their battle, on 28 May 585 right after 15:30.

Chronologically, philosophy begins with the convergence of the Mede prince Cyaxares, the Lydian prince Alyattes, the first philosopher, and the father of history on the same fact. The date is reported by

Pliny, on the authority of Apollodorus of Athens. And the date is fixed by calculation from Kepler's laws.

To arrange the 7 uniformly,

650 - 585	Cyaxares	prince c. 625-585,
640 - 560	Alyattes	prince c. 615-560,
625	Thales	predicted an eclipse which occurred in 585,
484 - 425	Herodotus	484 - the decade after 430,
186 - 114 ^{BC}	Apollodorus of Athens	student of Aristarchus of Samothrace - the decade after 119,

24^{AD} - 79 **Pliny**,

1571 - 1630 **Kepler**.

And the chronological felicity of the evidence about the first philosopher is representative of the evidence about the large majority of the philosophers.

Thus, as Thales so Pythagoras. Porphyry reports: Pythagoras adapted a cave for the study of philosophy, and he lived there day and night, teaching a few of his followers; he was then 40, Aristoxenus says; but seeing that the tyranny of Polycrates was becoming so violent that a free man was in danger of falling victim to him, he left Samos and went to Italy (*Pythagoras*, 9). Polycrates was tyrant c. 538-22. Counting 40 years from the middle of his reign, the year of birth of Pythagoras is c. 570.

To arrange the 4 uniformly,

578 - 522	Polycrates	tyrant c. 538-22,
570 - 495	Pythagoras	c. 570 - the decade after c. 500,
371 ^{BC}	Aristoxenus	contemporary with Theophrastus,
234 ^{AD} - 308	Porphyry	234 - 305/10.

The year of the apex of Thales is certain within 1 hour either way. The year of birth of Pythagoras is certain within 5 years either way, and very probably within narrower limits.

Thales is noted by Xenophanes, noted by Heraclitus, Herodotus writes on him,

460 **Democritus** young in the old age of Anaxagoras,
notes him,

427 - 347 **Plato**

writes on him,

384 - 322 **Aristotle**

investigates him,

371 - 287 **Theophrastus**

investigates him, Aristoxenus investigates him,

371 **Dicaearchus** contemporary with Theophrastus,
investigates him,

371^{BC} **Eudemus** contemporary with Theophrastus,
investigates him, and

219^{AD} **Laertius** two generations after Empiricus,
quotes 33 other writers. Pythagoras is noted by Xenophanes, by Heraclitus, Empedocles sings of him,

490 - 426 Ion of Chios c. 490 - the decade before 421,

sings of him, Herodotus writes on him,

436 - 338 Isocrates

notes him, Plato notes him,

395 - 317 **Ponticus** contemporary with Xenocrates - the decade after 322,

writes on Pythagoras and the Pythagoreans, Aristotle investigates the Pythagoreans, Theophrastus investigates Pythagoras and the Pythagoreans, so does Aristoxenus, so does Dicaearchus, so does Eudemus, and Laertius quotes 21 other writers. Thus the evidence about Thales and Pythagoras. As to Thales and Pythagoras themselves, they are associated with the Mede princes, with the Lydian princes,

with the tyrant of Samos, with the Egyptian princes – Porphyry reports: when Pythagoras went to Egypt, Polycrates wrote to his friend Amasis, the prince of Egypt, to present Pythagoras to him (7) – next to all contemporary wise men and philosophers, next to many other men, wise or otherwise. All the dates of all these princes, philosophers, wise men, and otherwise, in relation to one another, fix one another.

To include the prince of Egypt in the uniform arrangement,

617 - 526 Amasis general in 592 - 526.

As Thales and Pythagoras so also Xenophanes. Xenophanes sings:

sixty-seven years I have tossed my mind
up and down the land of Greece;
and there are twenty-five to add to these,
counting from my birth (fr. 8).

Clement of Alexandria reports: Timaeus says that Xenophanes lived to the time of Hiero, the tyrant of Syracuse (*Miscellanies*, I, 64). Hiero was tyrant 478-66. Counting 92 years from the beginning of his reign, the year of birth of Xenophanes is *c.* 570.

Without in this case quoting his source, Laertius assigns the apex of Xenophanes to the 60th olympiad (IX, 20), 540/37.

To arrange the 5,

570 - 473	Xenophanes	<i>c.</i> 570 - the decade after 478,
535 - 466	Hiero	tyrant 478-66, brother of Gelon,
350 - 259 ^{BC}	Timaeus	<i>c.</i> 350 - the decade after 264,
150 ^{AD} - 214	Clement of Alexandria	<i>c.</i> 150 - 211/6,
219	Laertius	two generations after Empiricus.

And the year of birth of Xenophanes is also certain within 5 years either way, and also very probably within narrower limits.

So also the dates of Parmenides, Anaxagoras, and Empedocles. And so also the dates of the large majority of later philosophers, and of steadily more of them over time, and within steadily narrower limits of certainty.

In general, the record is very abundant and very explicit. It is more abundant and more explicit, however, about the doctrines of the philosophers than about their dates. Hence, the succession of the philosophers is fixed in all cases unambiguously, and in the large majority of cases within narrow limits. And hence, when the evidence about the date of any one philosopher cannot be traced back to the early authorities, as in the case of Thales back to Apollodorus of Athens, in the case of Xenophanes earlier still to Timaeus, in the case of Pythagoras earlier still to Aristoxenus, the succession of the philosophers is the firmest ground on which to fix the date. The succession of the philosophers is the firmest ground also when there is no evidence about the date.

Thus, first Thales, then Anaximander, then Anaximenes, then Pythagoras and Xenophanes. Aristotle already reviews them invariably in this order. Also,

65 - 29^{AD} **Strabo** 68/3 - the decade after 24^{AD},

writes: Anaximander was a student of Thales, Anaximenes was a student of Anaximander (XIV, 1.7).

And on the authority of Theophrastus,

489 **Simplicius** left Athens in 529,

writes: Anaximenes was a friend of Anaximander (comm. *Physics* 24). The evidence about Anaximander and Anaximenes is not so abundant and explicit as the evidence about Thales, Pythagoras, Xenophanes, Parmenides, Anaxagoras, and Empedocles. Still, about the second philosopher Laertius reports: Apollodorus reports in the *Chronicle* that Anaximander was 64 years old in the 2nd year of the 58th olympiad, and died not long after (II, 2). This fixes the date of the second philosopher,

611 - 541 **Anaximander** 611 - the decade after 546.

To the third philosopher then the date can be assigned,

590 **Anaximenes** between Anaximander and Xenophanes.

The date is consistent with the report of Laertius: Apollodorus reports that Anaximenes lived in the time of the fall of Sardis, and died in the 63rd olympiad (II, 3). Sardis fell in 546, the 63rd olympiad is 528/5. And the date of Anaximenes should be certain within 10 years either way, and very probably within narrower limits.

The evidence about Heraclitus is very abundant, but it is not, being evidence about what needs a diver to get to the bottom of it, so explicit. The succession Pythagoras and Xenophanes, then Heraclitus, then Parmenides is certain, however. Given how vigorously Heraclitus abuses Pythagoras, the date can be assigned,

540 **Heraclitus** one generation after Pythagoras.

The date is consistent with Laertius who assigns the apex of Heraclitus to the 69th olympiad (IX, 1), 504/1, without quoting his source. And this date should also be certain within 10 years either way.

The evidence about Hecataeus is not very abundant or explicit. Still, Herodotus already notes him explicitly four times, twice explicitly in the reign of Darius (V, 36, 125). The date can be assigned,

562 **Hecataeus** under Darius, prince 522-486.

The date is consistent with Strabo's report: Cadmus, Pherecydes, and Hecataeus first began imitating poetry by writing prose (I, 2.6). Even if the evidence about Pherecydes is yet less abundant or explicit, conforming to the fact that he is not very important, and his date is yet more difficult to fix, and the evidence about Cadmus of Miletus is meager, conforming to the fact that he is not important, and his date is yet more difficult to fix,

599 Pherecydes under Cyrus, prince 559-30,

523 Cadmus of Miletus between Hecataeus and Herodotus.

The date of Hecataeus should be certain within 20 years either way.

The evidence about Alcmaeon is also not very abundant or explicit. Theoretical medicine begins with him, however, and the succession Pythagoras, then Alcmaeon, then Empedocles is certain. The date can be assigned,

532 **Alcmaeon** between Pythagoras and Empedocles.

The date is consistent with the facts of association of Alcmaeon with Croton, attested by all sources, and of the report of Herodotus, writing about the reign of Darius: at this time the Crotoniates became famous as the best doctors (III, 131). It is consistent also with the facts of the establishment of the first Pythagorean brotherhood in Croton by the master himself, and of association of Alcmaeon with the Pythagoreans, which can be traced back to Aristotle: Alcmaeon borrowed his doctrines from the Pythagoreans, or they borrowed theirs from him (*Metaphysics*, I, 5). Some of the manuscripts of the *Metaphysics* also have the note: Alcmaeon lived in the old age of Pythagoras (6). And the date of Alcmaeon should also be certain within 20 years either way.

The evidence about Hippasus, conforming to the fact that he is not very important, is not abundant or explicit. His association with the Pythagorean brotherhood is certain, however, and the succession Pythagoras, then Hippasus, then Philolaus is certain. The date can be assigned,

519 Hippasus between Pythagoras and Philolaus.

The date is consistent with

240 - 325 Iamblichus *c.* 240 - *c.* 325,

who reports: the Pythagoreans were of two kinds, listeners and students, and the listeners did not recognize the students as Pythagoreans because, the listeners said, the students had received their doctrines not from Pythagoras but from Hippasus (*Pythagoras*, 18), and: Hippasus first revealed the construction of the dodecahedron to the uninitiated, and he was drowned at sea for that (*id.*). The date of Hippasus should be certain within 30 years either way.

And the date of Hippasus is as difficult as the date of any philosopher.

The observation of Jupiter from 526 to 490, on the other hand, dates itself. And the date of this philosopher is certain without qualification. As are the dates of the substantial number of later philosophers who have left behind nothing concerning their individualities, but have left behind

observations.

And to arrange all particulars uniformly, years of birth have to be assigned to the princes,

584 - 530	Cyrus	prince 559-30,
555 - 522	Cambyases	prince 530-22, son of Cyrus,
550 - 486	Darius	c. 550 - 486,
520 - 465	Xerxes	c. 520 - 465.

The years of birth of Cyrus and Cambyases are assigned by counting 25 years back from the beginning of each reign. The reports of Herodotus indicate that the reign of each prince began in his early summer. Herodotus reports also: Darius was a boy of about 20 when Cyrus fell fighting the Massagetae (II, 209). And: Xerxes was born when Darius was already king (VII, 3). Cyrus fell in 530. Darius was thus born c. 550. He became king in 522. Xerxes was thus born c. 520.

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Finally, below are some of the more important more difficult dates after Thales. All these particulars have been presented above as well.

597	Joshua, Judges, Samuel, Kings	– the two generations after 587,
595	<i>Proverbs</i>	between <i>Deuteronomy</i> and the Priestly code,
560	<i>Haggai</i>	prophecy began in 520,
529	Priestly code	the century before 445/33,
528	<i>Job</i>	the century after 538,
429	Chronicles, Ezra, Nehemiah	– the century after 445/33,
309	<i>Ecclesiastes</i>	between <i>Chronicles, Ezra, Nehemiah</i> and <i>Daniel</i> ,
189	Daniel	the generation after 164.

The difficulty with the writings collected in the Hebrew scriptures only begins with the fact that they are not informed by writings other than themselves, and excepting a handful of the latest events recorded in *Kings*, what they report is not attested independently. This is characteristic of all early writings, that they are informed by little, and nothing other than their immediate predecessors, and immediate in both time and space. Hence the difficulty of dating early writings. What is not characteristic of all early writings, and for a long time, until the writings collected in the Christian scriptures, characteristic only of these writings, is that they pretend to be what they are not. Wellhausen writes: the Priestly code tries hard to imitate the costume of the Mosaic period and to disguise its own; and it has been so successful in concealing the date of its composition that its many inconsistencies are taken to prove that this date lies beyond all known history and that its enormous antiquity can hardly be brought in connection with history (*Prolegomena*, intr.2). Most of the psalms in *Psalms* are: a psalm of David (*passim*). *Proverbs* begins: the proverbs of Solomon, son of David, king of Israel (1). *Ecclesiastes* begins: the words of the son of David, king in Jerusalem (1). *Daniel* reports: in the 3rd year of king Cyrus of Persia an oracle was revealed to Daniel (10), and the oracle revealed to Daniel is of the future such as it was, by the time of writing, very much the past.

Judah fell in 587. *Joshua, Judges, Samuel, and Kings* are from one hand, and on the ground of language and subject matter, their date is the two generations after the fall of Judah.

The date of *Proverbs*, between *Deuteronomy* and the Priestly code, is from the *termini post quem* and *ad quem* of the collection.

Haggai begins: in the 2nd year of king Darius, on the 1st day of the 6th month, the word of the lord came to the prophet Haggai (1). The 2nd year of king Darius, never mind the 1st day of the 6th month, is 520.

The year of the beginning of the exile is 587. The year of its end is 538. *Ezra* begins: in the 1st year of king Cyrus of Persia the word of the lord spoken by Jeremiah was fulfilled, and the lord roused the spirit of king Cyrus of Persia to issue a proclamation throughout his domain; thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building

him a house in Jerusalem, which is in Judah; so anyone of you his people, may god be with you, go to Jerusalem, which is in Judah, and build the house of the lord god of Israel, the god who is in Jerusalem (1).

On the ground of language and subject matter *Job* is dated to the century after the end of the exile.

Judaism is the first church, and the first church was founded in the great assembly under Ezra. The great assembly is described with all due solemnity in *Nehemiah*. Solemnity requires witnessing the day: on the 24th day of the 7th month the Israelites assembled, fasting, in sackcloth, with earth on their heads (9). It does not require witnessing the year. Still, Nehemiah was a cupbearer of Artaxerxes who came to Judea as governor, *Nehemiah* reports, and more particularly: I was governor from the 20th to the 32nd year of king Artaxerxes (5). Hence, presuming that Nehemiah was a cupbearer of Artaxerxes, prince 465-24, not of Artaxerxes II, prince 404-358, the date of the great assembly is, never mind the 24th day of the 7th month, 445/33.

On the ground of language and subject matter the date of the Priestly code is the century before the great assembly.

On the same ground *Chronicles*, *Ezra*, and *Nehemiah* are from one hand, and their date is the century after the great assembly.

On the same ground the date of *Ecclesiastes* is between *Chronicles*, *Ezra*, *Nehemiah* and *Daniel*.

And on the same ground *Daniel* can be dated within narrower limits. In the 3rd year of king Cyrus of Persia an oracle was revealed to Daniel. More particularly: I heard a voice, Gabriel, make this man understand; and he came to me and said, man, understand that this oracle is about the end (8). More particularly still, the angel tells this man: I will tell you the truth (11). When Alexander's successors divided his domain, Ptolemy won Egypt, Seleucus won Asia, and for the following one and a half centuries the land which god had promised to his people was a borderland over which the successors of Ptolemy and Seleucus fought. And with all due respect to the arcana of the heavenly messenger, the truth which he makes this man understand (10-2) are the tribulations of the promised land under the successors of Ptolemy and Seleucus, identifiable unambiguously through Antiochus IV, prince 175-64. Hence the date of *Daniel*, the generation after 164. The date is corroborated by the fact that it is only with *Daniel* that immortality enters the Hebrew scriptures. About the end the angel makes this man understand: at that time, many of those who sleep in the dust of the earth will awake, some to eternal life, some to eternal abhorrence (12). The *Second book of the Maccabees*, for its part, makes you understand: the king of the world will raise us up again to eternal life (7), and: the creator of the world, in his mercy, will give you back your life and breath again (*id.*). Excluded from the Hebrew scriptures, the *Second book of the Maccabees* found its way into the Christian scriptures. It is prefaced by a letter: from the Jews in Jerusalem to their Jewish brethren in Egypt (1), and the letter is dated: the year 188 (*id.*). Time was reckoned in Asia by the era Seleucus, the era Seleucus begins 312 years before the era Christ, and the year 188 of the era Seleucus is the year 124 before the era Christ.

491	Twelve tables	promulgated in 451-49,
443 - 365	Camillus	tr. mil. 403 - 365,
406	Sextius Lateranus	cos. 366,
404	Licinius Stolo	cos. 364,
371	Valerius Corvus	cos. 348 at 23,
273 - 203	Fabius Maximus	cos. 233 - 203,
262 - 208	Marcellus	cos. 222 - 208,
256	Fabius Pictor	embassy in 216.

Early Roman dates stand on Livy. Livy writes annals, introducing each year with the consuls of that year. Attested abundantly, corroborating Livy everywhere, consular lists are certain back to the beginning of the republic in 509. All years above other than those of the consulships are also from Livy – of the promulgation of the Twelve tables (III, 33-8), of the death of Camillus (VII, 1), of the age of Valerius Corvus at his first consulship (26), of the death of Fabius Maximus (XXX, 26), of the fall of

Marcellus at Locri (XXVII, 27), of the embassy of the first Roman historian (XXII, 57). And while the first office of Camillus, Plutarch records as censorship (*Camillus*, 2), Livy records it as military tribuneship with consular authority (V, 1).

480 **Leucippus** between Anaxagoras and Democritus,

460 **Democritus** 40 years younger than Anaxagoras.

Laertius reports: Democritus himself writes in the *Little catalogue* that he was a young man in the old age of Anaxagoras, being 40 years his junior (IX, 41). Hence also the date of Leucippus.

359 Hanno the century before 269.

Hanno's *Description of the sea* is quoted in the Aristotelean *On marvelous things heard* (37). On the ground of language and subject matter *On marvelous things heard* is not by Aristotle, but it was composed, like most of the spurious treatises in the Aristotelean corpus, in the Lyceum under Theophrastus and Strato. Strato was scholarch 287-69. And hence the date of Hanno.

346 **Euclid** under Ptolemy, prince 306-282.

Proclus reports: Euclid lived in the time of the first Ptolemy, for Archimedes, who lived after that time, mentions Euclid; and it is reported also that king Ptolemy once asked Euclid if there was a shorter road in geometry than through the *Elements*, and Euclid replied that there was no royal road in geometry (comm. *Elements*, 68). Stobaeus has, instead, Alexander ask Menaechmus to teach him geometry briefly, and Menaechmus reply: king, in the country there may be different roads for the multitude and for the kings, but in geometry the road is the same for all (*Anthology*, II, 228). About Euclid Stobaeus has this: having just begun to study geometry, a student asked Euclid, what will I profit from learning these things? Euclid turned to his slave and told him, give him three obols, to have him profit (*id.*).

Chronology is like that, too, what will I profit from learning these things? Indeed, all theory is like that.

233 **Apollonius** born 246/21.

Eutocius reports: Apollonius was born in the reign of Ptolemy Euergetes (comm. *Conics*, II, 168). Ptolemy III was prince 246-21.

6^{AD} - 62 **st Paul** on the road to Damascus *c.* 36 - *c.* 62

25 *Gospel of Mark* the decade before 70,

43 *Gospel of Matthew* between 75 and 90,

50 *Gospel of Luke, Acts of the apostles* – between 80 and 100,

55 *Gospel of John, Apocalypse* – between 90 and 100,

70 catholic letters between 70 and 150.

The new testament begins with the 4 gospels, the *Acts of the apostles* follows, then there are the 14 letters of st Paul, then the 7 catholic letters, and it ends with the *Apocalypse*. All in all, 27 writings. All in all, 20 of the 27 are not what they pretend to be. One consequence, very minor compared to some of the others, is the great difficulty of dating these writings.

The *Acts of the apostles* reports: when Gallio was proconsul of Achaia the Jews set upon Paul and brought him to court; this man, they said, is making men worship god in ways that are against the law; Gallio said to them, had it been a crime, I would have given you Jews a patient hearing, but a bickering about words and your Jewish law, you may see to it yourselves; and he threw them out of the court (18). Gallio is the brother of Seneca. An inscription in the temple of Apollo at Delphi was found in 1905 attesting Gallio proconsul in the 12th year of Claudius. Claudius was prince 41-54. Hence the only year, 53, which can be assigned without qualification to anything that any of the writings collected in the Christian scriptures has to report.

The *Acts of the apostles* again: Saul was still breathing murderous threats against the disciples of the lord; so he asked the high priest to send him to Damascus to arrest anyone, man or woman, who followed the new way and bring them to Jerusalem; and he was on the road to Damascus, when a light flashed from heaven; he fell to the ground, and heard a voice, Saul, Saul, why do you persecute me? who are you, lord? he asked; and the voice answered, I am Jesus, whom you persecute; but get up, go

to the city, and you will be told what to do (9). In his *Letter to the Galatians* st Paul reports: when god, who had set me apart from birth and called me through his grace, when god chose to reveal his son to me, and through me, so that I proclaim him to the gentiles, when this happened, I went to Arabia without going back to Jerusalem to see those who were apostles before me, and then I went back to Damascus; to Jerusalem I went back 3 years later (1); and I went to Jerusalem again 14 years after that (2). Presuming that the affair in Achaia involving Gallio and the *Letter to the Galatians* are from about the same time, 17 years can be counted back from 53, and hence st Paul, still Saul at the time, was on the road to Damascus c. 36.

The *Acts of the apostles* again: Felix was succeeded by Festus (24); 3 days after his appointment Festus came to Jerusalem, and the chief priests and leaders of the Jews brought the case of Paul before him (25). And Josephus writes in the *Jewish antiquities* and *The Jewish war* about the procurators of Judea Felix and Festus. About Felix at some length (*Antiquities*, XX, 7-8; *War*, II, 12-3), about Festus briefly (*Antiquities*, XX, 8-9; *War*, 14). Felix was appointed by Claudius and remained procurator for several years under Nero, prince 54-68. Festus was appointed by Nero, died shortly after that, and his two successors were procurators still under Nero. It can be concluded that Festus was procurator c. 60.

The *Acts of the apostles* ends: Paul stayed in Rome 2 full years at his own expense, proclaiming unhindered the kingdom of god and teaching about the lord Jesus Christ (28). This witness to st Paul thus ends c. 62.

And to arrange the particular st Paul uniformly, it can be presumed that the light flashed from heaven on the road to Damascus when Saul was in his midsummer.

The *Gospel of Luke* and the *Acts of the apostles* are from one hand. The *Gospel of John* and the *Apocalypse* are from one hand as well. And the 4 gospels are dated on the ground of language and subject matter within limits as narrow as they are, because early Christian writing is not very explicit, but is very abundant.

And the 7 catholic letters are a unity. Eusebius writes in *The history of the church*: admittedly, the authenticity of the *Letter of James* is doubted, for few early writers mention it; they do not mention the *Letter of Jude* either, which is also one of the 7 called catholic; nevertheless, these 2 are regularly used by many churches just like the others (II, 23).

133	Pausanias of Magnesia	wrote in 173,
164	Alexander of Aphrodisias	wrote between 198 and 209,
181	Africanus	wrote in 221,
380	Capella	wrote between 410 and 429,
394	Vincent of Lérins	wrote in 434
841	ibn Khurdadhbih	wrote in 870/92,
1103	Tzetzes	wrote in 1143,
1229	Peter Peregrinus	wrote in 1269,
1295	Heytesbury	wrote in 1335.

These dates are not so difficult. Just three instances.

Alexander of Aphrodisias dedicates *On fate* to Severus and Caracalla. Severus was emperor 193-211, he elevated Caracalla to the rank of Augustus in 198, and elevated Geta to the rank of Augustus in 209. This dates the dedication, and hence the writer.

Vincent of Lérins writes in the *Reminders*: lest it be thought that we are setting up principles by our own presumption rather than on the authority of the holy church, we appeal to the holy council which took place three years ago at Ephesus when the illustrious Bassus and Antiochus were consuls (29). The illustrious Bassus and Antiochus were consuls in 431. The holy council of Ephesus condemned the heresies of Pelagius and Nestorius.

Peter Peregrinus signs the *Letter on the magnet*: completed in the camp at the siege of Lucera, in the year of our lord 1269, on the 8th day of August (*id.*).

219	Laertius	two generations after Empiricus.

In *On my books* Galen reports: I was 34 years old when I came to Rome for the second time (15); and I remained in Rome for 3 years (*id.*). And in the commentary on the *Prognosis* he reports: I left Rome when Verus returned from the Parthian war (8). Verus returned from the Parthian war in 166. Galen was thus born in 129.

In *On my books* Galen reports also that he wrote a book of criticism of Menodotus (38). Also, Josephus reports that Philo Judaeus, as an old man, led an embassy of the Jews to Caligula in his 2nd year (*Antiquities*, XVIII, 6-8). Caligula was prince 37-41. Philo Judaeus, in *On the drunkenness of Noah*, quotes the ten sceptic modes (169-202). Aenesidemus formulated the ten sceptic modes. Laertius has the succession of the sceptic philosophers: Aenesidemus taught Zeuxippus, who taught Zeuxis, who taught Antiochus of Laodicea, who taught Menodotus (IX, 116). And in order to accommodate all these facts, it has to be presumed that Aenesidemus predates Philo Judaeus by one generation, and Menodotus predates Galen by one generation.

The successors of Menodotus in the succession of the sceptic philosophers are the latest philosophers in *The lives and doctrines of the philosophers*. Laertius reports: Menodotus taught Herodotus of Tarsus, who taught Empiricus, who wrote 10 books on scepticism and other fine works, and who taught Saturninus (*id.*).

Counting two generations after Menodotus, the date can be assigned to Empiricus, one generation after Galen.

and counting two generations after Empiricus, the date can be assigned to Laertius, two generations after Empiricus.

The date is consistent with the presumption that the enumeration of the philosophers in *The lives and doctrines of the philosophers* is so complete as to omit nothing.

224 **Diophantus** the generation before 276-82.

In the *Introduction to the Egyptian way of calculation* Psellus reports: Diophantus and Anatolius both wrote on the Egyptian way of calculation, Diophantus indeed more accurately, but the learned Anatolius in a way different from Diophantus and more briefly, and he dedicated his book to Diophantus (*id.*). In *The history of the church* Eusebius dates the successions of the bishops by arranging them under the reigns of the emperors. And in the succession of the bishops of Laodicea under Probus is: Anatolius, who was born in Alexandria, and who was one of the most eminent men of my time in learning, in secular studies, and in philosophy, excelling in arithmetic, geometry, and astronomy, in physics and metaphysics, and in my own art, too (VII, 32). Probus was prince 276-82. This is the date of the bishop of Laodicea, and given that the bishop dedicated his book on the Egyptian way of calculation to Diophantus, the date can be assigned to Diophantus, the generation before 276-82.

380 - 461 **Leo** pope 440-61,

432 - 496 **Gelasius** pope 492-6.

As Christian writing began, so it continued. The Leonine sacramentary is not by Leo. The Gelasian sacramentary is not by Gelasius. The Gelasian decretals are not by Gelasius. And as these sacramentaries and decretals, so also all too many other witnesses. Hence, in order to arrange the particulars uniformly, extrapolating from the average age at which later and more independently attested particulars have risen to the head of the apostolic see, years of birth can be assigned by counting back from the winter equinox of each of the two saints.

803	banu Musa	Muhammad died in 873,

860 - 930	al-Razi	died in 925/35,

887 - 957	al-Masudi	died in 957.

When only the years of death are attested, years of birth can be assigned by counting back from midwinter. For, with the psalmist: three score and ten we live, four score only if strength holds (90). Counting the 3 brothers Musa 1 philosopher, a year of birth is assigned to the philosopher, counting back from the year of death of the eldest brother.

1468 - 1526 **de Toren** drew maps in 1508 - 1526,

1489 Pigafetta sailed with Magellan in 1519.

Finally, as recently as the time when the record was losing conclusively its ability to lose anything, the philosopher who drew the first map of the earth in its true proportions, and the knight who reports in *The voyage around the earth*: having learned many things from books and listened to those who spoke of the great marvels of the ocean sea, I decided to go and see those things for myself, and thus also win my renown among the later posterity (1), have yet succeeded in not leaving behind the years of their birth. The years of birth are assigned counting back from the autumn equinox of the philosopher, and from the midsummer of the knight.

And so all the particulars.

Let no one be alarmed at the multitude of the particulars. The particulars are like an army, little is to be hoped for unless all particulars are marshaled in their series and order.

The development of the state, and of history

The nine and a half centuries from Narmer to Mentuhotep and the six and a half from Enmebaragesi to Ibbi-Sin	1467
The thirteen centuries from Mentuhotep and Ibbi-Sin to Tiglath- pileser III.	1528
The seven and a half centuries from Tiglath-pileser III to Augustus	1672
The fourteen and a half centuries from Augustus to prince Henry	2271
The three and a half-odd centuries from prince Henry to Napoleon	
The two-odd centuries since Napoleon	

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And the task now is to collect the development of the state, and of history, and in their dependence on one another, particular after particular after particular, all important among them, and all steps of advance in the acquisition of knowledge among them. And on this ground address the problem of knowledge.

Much has been said about the state above.

Two parts of the development of the state have been collected in their entirety.

The development of the state in the six and a half centuries from Enmebaragesi, prince c. 2680, to Ibbi-Sin, prince c. 2037-13, in the valley of the two rivers, has been collected.

And the development of the state in the four-odd centuries from Tiglath-pileser III, prince 745-27, to Alexander, prince 336-23, west of the Indus, has been collected.

The chronology of all important states in the first two and a half millennia of the development

of the state, toward the end of that time again with the qualification, west of the Indus, has just been fixed explicitly.

The developments leading to the beginning of the five problems, the earth, the soul, the best state, the triangle, and the principles of all things, all five, have been traced back to the labors of the princes of building the state.

In all cases the advance in the development of the state has been shown a part of the acquisition of knowledge and a principal cause of the acquisition of knowledge.

And many of the important philosophers who have concerned themselves with the state, Protagoras, Plato, Aristotle, Zeno of Citium, Augustine, Aquinas, Hobbes, Spinoza, Locke, Montesquieu, Hegel, Marx, have been presented in some detail.

Much has been said about history as well.

Most of all, that the method of history does not differ from the method of physics at all, but agrees with it entirely, has been shown.

And, hence, the collection of the development

of the state, and of history, is on these presumptions.

The development of the state is the state. And the other way around, the state is the development of the state. There is no state apart from the development of the state. And the importance of this fact is as great as that of the fact that the philosophers began concerning themselves with the state very early, with Protagoras, four generations after the beginning of philosophy, two generations later, with Plato, the state became a central concern of the philosophers, and from the first, and ever since, the philosophers have concerned themselves with a state apart from the development of the state, conceived in speech, in heaven, in the future, in the idea. As Hegel writes: we must not look at particular states, we must look at the idea of the state. Accordingly, Plato concludes: you will not find a state as great as ours among the states of either the Greeks or the barbarians. And no, you will not.

The state is the development of the state. And the state is nothing else.

The development of the state begins with the beginning of the state. And the other way around, with the beginning of the state the development of the state begins. And the importance of this fact is the same. Protagoras, Plato, Aristotle, Augustine, Hobbes, Locke, Rousseau, Marx, all concern themselves with the beginning of that state, conceived in speech, in heaven, in the future, in the idea. But there is the beginning of the state. The theory of evolution has been formulated. Egyptian and Mesopotamian antiquity have been rescued from oblivion and ignorance. Paleontology and archeology have brought to light the facts which have to relate the two, evolution and Egyptian and Mesopotamian antiquity. The problem of the beginning of the state can be formulated, and solved.

The state is the beginning and development of the state. And the state is nothing else.

And the particulars are in those other philosophers, the historians. The particulars, which constitute the beginning and development of the particular states, in particular, which constitute the beginning and development of the state, in general. The particulars, in which, if it is to be observation, the investigation of the state should

ground itself.

The historians are the beginning and development of history, and the beginning and development of history are the historians.

The beginning and development of history is from the development of the state. And, to its great detriment, the development of the state has not been informed by the development of history too much, not substantially or essentially. The other way around, however, the development of the state has been the ground of the development of history beginning to end substantially and essentially.

The two, the state and history, have to be collected together.

The development of the state has been the whole of which the fundamental parts have been the development of the law, the development of religion, and the development of custom. These have to be collected as well.

The advance in the development of the state has been a part and a principal cause of the acquisition of knowledge first of all by advancing the description of the surface of the earth. The development of the state has been the ground of the development of geography. The development of geography has been a fundamental part of the development of history. The development of geography is the fundamental link between the development of the state and the development of history. The development of geography has to be collected as well.

And from all this the division of the task into parts follows.

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The state begins with Narmer, prince *c.* 3000, in the valley of the Nile.

Three-odd centuries later, with Enmebaragesi, prince *c.* 2680, the state begins in the valley of the two rivers.

And the development of the state in the valley of the two rivers and the development of the state in the valley of the Nile remain for a long time independent of one another lines of development of the state.

The princes of the valley of the Nile first venture into the other valley. Senwosret III, prince *c.* 1878-45, first campaigns in Asia beyond

Sinai.

In the eleven and a half centuries from Narmer to Senwosret III, the eight-odd centuries from Enmebaragesi to Senwosret III, the development of the state in the valley of the Nile and the development of the state in the valley of the two rivers are altogether independent of one another.

Thutmose, prince c. 1521-09, conquers the Asian Mediterranean littoral north to the Euphrates. His successors in the next three centuries maintain their control over the littoral. Then their state declines catastrophically. And the princes of the valley of the two rivers first conquer the other valley. Under Tiglath-pileser III and his successors the state expands greatly, and Esarhaddon, prince 680-68, conquers the valley of the Nile.

In the twelve centuries from Senwosret III to Esarhaddon the development of the state in the valley of the two rivers and the development of the state in the valley of the Nile converge, gradually, haltingly, still largely independent of one another. They are still two independent of one another lines of development of the state.

Then they become one joint development.

The line of development of the state in the valley of the two rivers has incorporated into itself the line of development of the state in the valley of the Nile.

And since Esarhaddon this now one joint line of development of the state from Narmer and Enmebaragesi through Esarhaddon has remained one line of development of the state, for twenty-seven centuries now.

The great expansion of the state which begins with the Assyrian princes continues after them. Under the great kings the state reaches to the Indus in the east. The state has brought under itself the Mediterranean littoral. Under Rome the state reaches further west and north. Counting from Tiglath-pileser III, prince 745-27, to Augustus, 27^{BC}-14^{AD}, the expansion continues for seven and a half centuries. The state has brought under itself the domain from the Atlantic to the Indus.

Prince Henry begins sending his knights to sea, and in 1434 Eanes rounds cape Bojador.

In the fourteen-odd centuries from Augustus to prince Henry the state expands little.

In the following four and a half centuries the state expands greatly again. By the end of the

nineteenth Christian century the state has brought the entire surface of the earth under itself.

The line of development of the state from Narmer and Enmebaragesi through Esarhaddon through Augustus through prince Henry through the scramble for Africa is the main line of development of the state.

And there is one major line of development of the state independent of the main. The development of the state in the valleys of the Chang Jiang and Huang He.

Sima Qian fixes the dates of the early princes back to the end of the reign of Li in 841^{BC} (14). And no further, because: the earlier record is confused and unreliable (13). Through the confusion, earlier princes can be traced back more or less reliably some two centuries before Li, not entirely unreliably some two centuries further back, only entirely unreliably further back. And if the state begins in the valleys of the Chang Jiang and Huang He four centuries before Li, its beginning in these valleys postdates its beginning in the valley of the Nile by seventeen and a half centuries, its beginning in the valley of the two rivers by fourteen and a half centuries.

Genghis Khan, prince 1206-27^{AD}, campaigns from the Pacific in the east to the Black Sea in the west. His successors in the next two generations, Ögedei, Batu, Möngke, Kublai, and Hülegü, continue overrunning and pillaging the domain between the Dniester and the Euphrates in the west and the Pacific in the east, then begin ruling it. Kublai becomes Yuan emperor. Polo reaches China under Kublai.

If the state begins in the east four centuries before Li, in the twenty-four and a half centuries from the beginning of the state in the east to Genghis Khan, the forty-two-odd centuries from the beginning of the state in the west to Genghis Khan, the development of the state in the west and the development of the state in the east are altogether independent of one another.

A Portuguese ship reaches China in 1513, a Portuguese ship reaches Japan in 1543. In the following centuries trade grows, and in the nineteenth Christian century becomes conquest. After the first opium war in 1839-42 Britain imposes the first of the unequal treaties on the Qing emperor. In 1853 American warships impose a

treaty on Japan. In 1868 the Meiji restoration begins. In 1912 China becomes a republic under Sun Yat-sen.

In the six and a half centuries from Genghis Khan to the middle of the nineteenth Christian century the development of the state in the west and the development of the state in the east converge, gradually, haltingly, still largely independent of one another. They are still two independent of one another lines of development of the state.

Then they become one joint development.

And this now one joint line of development of the state has remained one line of development of the state, for one and a half centuries now.

The development of the state in the west and the development of the state in the east should be collected independently of one another. Such as they have been, independent of one another, for forty-eight and a half-odd of the fifty-odd centuries of development of the state. They are both parts, in particular, of the one and only one development of the state, in general. This the fact that they have become one joint development suffices to show. And after they are both collected, and not before, the attempt should be made to formulate, and solve, the problem of, both, how and why the state has begun and developed severally, and how and why its several beginnings and developments are all parts of one and only one development.

Here, then, in this part four of the investigation, the main line of development of the state is collected.

The collection of the other major line of development of the state, as well as of the few minor lines, and the attempt to formulate and solve the problem of the unitary development of the state, is a central concern of part six.

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The investigation of the state should not begin with the problem of the beginning of the state. The beginning should be of the state. What the state is the particulars should decide. And the problem of the beginning of the state has been solved too many times without recourse to the particulars. In speech, in heaven, in the future, in the idea. Worse, with recourse, recently, to

ideologies, world-views, cultures, civilizations.

The investigation of the state should begin with Narmer and Enmebaragesi.

From the most important steps in its development the fifty-odd centuries of this development can be divided into six parts.

The nine and a half centuries from Narmer to Mentuhotep and the six and a half from Enmebaragesi to Ib-bi-Sin.

The thirteen centuries from Mentuhotep and Ib-bi-Sin to Tig-lath-pileser III.

The seven and a half centuries from Tig-lath-pileser III to Augustus.

The fourteen and a half centuries from Augustus to prince Henry.

The three and a half-odd centuries from prince Henry to Napoleon.

The two-odd centuries since Napoleon.

The third part, the seven and a half centuries from Tig-lath-pileser III to Augustus, is the pivotal. This is the time of the greatest expansion of the state. The time also of the greatest consolidation of the state. The state acquires permanence at this time. It is the time also of the most important steps in the development of the law, the development of religion, and the development of custom, all three. It is the time also of Herodotus and Polybius.

The earlier centuries, the twenty-two and a half before Tig-lath-pileser III, Ib-bi-Sin divides into two parts.

In the first part, the nine and a half centuries from Narmer to Mentuhotep and the six and a half from Enmebaragesi to Ib-bi-Sin, the state begins, first in the valley of the Nile, then also in the valley of the two rivers. In these, the earliest centuries of the development of the state, times of states and order keep alternating with times of no states and disorder. Nevertheless, in the valley of the two rivers, early on, the great expansion of the state also begins. Later on, the law also begins. It is the time also of the Sumerian prince list.

In the second part, the thirteen centuries from Mentuhotep and Ib-bi-Sin to Tig-lath-pileser III, times of states and order continue to alternate with times of no states and disorder. Nevertheless, early on, the development of the law continues. Later on, the attempts at expansion of the

state resume.

The pivotal centuries follow. This is the time also of the greatest states.

The later centuries, the twenty-odd after Augustus, first prince Henry divides into two parts. Then the latter of these parts, the five and a half-odd centuries after prince Henry, Napoleon divides into two parts.

In the fourth part, the fourteen and a half centuries from Augustus to prince Henry, the state, even as it has acquired permanence, declines. This is the time of the great rise of religion.

In the fifth part, the three and a half-odd centuries from prince Henry to Napoleon, exploration resumes. Hence the great expansion of the state also resumes. The state is on the verge of bringing the entire surface of the earth under itself. Attempts also begin to build the state anew and better. With the defeat of the revolution the most valiant of these attempt is defeated. This is the time also of Spinoza and Voltaire.

The sixth part, the two-odd centuries since Napoleon, is the present. The state has brought the entire surface of the earth under itself. All attempts to build the state anew and better have failed.

The most important steps in the development of the law are three. The code of Ur-Nammu. The code of Hammurabi. And the jurists. The code of Ur-Nammu is late in the first part. The code of Hammurabi is in the second part. The jurists are late in the third part and early in the fourth.

The most important steps in the development of religion are also three. Judaism. Christianity. And Islam. The development of Judaism is in the third part. The development of Christianity and Islam is in the fourth part.

The most important transformation of custom is in the third part.

The great advance in the description of the surface of the earth by the princes is in the first and third parts. And the great advance of geography is in the third part and early in the fourth, then again in the fifth part.

The most important historians are the Sumerian prince list, Herodotus, Polybius, Spinoza, and Voltaire.

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Finally, before turning to the collection of the particulars, and hence the development of the state, and of history, how the particulars are collected can be made more explicit.

Here as everywhere, we call the council of our predecessors.

The particulars are in the historians. The particulars include the historians. And first the historians have to be collected. They are the fount.

And the historians have been, in fact, collected.

Bodin has collected them.

Bodin is an older contemporary of Viète, Gilbert, and Tycho, one generation-odd before Bacon, Galileo, and Kepler, two-odd generations before Descartes. And not quite two generations before the *New organon*, two-odd generations before the *Discourse on the method*, in 1566, Bodin wrote the *Method for the easy knowledge of history*.

The *Method for the easy knowledge of history* is in ten chapters. Chapter 10 is *The order and collection of the historians*. And in *The order and collection of the historians* Bodin orders and collects the historians.

265 particular historians.

The rule is to make enumerations so complete and reviews so general as to omit nothing, and so it is in Bodin.

Of each historian, with but a few exceptions, Bodin has a brief description and a date. The following 8 entries can illustrate, and indicate also the completeness and generality of the enumeration:

Moses, the books of origins from creation to the migration of the Hebrews from Egypt to Palestine, a complete history of the world for 2450 years; fl. 1518^{BC};

Herodotus of Halicarnassus, on the deeds of the Greeks, Egyptians, Medes, Persians, Lydians from 3210^{AM} to 3500^{AM}, 9 books; fl. 425^{BC};

Caesar, on the Gallic war, 7 books, with the book of their continuation by Hirtius, fl. 43^{BC};

Eusebius, ecclesiastical histories, 10 books; fl. 312;

the koran, collected from all the korans in the name of Muhammad in the year of Muham-

mad 110; fl. 600^{AD};
Otto of Freising, on the deeds of Frederick Barba-
rossa;

Niccolò Machiavelli, history of the Florentines
from 1215^{AD} to 1494^{AD}; fl. 1500;

Christopher Columbus the Genoese, voyage to
islands until then unknown, fl. 1512 (*id.*).

Bodin orders and collects the historians under
eighteen heads, and the heads can also indicate
the completeness and generality of the enumera-
tion. The eighteen heads are:

writers of universal history;

universal geographical historians;

after the universal historians, it is not inappropri-
ate to add the ecclesiastical writers and the
writers of the sects which have established and
retained their power, and first of all of the
religion, antiquities, and deeds of the Jews;

historians of the pagan superstitions;

historians of the Christian religion;

historians of the Arab sect;

historians of the Chaldeans, Assyrians, Medes,
Egyptians, Persians, Phoenicians, Hebrews,
Parthians, whose deeds are described mostly
by the writers above;

historians of the Greeks, under which name come
the Ionians, Aeolians, and Dorians who settled
Asia Minor as well as Europe from the Dan-
ube, the Acroceraunians, and mt Haemus to
the Ionian Sea, the islands, and the continent;
historians of the Romans and the Carthaginians,
and of all things concerning Italy;

historians of the Celts, or Gauls, and of the
Franks, under which name come all peoples
between the Rhine, the Pyrenees, the Alps, and
the sea;

historians of the Germans and of all peoples who
live from the Alps to the Baltic Sea, and from
the Rhine to the Vistula, to which is added the
history of the Goths, Vandals, Huns, Heruli,
Helvetians, Lombards, Poles, Muscovites,
Danes, Swedes;

historians of the Britons, who were afterward
called Anglo-Saxons and Scots;

historians of the Spaniards;

historians of the Arabs, who once ruled Africa,
Syria, Persia, and Spain, known vulgarly as
Saracens;

historians of the Turks;

historians of the Tartars and the Muscovites;

historians of the Ethiopians, Indians, Americans,
and all peoples of Africa;

and after the histories common to all peoples and
those peculiar to each state, the separate his-
tory of illustrious men follows (*id.*).

Temporally, Bodin reaches back to the antiqui-
ties of the Jews. It will be three centuries after
him when the historians begin recovering the
antiquities of the Mesopotamians and Egyptians.

Spatially, he reaches across nearly the entire
surface of the earth, from the Americans in the
west to the Tartars and the Indians in the east, and
from the Swedes in the north to all peoples of
Africa in the south. It will be one generation-odd
after him when Ricci goes to China and begins
filling the last gap, the Chinese.

One century after him, Spinoza will also show
that the historian Moses is not the historian
Moses.

History includes the writers of universal
history, geographical historians, historians of
religion, as well as of superstitions and sects, the
histories common to all peoples, peculiar to each
state, as well as of illustrious men.

Bodin's is a most successful attempt to collect
the historians.

Below, in the course of argument, Bodin's
enumeration is presented in detail, its few errors
are corrected, and it is completed, and continued.

The historians are also sorted out into impor-
tant and not important.

Ignoring, here, the historian Moses and all
other scriptural historians, of the remaining 254
historians in the enumeration 79 are important.
The first is Herodotus. And, counting centuries
from the year of birth assigned to Herodotus, this
is the distribution of the 79,

484- 385	6,
384- 285	6,
284- 185	3,
184- 85	3,
84 ^{BC} - 16 ^{AD}	8,
17- 116	7,
117- 216	10,
217- 316	2,
317- 416	5,
417- 516	2,
517- 616	4,

617- 716	1,
717- 816	2,
817- 916	—,
917-1016	2,
1017-1116	3,
1117-1216	2,
1217-1316	2,
1317-1416	5,
1417-1516	6.

This is how the historians are collected.

And this is how the particulars in the historians are collected.

Herodotus researches the great and magnificent deeds of 804 particular Greeks and barbarians.

The *Histories* was divided into nine books by the Alexandrian grammarians, and has since been divided into sections, for a total of 1 534 sections. Counting the sections, rounding to the nearest pentad below – as, granted its editorial virtue, the division into sections is often arbitrary – and dividing them into important, on the left, and not important, on the right, Herodotus researches the following 16 in more than 25 sections each,

Xerxes	220+ sections,
Darius	170+,
Cyrus	100+,
Croesus	75+,
Mardonius	65+,
Cambyeses	55+,
Cleomenes	35+,
Astyages	30+,
Pausanias	30+,
Amasis	25+,
Polycrates	25+,
Histiaeus	25+,
Aristagoras	25+,
Demaratus	25+,
Leonidas	25+,
Themistocles	25+.

13 of the 16 are important, 3 are not important. One century after Herodotus, the council has established this fact. Of the 13 important 11 occur in Thucydides, 9 occur in Plato, 11 occur in Aristotle. In Thucydides occur: Xerxes, Darius, Cyrus, Croesus, Cambyeses, Cleomenes, Pausanias, Polycrates, Aristagoras, Leonidas, and Themistocles. In Plato occur: Xerxes, Darius, Cyrus, Croesus, Cambyeses, Pausanias, Amasis, Polycrates, and Themistocles. In Aristotle occur: Xerxes, Darius, Cyrus, Croesus, Cambyeses, Cleomenes, Astyages, Pausanias, Amasis, Polycrates, and Themistocles. None of the 3 not important occurs in Thucydides, or in Plato, or in Aristotle.

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Again, the development of the state, and hence also of history, is divided into these six parts.

The nine and a half centuries from Narmer to Mentuhotep and the six and a half from Enmebaragesi to Ibbi-Sin.

The thirteen centuries from Mentuhotep and Ibbi-Sin to Tiglath-pileser III.

The seven and a half centuries from Tiglath-pileser III to Augustus.

The fourteen and a half centuries from Augustus to prince Henry.

The three and a half-odd centuries from prince Henry to Napoleon.

The two-odd centuries since Napoleon.

And in each part the particulars are collected. The particular states which the particulars indicate are described. The development of the state in general is described. Including the law, religion, and custom. The development of geography is described. The historians are collected and sorted out explicitly, and the development of history is described. The problem of knowledge is addressed.

The nine and a half centuries from Narmer to Mentuhotep and the six and a half from Enmebaragesi to Ibbi-Sin

cdxxxiii

The state begins in the valley of the Nile.

Three-odd centuries later, it begins independently in the valley of the two rivers. Developments in the two valleys remain independent of one an-

other for a long time. And so they have to be collected first, independently of one another.

Then the problems of the relation of the two can be addressed. Most important, why the state develops independently in the valley of the Nile and in the valley of the two rivers. And to what degree, and why, is the development different, and to what degree, and why, the same.

The nine and a half centuries from Narmer to Mentuhotep

cdxxxiv

The dates are,

Narmer prince *c.* 3000,

Mentuhotep prince *c.* 2069-18.

Manetho's description of the succession of the princes in the valley of the Nile is of a time of order, then of disorder, again of order, again of disorder, again of order, again of disorder. These are the old kingdom, the first intermediate period, the middle kingdom, the second intermediate period, the new kingdom, and the late period.

The nine and a half centuries from Narmer to Mentuhotep are the seven and a half centuries of the old kingdom and the two centuries of the first intermediate period. With Mentuhotep the middle kingdom begins.

The sources have been presented above.

The most important, about this earliest time as about all later times, are the predecessors of the historians and historians.

The Palermo stone postdates the first prince by five and a half centuries. The earliest prince, however, whom the stone attests explicitly is the third, Djer. The first predecessor of the historians reaches back very close to the very beginning. The last prince whom the stone attests explicitly is Neferirkare, five centuries after Djer. And as in all later predecessors of the historians and historians so in the first, the record on the stone becomes from Djer to Neferirkare steadily ampler and more explicit.

Nine and a half-odd centuries then separate the Palermo stone and the next predecessors of the historians, the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus. They all four, however, reach back

across these nine and a half-odd centuries, and the Abydos prince list and the Turin papyrus back to the first prince, too, examining and corroborating the stone. There is no discontinuity in the record, there is continuity. The council is in session.

Eight and a half centuries then separate these predecessors of the historians and the historians, Herodotus and Manetho. Again there is no discontinuity, there is continuity. The historians reach back across these eight and a half centuries, and both back to the first prince, too, examining and corroborating their predecessors. The session of the council continues.

Next, there are the inscriptions of the princes. These are not nearly as many in this valley as in the other. Or nearly as explicit. They attest rather more of the thought and the sense than of the reference and the true. Nevertheless, next to all the pictures, they attest the names of the princes beginning with the first. Writing develops, and Peribsen, prince two and a half centuries after the first prince, has left behind the oldest sentence. Writing continues to develop, the inscriptions become steadily more, and even as they attest much more of the thought and the sense, they attest steadily more of the reference and the true as well. Corroborating the predecessors of the historians and historians.

Next, there are the inscriptions of lesser officials. The oldest attesting the reference and the true is from Metjen, an official of Huni, prince not quite four centuries after the first prince, not quite two centuries before the stone. Also corroborating the predecessors of the historians and historians.

Finally, there are all the other monuments. Tombs, temples, smaller artifacts, palettes, maceheads, labels, potsherds, seals, statues, stelae, bowls. Corroborating the predecessors of the historians and historians as well.

Thus, there may be errors in the following analysis, but there need be no confusion. Nor need the errors be either many or grave. It can also be indicated where the errors, if there may be errors, may be.

A succession of 39 princes has been extracted from the sources for the old kingdom.

Herodotus first calculates when the first prince

was. The calculation yields *c.* 12 011^{BC}.

Manetho assigns reign years to the princes, totals them, and totals the totals. The totals yield for the first prince *c.* 6303^{BC}.

Instead, the dates of the 39 princes can be fixed in this way. The date of Mentuhotep is certain within 20 years. Two centuries can be postulated for the first intermediate period. This yields the date of the last of the 39 princes. 20 years can be postulated as the average length of a reign, and then spacing the middles of the reigns at 20 years has to yield the smallest error about the time of any one prince on average. And for the first prince this yields *c.* 3000.

The succession of the 39 princes indicates first

one and a half centuries of great stability, then two centuries of relative instability, then four centuries of great stability. Then the state falls apart.

The nine and a half centuries from Narmer to Mentuhotep can thus be divided into four parts. The one and a half centuries from Narmer to Qaa. The two-odd centuries from Qaa to Huni. The not quite four centuries from Huni to Pepi II. And the two centuries from Pepi II to Mentuhotep.

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The one and a half centuries from Narmer to Qaa.

Again, this is the evidence.

Manetho	Abydos prince list	Saqqara prince list	Turin papyrus	inscriptions,
1. Menes	1. Meni	—	Meni	Narmer,
2. Athothis	2. Teti	—	—	Aha Men,
3. Kenkenes	3. Iti	—	Iti	Djer Itit,
4. Uenephes	4. Ita	—	Ita	Djet Uadji Iterti,
5. Usaphais	5. Zemti	—	Zemti	Den Udimu Zemti,
6. Miebisi	6. Merbiapen	1. Merbiapen	Merbiapen	Anedjib Merpibia,
7. Semempses	7. Semsem	—	Semsem	Semerkheth,
8. Bieneches	8. Kebh	2. Kebwe	Kebh	Qaa.

Manetho and the lists establish the fact of the first eight princes.

The inscriptions then corroborate the fact.

The first princes were buried at Abydos. Abydos is by the Nile, in upper Egypt, in the south, 590 km south of the Mediterranean along the meridian.

In particular, in a mortuary complex at Abydos the tombs of the third, the fourth, the fifth, the sixth, the seventh, and the eighth princes have been unearthed. The tomb of Djer is tomb O, the tomb of Djet is tomb Z, the tomb of Den is tomb T, the tomb of Anedjib is tomb X, the tomb of Semerkhet is tomb U, and the tomb of Qaa is tomb Q. These earliest tombs are not inscribed, but they are supplied with artifacts, the artifacts are inscribed, and hence the tombs are identified. These earliest inscriptions are pictures, but from the first among the pictures the names of the princes can be read phonetically, and can be read phonetically because, attesting the beginning of writing, they have been written phonetically. The princes will eventually have not less than five

names each, and from the first the inscriptions attest the two chief names, the name of the prince as Horus, the falcon, and the name of the prince as Wadjet and Nekhbet, the cobra and the vulture, the two ladies, of upper Egypt and of lower Egypt, respectively. Thus, Djer as Horus is Itit as Wadjet and Nekhbet. Den, or Udimu, as Horus is Zemti as Wadjet and Nekhbet. The various names show unambiguously the agreement of the inscriptions and the lists, and strengthen the presumption of agreement of the lists and Manetho, transcribing as Manetho first is hieroglyphs phonetically into an alphabet.

And as the third, the fourth, the fifth, the sixth, the seventh, and the eighth princes so the first and the second.

Manetho and the lists, as well as Herodotus, establish the fact of the first and the second princes.

The inscriptions then corroborate the fact.

In 1898, at Nekhen, Quibell excavated the palette of Narmer. Nekhen is also in upper Egypt, in the south, 120 km south of Abydos along the

meridian.

The palette attests unambiguously the fact that the prince is depicted. The main figure wears on the obverse the crown of upper Egypt, on the reverse the crown of lower Egypt, such as the princes will continue to wear the two crowns in the following two and a half millennia. It attests also unambiguously the name of the prince, Narmer, read phonetically.

The palette is dated from the site of its find, its material, design, and subject matter, each a part of a firmly established series.

At the same site two maceheads were excavated.

One of the maceheads attests again, both, Narmer and the fact that he is the prince.

On the other macehead the main figure wears the crown of upper Egypt, no name is indicated, and as no part of the picture can be read phonetically, from the depiction of a scorpion the figure goes by the name the scorpion king.

At Naqada an ivory label was excavated. Naqada is also in upper Egypt, in the south, between Abydos and Nekhen.

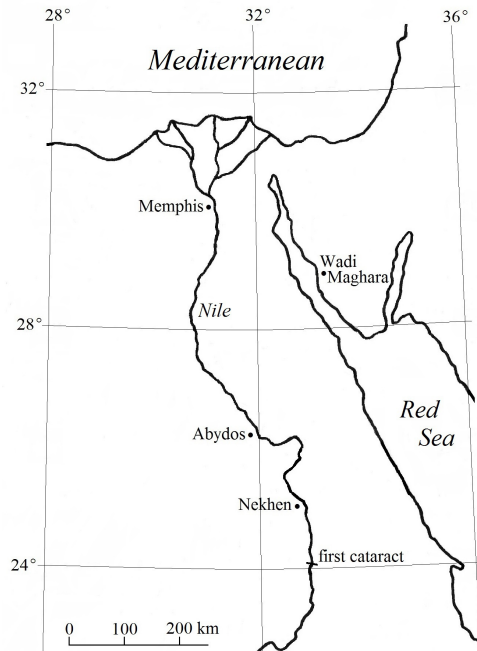
The ivory label attests unambiguously Aha, or Men, both names read phonetically, and the fact that Aha, or Men, is the prince. Aha as Horus is Men as Wadjet and Nekhbet. Depicted next to one another, the falcon stands on the name Aha, the cobra and the vulture stand on the name Men, such as the falcon, and the cobra and the vulture, will continue to stand on the names of the princes in the following two and a half millennia. And a potsherd was excavated, attesting again, both, Aha and the fact that he is the prince. The falcon stands on the name Aha.

At Abydos, next to the larger tombs of the princes, there are numerous smaller tombs of their retinue. And among the smaller tombs a tomb has been ascribed to Aha, at first tomb B-19, then tombs B-10, B-15, and B-19 jointly. Attempts have been made to ascribe a tomb also to Narmer.

Thus, the scorpion king is a ruler of upper Egypt before the first prince.

The first prince is the ruler of upper Egypt and lower Egypt both.

And the references of 'Menes' and 'Athothis' in Manetho, 'Meni' and 'Teti' in the Abydos



Lambert azimuthal equal area projection. The coastline and the course of the Nile are those of today.

prince list and the Turin papyrus, and 'Narmer' and 'Aha, or Men' in the inscriptions are the same, namely, the first prince and the second prince.

In the first one and a half centuries of development of the state, then, the particulars are these,

Narmer	prince c. 3000,
Aha	prince c. 2980,
Djer	prince c. 2960,
Djet	prince c. 2940,
Den	prince c. 2920,
Anedjib	prince c. 2900,
Semerckhet	prince c. 2880,
Qaa	prince c. 2860.

And this is what the particulars indicate.

Narmer's palette shows that upper Egypt and lower Egypt have been unified. And that they have been unified by smiting.

It shows the prince, wearing the crown of upper Egypt, holding an upraised mace in his right hand ready to smite his kneeling foe whose forelock he holds in his left hand. And it shows the prince, wearing the crown of lower Egypt, marching in a procession with his retinue toward

the corpses of his decapitated foes. The corpses of his decapitated foes are ten.

Narmer's successors in the following two and a half millennia will continue to depict themselves in both these ways, and especially the former. Den, the fifth prince, attests the oldest emulation. On an ivory label, Den holds an upraised mace in his right hand ready to smite his kneeling foe whose forelock he holds in his left hand.

Narmer's macehead shows the prince sitting on his throne.

His successors will continue to depict themselves in this way, too.

The tomb of Djer is 21 x 20 m.

The tomb of Djet is 19 x 15 m.

The tomb of Den is 25 x 16 m.

The tomb of Anedjib is 16 x 9 m.

The tomb of Semerkhet is 29 x 21 m.

The tomb of Qaa is 30 x 23 m.

And other than that – ignoring all the other pictures, which are not many so early on either, and all the chattel in the tombs, which is not much so early on either – there is only the Palermo stone. The first two princes whose labors are recorded on the Palermo stone are Djer and Den. And what this first predecessor of the historians reports of these two princes, the third prince and the fifth prince, is, in fact, all the explicit evidence that there is about this time.

This is what the stone reports of Djer:

Horus Djer, whose mother was Khened Hap;
the year of the following of Horus at the birth of Anubis;

the year of the festival of the two lakes;

the year of the following of Horus at the birth of Seth;

the year of the festival of Sokar at the house of the mighty gods;

the year of the following of Horus at . . . ;

the year of the appearance of the lord of upper Egypt at the birth of Ha;

the year of the following of Horus at the birth of . . . ;

the year of the festival of Desher at the house of the mighty gods;

the year of the following of Horus at the birth of . . . (Cairo fr. 1).

And this is what it reports of Den:

Horus Den, whose mother . . . ;

the year of the great . . . ;

the year of the smiting of the easterners;

5 cubits;

the year of . . . at the birth of . . . ;

. . . cubits;

the year of the smiting of the . . . people;

6 cubits, 1 palm, 2 fingers;

the year of the festival of Sokar at the house of the mighty gods (Cairo fr. 5);

the year of the journey to the temple of Ptah in Heka;

3 cubits, 1 palm, 2 fingers;

the year of the smiting of the troglodytes;

4 cubits, 1 span;

the year of the appearance of the lord of upper Egypt and of lower Egypt at the festival of Seth;

8 cubits, 3 fingers;

the year of the flooding of the lakes in the west and in the east;

3 cubits, 1 span;

the year of the second festival of Wadjet;

5 cubits, 2 palms;

the year of the festival of Sokar at the house of the thrones of the gods;

5 cubits, 1 palm, 2 fingers;

the year of the stretching of the cord at the great door by the priest of Seshat;

4 cubits, 2 palms;

the year of the opening of the lake by the house of the thrones of the gods and of the killing of the hippopotamus;

2 cubits;

the year of the journey to the lake of Harsaphes;

5 cubits;

the year of the journey to Sahseteni and of the smiting of the Werka;

4 cubits, 1 span;

the year of . . . at the birth of Seth;

6 cubits, 1 palm, 2 fingers;

the year of the appearance of the lord of lower Egypt at the running of Apis;

2 cubits, 1 span;

the year of . . . at the birth of Seshat and Mafdet;

3 cubits, 5 palms, 2 fingers;

the year . . . (Palermo fr.).

The state, then, begins with smiting and hence unification.

Smitten is lower Egypt. The ruler of upper Egypt smites lower Egypt, and so the state begins.

Unified are upper Egypt and lower Egypt, the land of Wadjet and the land of Nekhbet. These eight princes are in Manetho dynasty I, from Thinis. Thinis is in upper Egypt, in the south, around Abydos, where the princes have left their tombs as well. Lower Egypt is in the north, closer to the Mediterranean, where the first princes will build Memphis.

The state begins with smiting and hence unification, the state is one, and remains one.

It is a large state. The valley of the Nile is narrow, bounded sharply by the desert. But it is a long valley, 710 km along the meridian from the Mediterranean to Nekhen.

It is a very stable state. The orderly succession of the six princes from the third through the eighth, Djer through Qaa, attested as such by the complete agreement of Manetho, the lists, and the monuments, indicates this.

The princes build their tombs.

They vigorously celebrate the gods. Horus, Wadjet, Nekhbet, Anubis, Seth, Sokar, Ha, Desher, Ptah, Seshat, Apis, Mafdet.

They build temples. The house of the mighty gods, the temple of Ptah in Heka, the house of the thrones of the gods, the great door where the priest of Seshat stretches the cord.

The prince is himself a god. He is Horus. He is Wadjet and Nekhbet.

Development is also indicated.

From Djer and Den to Semerkhet and Qaa the tombs have become larger.

Djer, the third prince, celebrates the gods.

Den, the fifth prince, also celebrates the gods. But he also opens the lake by the house of the thrones of the gods and kills the hippopotamus. He also does much smiting. He smites the easterners, the . . . people, the troglodytes, and the Werka. The smiting is corroborated by the ivory label on which Den smites his kneeling foe.

The record of the level of the high Nile also begins under Den.

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The two-odd centuries from Qaa to Huni.

The sources are the same, and for this time as

well they have been presented above in some detail.

The agreement of Manetho, the Abydos prince list, and the Saqqara prince list is only partial, and it is only partially corroborated by the Turin papyrus and the monuments.

A succession of 12 important princes has been inferred. Through Khasekhemwy the succession is poorly attested by Manetho and the lists, and it is inferred mainly from the names of the princes inscribed on artifacts. Beginning with Khasekhemwy the succession is better attested by Manetho and the lists, and it is corroborated by the tombs of the princes.

The 12 important princes are,

Hotepsekhemwy	prince c. 2840,
Raneb	prince c. 2820,
Ninetjer	prince c. 2800,
Weneg	prince c. 2780,
Send	prince c. 2760,
Peribsen	prince c. 2740,
Khasekhemwy	prince c. 2720,
Nebka	prince c. 2700,
Djoser	prince c. 2680,
Sekhemkhet	prince c. 2660,
Khaba	prince c. 2640,
Huni	prince c. 2620.

When the officials

Imhotep	under Djoser, c. 2680,
Metjen	under Huni, c. 2620,

are added, these are all the important particulars. And this is what the particulars indicate.

From Hotepsekhemwy to Peribsen the succession of the princes indicates first of all just that, that the succession of the princes continues.

Ninetjer is one of these princes, and he is the next prince whose labors are recorded on the Palermo stone. Some one dozen-odd of his years are recorded. And Ninetjer does as his predecessors do. The year is several times: the year of the following of Horus (Palermo fr.), several times: the year of the appearance of the lord of upper Egypt and of lower Egypt (*id.*), celebrating Horus, Wadjet, Nekhbet, Sokar, Apis. One year there is smiting: the year of the smiting of the house of Shem-Re (*id.*). Every year the level of the high Nile is recorded. There is also a development. Counting begins: the year of the 3rd counting (*id.*);

the year of the 4th counting (*id.*);
 the year of the 5th counting (*id.*),
 and through:
 the year of the 10th counting (*id.*).
 What is counted is not recorded yet.

Peribsen, on a seal, has left behind the oldest sentence:

he of Ombos has joined the two lands for his son, the lord of the two lands Peribsen (*id.*).
 He of Ombos is Seth.

Khasekhemwy is the next prince whose labors are recorded on the Palermo stone. Some half a dozen of his years are recorded. And Khasekhemwy also does as his predecessors do: the year of the following of Horus (Palermo fr.); the year of the appearance of the lord of upper Egypt and of lower Egypt (*id.*). The level of the high Nile is recorded. One year is: the year of the building of ships (*id.*). And again there is a development. What is counted is now recorded:

the year of the 7th counting of the gold and the fields (*id.*);
 the year of the 8th counting of the gold and the fields (*id.*).

Khasekhemwy has also left behind his tomb, and his tomb is much larger than the tombs of his predecessors. The foundation is 70 m long, a trapezoid with bases 17 m and 10 m. It is, like the tombs of his predecessors, at Abydos.

Nebka, Djoser, and Sekhemkhet are the earliest princes attested by the series of reliefs at Wadi Maghara. In his depiction Nebka, too, does as his predecessors do, holding an upraised mace in his right hand ready to smite his foe. Wadi Maghara is in Sinai, near the Red Sea, 230 km east of the Nile along the parallel.

Djoser has also left behind his tomb, and his tomb is not only much larger than the tombs of his predecessors. It is the first pyramid. A step pyramid with a base 109 x 125 m, some 62 m high.

The builder of the pyramid is Imhotep. On a statue of Djoser the offices of Imhotep are recorded:

the treasurer of the lord of lower Egypt, the first after the lord of upper Egypt, the overseer of the great palace, the high priest of Heliopolis, Imhotep, the builder, the sculptor, the maker of vases (*id.*).

Heliopolis is 30 km north of Memphis.

His lord was a god, and Imhotep became a god. He was venerated in Manetho's time still, identified now with Asclepius (fr. 2a).

Djoser's pyramid is not at Abydos, in upper Egypt, in the south, but at Saqqara, in lower Egypt, in the north, next to Memphis.

Sekhemkhet, Khaba, and Huni have also left behind his pyramid each. Sekhemkhet's is unfinished. Huni's stands as high as Djoser's. All three are in the north, Sekhemkhet's at Saqqara as well, but Khaba's 5 km to the south, Huni's 50 km to the south. Larger, spread widely, these pyramids are not a mortuary complex like the tombs at Abydos.

And from the reign of Huni is the tomb inscription of Metjen. It is the oldest of its kind.

Metjen lists his offices, and his rewards for his services in his offices. Among his offices:

governor of the districts of upper Egypt;
 overseer of the district of Anubis;
 overseer of the district of Sinu;
 governor of the people of Dep;
 governor of Miper;
 governor in the desert;
 defender of the lands;
 overseer of the fields;
 overseer of the canal;
 overseer of the great palace;
 overseer of the scribes;
 overseer of the linen of the prince;
 master of the hunt (*id.*).

Before listing his rewards for his services, Metjen enjoins:

obey the royal decree, for Metjen has the title, it was given to him (*id.*).

Among his rewards:

given to him 200 aroura of land with the people on it and the cattle;
 100 rations of bread daily;
 a house 200 cubits long and 200 cubits wide, built from good wood, with a large pond, planted with figs and vines (*id.*).

200 aroura is somewhat more than 0.5 km². And Metjen concludes by noting another of his offices:

overseer of the tomb of Huni (*id.*).

The state, then, continued.

The same one large state for three and a half-

odd centuries by the time of Huni.

The succession of the princes after Qaa and before Khasekhemwy is not so well attested by Manetho and the lists, indicating relative instability after the great earlier stability. But the evidence is unambiguous that the state continued, that the princes accomplished the feat of maintaining the unity of upper Egypt and lower Egypt. The princes from Hotepsekhemwy to Khasekhemwy correspond to Manetho's dynasty II, the princes from Nebka to Huni to his dynasty III. Dynasty II is, like dynasty I, from Thinis, in upper Egypt, in the south. Dynasty III is from Memphis, in lower Egypt, in the north. Memphis is 190 km south of the Mediterranean. Saqqara is next to Memphis, where Djoser and Sekhemkhet built their pyramids, and the pyramids of Khaba and Huni are not far from Memphis either. The shift of the center of the state from the south to the north also indicates its increasing stability.

The princes do as their predecessors do.

They build their tombs.

They celebrate the gods.

They build temples.

The level of the high Nile is recorded.

Some smiting is recorded.

The counting of the gold and the fields is also recorded.

The offices and rewards of the high officials are also recorded, of those who do the counting.

And the tombs continue to become larger.

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The not quite four centuries from Huni to Pepi II.

The sources are in agreement throughout, the inscriptions are more and more explicit. These are nearly four centuries of great stability of the state.

The princes are,

Sneferu	prince c. 2600,
Khufu	prince c. 2580,
Djedefre	prince c. 2560,
Khafre	prince c. 2540,
Menkaure	prince c. 2520,
Shepseskaf	prince c. 2500,
Userkaf	prince c. 2480,
Sahure	prince c. 2460,
Neferirkare	prince c. 2440,
Shepseskare	prince c. 2420,

Neferefre	prince c. 2400,
Niuserre	prince c. 2380,
Menkauhor	prince c. 2360,
Djedkare	prince c. 2340,
Unas	prince c. 2320,
Teti	prince c. 2300,
Pepi	prince c. 2280,
Merenre	prince c. 2260,
Pepi II	prince c. 2240.

The officials are,

Hemionu	under Khufu,
Niankhsekhmet	under Sahure,
Weni	first office under Teti,
Harkhuf	first office under Merenre,

And these are all the important particulars.

Sneferu has left behind two pyramids next to one another, not far from Memphis. Both are substantially larger than the pyramids of his predecessors. 187 x 123 m and 105 m high, and 220 m square and 105 m high, respectively. Both are also substantially more sophisticated structures. The larger is the first regular pyramid.

With Sneferu the Wadi Maghara inscriptions become longer:

lord of upper Egypt and lower Egypt, favored by the two goddesses, lord of truth, golden Horus, Sneferu, great god, given prosperity, life, health, and joy forever.

Sneferu is also the next prince whose labors the Palermo stone records:

the year of Sneferu . . . the 2nd counting of the silver and lapis lazuli;

3 cubits;

. . . the making of the copper statue of Horus Sneferu;

3 cubits, 5 palms;

the year of the fourth . . . ; the making of the golden statue of Horus Sneferu; he brought from Libya 1 100 men and 13 100 large and small cattle (Cairo fr. 4);

. . . two children were born to the lord of lower Egypt . . . ;

the year he built one ship of 100 cubits of meru and 60 barges; he smote Nubia; he took 4 000 men, 3 000 women, and 200 000 large and small cattle; he built the wall of the house of Sneferu; 40 ships brought cedar;

2 cubits, 2 fingers;

the year he built 35 houses for 122 oxen; he built one ship of 100 cubits of cedar and two ships of 100 cubits of meru each; the 7th counting; 5 cubits, 1 palm, 1 finger;

... the building of the white crown of Sneferu on the southern gate and of the red crown of Sneferu on the northern gate; the building of the cedar gates of the palace;

2 cubits, 2 palms, 2 $\frac{3}{4}$ fingers (Palermo fr.).

Sneferu did not do as his predecessors did, he did more. And so did Khufu.

Khufu has left behind the largest pyramid, at Giza, 20 km northwest of Memphis. 230 m square, its sides equal within 20 cm, it stood 147 m high, weathered down by some 10 m since. It contains 2 300 000 blocks of stone of average weight 2.5 tons, and up to 15 tons.

It was built by Khufu's chief official Hemunu.

A ship 43 m long was also buried with the prince.

Khufu's is the next inscription at Wadi Maghara:

Khufu, great god, smiter of troglodytes, given prosperity and joy.

His is also the next record on the Palermo stone. It is very fragmentary:

the year ... 14 statues ... Khufu ... 100 cubits ...;

the year of the making of the statue of Horus ...;

... the birth of the bull of Horus ...;

... the appearance of the lord of lower Egypt ... (Cairo fr. 2).

Djedefre has left behind a smaller pyramid 8 km north of Giza.

His is the next record on the Palermo stone, also very fragmentary.

Khafre has left behind the second largest pyramid, at Giza, next to the pyramid of Khufu, and aligned precisely with it. 215 m square, it stood 136 m high, weathered down by some 10 m since. The sphinx, 20 m high, 73 m long, is part of the mortuary complex of Khafre.

The pyramid of Menkaure is next to the pyramid of Khafre, and aligned precisely with it. Smaller, but not small, 105 x 102 m, it stood 70 m high, weathered down by some 8 m since.

The three largest pyramids, of Khufu, Khafre, and Menkaure, and with the sphinx, have become a mortuary complex, and the most magnificent

humanity has built.

Khufu is the son of Sneferu, Djedefre and Khafre are the sons of Khufu, Menkaure is the son of Khafre. Four generations of massive building, of increasing sophistication through the most massive, and including the edifices which will remain the largest on earth for the following forty-four centuries.

The tombs then become substantially smaller. Shepseskaf's is at Saqqara.

His is the next record on the Palermo stone, very fragmentary.

Userkaf's pyramid is also at Saqqara.

His is the next record on the Palermo stone, of some five of his years. This is one:

the year of the lord of upper Egypt and lower Egypt Userkaf; he made for his monument the house of the spirits of Heliopolis; he ordered for them the following offerings, ... bread and beer, 43 oxen, ... , 132 fowl, and 12 ducks on the festival of ... , and on every return of the festival forever; arable land for Re 448 $\frac{3}{8}$ aroura, for Hathor 235 $\frac{3}{8}$ aroura;

3 cubits, 2 palms, 2 $\frac{1}{2}$ fingers (London fr.).

Sahure's pyramid is at Abusir, 10 km south-east of Memphis.

His is the next inscription at Wadi Maghara: Horus, lord of the crowns, lord of upper Egypt and lower Egypt, Sahure, given life forever, smiter of peoples, great god, smiter of the easterners and of all countries.

His is also the next record on the Palermo stone, of some four of his years. This is one:

the year of the lord of upper Egypt and lower Egypt Sahure; he made ...; for Re, Hathor, and Seshat in the north and in the south, arable land for Hathor 8 aroura, for Seshat ...; brought were also 6 000 measures of copper, 80 000 measures of myrrh, 6 000 of electrum, 2 900 of gold, 23 000 of ... (Palermo fr.).

From the reign of Sahure is the tomb inscription of Niankhsekhmet:

the chief of doctors Niankhsekhmet said to his lord, would that your spirit, beloved of Re, command that a false door be given to me for my tomb;

and his majesty commanded that two false doors be brought; the white crown of Sahure commanded the chiefs of the crafts that the work

be done in his presence; and the cutting of the stone continued day after day; and his majesty had inscriptions placed on the doors and lapis lazuli (*id.*).

Neferirkare's tomb is also at Abusir.

His is the last record on the Palermo stone. Some five of his years are recorded, all five concerned, like those of his predecessors, with celebrations and donations.

Shepseskare's tomb is also at Abusir.

Neferefre's tomb is also at Abusir.

Niuserre's tomb is also at Abusir.

This is now, much more modest, the mortuary complex.

Niuserre's is also the next inscription at Wadi Maghara:

great god, lord of the two lands, lord of upper Egypt and lower Egypt, favorite of the goddesses, golden Horus, Niuserre, smiter of all countries (*id.*).

Menkauhor's tomb is at Saqqara.

His is the next inscription at Wadi Maghara: Horus, lord of upper and lower Egypt, Menkauhor, given life forever (*id.*).

Djedkare's tomb is also at Saqqara.

His is the next inscription at Wadi Maghara: Horus, son of Re, who lives forever, Djedkare, beloved of Wadjet, given life and joy forever (*id.*).

Unas's tomb is also at Saqqara.

And with Unas there is a development. In his tomb are inscribed for the first time the spells which will take the prince to Re in heaven. The spells in Unas's tomb are 228. They have been described above:

Unas, an indestructible spirit, is coming to Re in heaven (217).

Unas goes to heaven either by ferry (270), or by climbing a ladder (304).

Once there:

Unas is the servant of the gods;

Unas squats before Re, Unas opens his coffers,

Unas unseals his decrees, Unas seals his dispatches;

Unas does what Unas is told (309).

Also:

Unas eats the gods;

Unas eats their magic;

the big ones are his morning meal, the middle

ones are his midday meal, the little ones are his evening meal (273-4).

Also:

Unas sheds his seed;

Unas has any woman Unas wants (317).

Teti's tomb is also at Saqqara. This is now the mortuary complex.

Teti does as his predecessor does, he copies and multiplies the spells which will take him to Re in heaven. This is one of the new spells:

Teti will take his pure seat in the boat of Re, the sailors rowing Re will now row Teti, the sailors taking Re above the land will now take Teti above the land (407).

In Teti's reign begin also the services of Weni, described in his tomb inscription. Weni served Teti, Pepi, and Merenre.

For Teti's reign, Weni reports:

a youth under his majesty Teti, my office was custodian of the storehouse; I became overseer of the palace at . . . (*id.*).

Pepi's tomb is also at Saqqara, and Pepi does as his predecessors do, copies and multiplies the spells which will take him to Re in heaven. This is one of the new spells:

Pepi is not one of those who are carried off for the prince, he is not brought before the officials, he is not made to suffer, he is not found guilty;

Pepi will not suffer, he will not be carried off for the prince, he will not be brought before the officials;

his foes will never triumph;

Pepi will never hunger, his nails will never grow long, no bone of his will ever be broken (486).

Pepi's is also the next inscription at Wadi Maghara:

lord of upper Egypt and lower Egypt, favorite of the two goddesses, Pepi, given life forever (*id.*).

The prince is also depicted, like his predecessors, smiting his foe. There is also a development. The inscription is signed by the leader of the expedition to Sinai which carved the inscription:

the year after the 18th counting, fourth month of the third season, sixth day, commander of the army Ibdu, son of the commander of the army Merireonekh (*id.*).

And for Pepi's reign, Weni reports:

I became overseer of the robing room under his majesty Pepi, his majesty gave me the rank of companion and overseer of the priests of the pyramids (*id.*).

Weni then describes at some length a reward for his services, the grant of a sarcophagus of white stone, and his labors to obtain it. He then describes his service of judging an occurrence in the prince's harem, the nature of the occurrence carefully undisclosed, this service also being all by itself a reward: no one before me had ever been allowed in the prince's harem (*id.*). And continues:

when his majesty gathered an army of many tens of thousands from upper Egypt and from lower Egypt, his majesty sent me to lead the army against the sand-dwellers;

we counted the army; seal bearers, companions, chiefs, mayors, priests, overseers of districts from upper Egypt and from lower Egypt, from the villages and towns they govern, and from the Nubians in those foreign lands;

I commanded them;

because of my rectitude, no one molested his fellow, no one seized a loaf or a sandal or a goat from anyone;

and the army returned victorious; it ravaged the land of the sand-dwellers, it sacked the strongholds, it cut down the figs and the vines, it slew many tens of thousands, it carried off many men (*id.*).

Merenre's tomb is also at Saqqara, and he also copies and multiplies the spells which will take him to Re in heaven.

In his reign begin also the services of Harkhuf, described in his tomb inscription. Harkhuf served Merenre and Pepi II.

For Merenre's reign, Weni reports:

when I became chamberlain of the palace, his majesty Merenre, my lord, may he live forever, made me governor of upper Egypt from Medenyt in the north to Yebu in the south (*id.*).

Medenyt is 70 km south of Abydos. Yebu is 230 km south of Abydos, by the first cataract, 820 km south of the Mediterranean. Weni continues:

I governed upper Egypt in peace, I did everything perfectly, I counted everything that is counted twice (*id.*).

Weni then describes his services of procuring for the prince a sarcophagus, granite false doors, libation stones, an altar of alabaster. And concludes:

his majesty sent me to dig five canals in upper Egypt and to build three barges and four boats; I did everything perfectly (*id.*).

Harkhuf lists his offices:

governor of upper Egypt, bearer of the seal, sole companion, priest, chief of counting, overseer of Nekhen, councilor for everything in upper Egypt (*id.*),

lists his many offerings, and then reports:

his majesty Merenre, my lord, sent me with my father, the priest Iri, to Yam to open the path into that country (*ib.*).

Yam is the country beyond the first cataract, in the far south. It is also Punt. It is also Nubia. Harkhuf continues:

I did it in seven months and brought back all kinds of beautiful and rare gifts (*id.*).

Then:

his majesty sent me a second time alone (*id.*).

Harkhuf again brings back all kinds of beautiful and rare gifts. Then:

his majesty sent me a third time;

I came back with 300 donkeys laden with incense, ebony, panther skins, elephant tusks, and all kinds of other gifts (*id.*).

Finally, the tomb of Pepi II is also at Saqqara, and he also copies and multiplies the spells which will take him to Re in heaven. The total for the five tombs is 759 spells.

Pepi II's is the next inscription at Wadi Maghara:

Horus, Pepi, given life forever, lord of upper Egypt and lower Egypt, golden Horus, Pepi, given life forever, like Re (*id.*).

This inscription is also dated. And again there is a development. The inscription records the consort:

the mistress of the prince, devoted to the pyramid, Neferkere, alive forever, the wife of the prince, his beloved, devoted to the pyramid, beautiful forever, whom all the gods love (*id.*).

The inscription also lists all the officers of the expedition:

three captains, two leaders of the caravan, an overseer of the stone work, three other over-

seers, a chief scribe, another scribe (*id.*).

And Harkhuf concludes his report by transcribing a dispatch from Pepi II, praising him for the success of yet another expedition in the far south, and especially for one of the gifts Harkhuf has brought back on this occasion:

more than any other of the gifts you have brought back from the land of Punt my majesty desires to see the pygmy;

come at once, hasten, bring that pygmy (*id.*).

After Pepi II the state falls apart.

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The not quite four centuries from Huni to Pepi II, then, are a time of great stability of the state. All in all, by the time of Pepi II the state has continued for seven and a half centuries. Not many states have accomplished this feat.

And of the not quite four centuries from Huni to Pepi II, the first one and a half-odd, through Sahure, are a time also of great vigor of the state. The following two-odd centuries, through Pepi II, are a time of continuing stability, but little vigor.

The state begins as one large state, and remains the same one large state throughout. It is attested from the first at Nekhen, 710 km south of the Mediterranean. Seven and a half centuries later, under Merenre, Weni is governor of the country south to the first cataract, Harkhuf is sent to open the path into the country beyond the first cataract. The first cataract is 820 km south of the Mediterranean. Nebka, three centuries after the beginning of the state, has left behind the oldest inscription at Wadi Maghara, indicating the presence of the state on the western coast of Sinai. Four and a half centuries later, under Pepi II, an expedition carves his inscription no further. For seven and a half centuries the domain of the state extends some 800 km north to south, and at its greatest some 300 km west to east.

The state begins with smiting, but there is not too much smiting after that, nor is the smiting, when there is smiting, too vigorous. This is indicated by the stability of the state, and is attested by the record. The Palermo stone records much smiting by the fifth prince, Den. He smites the easterners, the . . . people, the troglodytes, and the Werka. Next, and last, three-odd centuries after Den, there is much smiting by Sneferu.

He brings from Libya 1 100 men and 13 100 large and small cattle, and smites Nubia and takes 4 000 men, 3 000 women, and 200 000 large and small cattle. And Sneferu's is not only the most vigorous smiting, it is the only definite smiting. He smites Libya and Nubia. He also counts the booty. The next recorded smiting is four centuries later, and it is altogether indefinite. Merenre gathers an army of many tens of thousands, sends Weni to lead it against the sand-dwellers, the army ravages the land of the sand-dwellers, sacks the strongholds, cuts down the figs and the vines, slays many tens of thousands, and carries off many men.

Counting is rather more vigorous and steadier. It is first recorded under Ninetjer, two centuries after the beginning of the state. The year of the 3rd counting, the year of the 4th counting, the year of the 5th counting, and through the year of the 10th counting. The record becomes explicit not quite one century later, under Khasekhemwy. The 7th counting of the gold and the fields, the 8th counting of the gold and the fields. Time remains reckoned by the countings. Four and a half centuries after Khasekhemwy, the date of Pepi's inscription at Wadi Maghara is the year after the 18th counting. Weni, the governor of upper Egypt, does everything perfectly, he counts everything that is counted twice. One of the offices of Harkhuf is chief of counting.

The offices of the state can thus be analyzed into two chief kinds. Under Huni, some of the offices of Metjen are governor of the districts of upper Egypt, overseer of the district of Anubis, overseer of the district of Sinu, governor of the people of Dep, governor of Miper, governor in the desert, overseer of the fields, overseer of the scribes. These offices attend to the collection of everything that is counted and its counting. Other of Metjen's offices are overseer of the great palace, overseer of the linen of the prince, master of the hunt. These offices attend to the prince. Three to three and a half centuries later, under Teti, Pepi, Merenre, and Pepi II, some of the offices of Weni are custodian of the storehouse, governor of upper Egypt. These are of the first kind. Others are overseer of the palace, overseer of the robing room, companion, chamberlain of the palace. These are of the second kind. Some of

the offices of Harkhuf are governor of upper Egypt, bearer of the seal, chief of counting, overseer of Nekhen. These are of the first kind. Another of his offices is sole companion. This is of the second kind.

It can be concluded that by the time of Huni, four centuries into its development, the state has developed some sophistication in the exercise of its authority. But not too much sophistication. And three and a half centuries later, by the time of Pepi II, it has not developed greater sophistication.

Toward the end of that time, under Merenre, Weni is the governor of upper Egypt from Medenyt to Yebu, 160 km north to south. A division of the country into some five main domains can be inferred. Hence it can be inferred further that the offices of the state are not many. This is supported by the variety of the offices of Metjen, and three to three and a half centuries later, of Weni and Harkhuf. It is supported also by the officers of the army under Weni, who are seal bearers, companions, chiefs, mayors, priests, overseers of districts. It is supported also by the size of the princes' gifts. Huni grants Metjen 0.5 km² arable land with the people on it and the cattle. Userkaf endows the house of the spirits of Heliopolis with 1.5 km² arable land.

In seven and a half centuries the state has not developed much sophistication in the exercise of its authority qualitatively or quantitatively.

The human population of the state is some one and a half million at the time of its beginning, some two and a half million seven and a half centuries later.

The state has remained fundamentally simple.

It celebrates the gods.

It builds temples.

It counts everything that is counted.

And most of all, beginning to end, the most important concern of the state, by far, very far, is the building of the tomb of the prince.

The one and a half-odd centuries from Huni to Sahure are the time of great vigor of the state. After that the vigor wanes, stability and simplicity prevail.

Huni's successor Sneferu does the greatest smiting.

Under Sneferu also the state undertakes to

fulfil greater needs. 40 ships bring cedar. Cedar has to come from the Mediterranean littoral of Asia. One and a half centuries later, under Sahure the state fulfills greater needs. Brought are 6 000 measures of copper, 80 000 measures of myrrh, 6 000 of electrum, 2 900 of gold, 23 000 of . . . Two-odd centuries later, the state fulfills smaller needs. Under Pepi II, Harkhuf brings 300 donkeys laden with incense, ebony, panther skins, elephant tusks, and all kinds of other gifts, including the pigmy.

Sneferu also builds one ship of 100 cubits of meru, then one ship of 100 cubits of cedar and two ships of 100 cubits of meru each. These are comparable in size to the 43 m long ship buried with his successor Khufu.

And Sneferu builds two pyramids. Indeed, a third pyramid is attributed to him as well.

The tomb of Djer is 21 x 20 m.

One century later, the tomb of Qaa is 30 x 23 m.

One and a half centuries later, the tomb of Khasekhemwy is 70 x 17 m.

One half century later, the step pyramid of Djoser is 109 x 125 m, 62 m high.

Not quite one century later, the first pyramid of Sneferu is 187 x 123 m, 105 m high. The second is the first regular pyramid, 220 m square, 105 m high.

In the next generation, the pyramid of Khufu is 230 m square, 147 m high.

In the next generation, the pyramid of Khafre, aligned precisely with that of Khufu, is 215 m square, 136 m high.

In the next generation, the pyramid of Menkaure, aligned precisely with that of Khafre, is 105 x 102 m, 70 m high.

Herodotus reports: Khufu ordered workers to drag great stones from the quarries in the Arabian mountains on the far side of the Nile, and other workers to ferry the stones across the river and drag them again as far as the Libyan hills; they worked in gangs of 100 000 for three months each; they built the road on which they dragged the stones in 10 years, and this was a labor as great as the pyramid, I think; the pyramid itself they built in 20 years.

The pyramid of Khufu contains 2 300 000 blocks of stone of average weight 2.5 tons, and

up to 15 tons.

In 1798, while his officers climbed to the summits of the three pyramids in Giza, Napoleon sat in the shadow and calculated that the stone used in the three pyramids suffices to build a wall around France 1 ft wide 12 ft high. Monge corroborated the result.

If the population of the country was about two million, and they worked in gangs of 100 000 for three months each, in one gang worked one fifth of all able-bodied men in the country, and if the gangs rotated, in one year and three months in the gangs worked all able-bodied men in the country. That the pyramid was completed guarantees that the gangs cannot have been smaller than 25 000 each. If so, all able-bodied men in the country took five years to rotate in the gangs.

And so they did – from Sneferu through Khufu through Khafre through Menkaure – for one century.

The tombs are then small. They are yet diligently built, tomb after tomb after tomb.

And two centuries after Menkaure, Unas discovers that he is an indestructible spirit.

This development corresponds to a change in the inscriptions at Wadi Maghara. Earlier, the inscriptions are from:

Sneferu, great god;

Khufu, great god;

Sahure, great god;

Niuserre, great god.

After that the inscriptions are not from great gods. They are from:

Menkauhor, given life forever;

Djedkare, given life forever;

Pepi, given life forever;

Pepi II, given life forever.

Unas is the successor of Djedkare.

In heaven Unas goes to Re, and so do his successors. Re is the sun. It is at this time that Re begins to predominate among the gods.

After Pepi II, an indestructible spirit himself, the state falls apart.

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The two centuries from Pepi II to Mentuhotep.

The sources are the same, and have been presented above.

That the state falls apart is attested unambigu-

ously.

After Pepi II Manetho and the lists have Merenre II and Neterkare, but the monuments attest no such princes.

After that Manetho has five dynasties, two from Memphis, two from Heracleopolis, one from Thebes. Heracleopolis is in lower Egypt, south of Memphis, Thebes is in upper Egypt, south of Abydos. Manetho counts 151 princes in the five dynasties, and has the name of but 1 of the 151.

The Abydos prince list has 18 princes after Pepi II and before Mentuhotep, none corroborated by the monuments.

The Turin papyrus is fragmentary, and none of the few legible names is corroborated by the monuments.

The Saqqara prince list has no princes after Pepi II and before Mentuhotep.

The monuments are scanty, and such as they are attest the ruin of the state. A few otherwise unattested names are enclosed in royal cartouches. The tombs of three local rulers, all named Intef, have been unearthed. One of them styles himself: the lord of upper Egypt and lower Egypt (*id.*). The tomb of another local ruler, Ankhtifi, has been unearthed. Ankhtifi was, as he reports in his tomb inscription: the great chief of the district of Edfu (*id.*). Edfu is in upper Egypt, halfway between Abydos and the first cataract. Ankhtifi reports:

I found the land inundated, abandoned, under a rebel, a wretch;

I restored the wellbeing of the land;

I am the leader of men, never has there been one like me, never before was one like me born, never will one like me be born again (*id.*).

There are no important particulars from this time.

The disappearance of the state, the disappearance of the succession of the princes, in particular, entails the gravest chronological problem, the length of time separating Pepi II and Mentuhotep, the length of the first intermediate period.

On the grounds that the Abydos prince list counts 18 princes between Pepi II and Mentuhotep, that the Turin papyrus counts 955 years from the first prince to some time during the time of disorder, and that Manetho assigns to the five

dynasties he has for this time reigns ranging from 70 days to 409 years, two centuries can be postulated for the length of time separating Pepi II and Mentuhotep. There is also the analogy with the second intermediate period, which continued for two-odd centuries.

Mentuhotep then restores the state. And, consequently, Mentuhotep is attested massively by the lists and the monuments.

The state, then, did not acquire permanence. After seven and a half centuries of great stability, it fell apart. The princes did not build the state as firmly as they did their tombs.

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And the following conclusions can be drawn from the development of the state in the nine and a half centuries from Narmer to Mentuhotep.

First and foremost, the state is one. One, only one, and one, and only one, from Narmer to Pepi II, for seven and a half centuries.

It is a very fundamental fact, that the state is one.

The state begins with smiting.

And this is a very fundamental fact as well, that the state begins with smiting.

The state does not begin, with Aristotle, when several villages unite in a single community large enough to be more or less self-sufficient. Nor does it begin, with Hobbes, or Locke, or Rousseau, with a covenant, or a compact, or a contract.

There is the scorpion king earlier, and hence, presumably, there are other local rulers. Nevertheless, the state such as the state is in the following seven and a half centuries, and the state such as the state is in the following two and a half millennia, too, upper Egypt and lower Egypt, the land of Wadjet and the land of Nekhbet, under the prince who is Horus and Wadjet and Nekhbet, begins with the first prince who wears the crown of Wadjet and the crown of Nekhbet, holds an upraised mace in his right hand ready to smite his kneeling foe whose forelock he holds in his left hand, and marches in a procession with his retinue toward the corpses of his decapitated foes.

This prince is Narmer. Narmer has done the smiting.

The two facts, that the state is one and that it begins with smiting, depend on one another very

fundamentally, too.

As a result of the smiting the state extends not less than 520 km south to north, counting from Nekhen, in upper Egypt, where Narmer's palettes has been unearthed, to the site, in lower Egypt, on which the first princes will build Memphis. The human population of the entire country is some one and a half million. A most consequential smiting has to make one state out of this country.

The state begins with smiting, and hence unification.

It remains one state, and only one. Its unity is maintained for seven and a half centuries. Very few states have accomplished this feat.

And the foundation of this feat are the labors of the immediate successors of Narmer, of the seven princes after the first, and first and foremost the labors of the second prince, the third prince, and the fifth prince.

Aha, the second prince, is the prince back to whom can be traced the identification of the prince with Horus and Wadjet and Nekhbet.

Djer, the third prince, is the prince back to whom can be traced the following of Horus at the birth of Anubis, the festival of the two lakes, the following of Horus at the birth of Seth, the festival of Sokar at the house of the mighty gods, the appearance of the lord of upper Egypt at the birth of Ha, the festival of Desher at the house of the mighty gods.

Den, the fifth prince, is the prince back to whom can be traced the continuing following of Horus, the continuing appearance of the lord of upper Egypt and lower Egypt, the continuing festival of Sokar. Back to him can be traced also the journey to the temple of Ptah in Heka, the festival of Seth, the festival of Wadjet, the stretching of the cord at the great door by the priest of Seshat, the journey to the lake of Harsaphes, the journey to Sahseteni, the running of Apis, the birth of Seshat and Mafdet. Den also does much smiting – and he is for a long time the last prince to do much smiting. He smites the easterners, the . . . people, the troglodytes, and the Werka. The record of the level of the high Nile also begins under Den.

The orderly succession of Djer, Djet, Den, Anedjib, Semerkhet, and Qaa is attested by the complete agreement of the Abydos prince list,

Manetho, and the monuments. The Abydos prince list postdates Qaa by fifteen centuries. The excavation of the monuments, of the tombs of all six, in particular, Djer, Djet, Den, Anedjib, Semerkhet, and Qaa, postdates Qaa by forty-seven and a half centuries.

Their tombs become larger, too.

These princes have made the state firm. Their labors are the foundation of the continuing stability of the state. So that some of their successors do more than their predecessors have done, most of them do as their predecessors have done. So that the state sometimes does more than it has done, most of the time does as it has done.

A succession of eight princes affirming forcefully the unity of the state, over one and a half centuries, is, to begin with, a feat very few states have accomplished.

The major later developments are three.

The first is the counting.

It can be traced back to Ninetjer, two centuries after the beginning of the state. The year of the 3rd counting, the year of the 4th counting, the year of the 5th counting, and through the year of the 10th counting. And the counting continues in the five and a half centuries after Ninetjer. Under Khasekhemwy, the year of the 7th counting of the gold and the fields, the year of the 8th counting of the gold and the fields. Under Sneferu, the 2nd counting of the silver and lapis lazuli, the 7th counting. Under Pepi, the year after the 18th counting. Under Merenre, Weni does everything perfectly, he counts everything that is counted twice, Harhuf is the chief of counting.

The state develops some sophistication in the exercise of its authority, but not much sophistication. The domain of the state is divided into districts. The exercise of its authority is divided into offices. But the offices are not many. The machinery of the counting remains simple. And this is indicated strongly by the fact as well that counting is recorded for five and a half centuries, but what precisely has been counted is hardly ever recorded.

There is very little smiting.

Together, much counting and very little smiting, indicate the stability of the state and its firm unity. They indicate also the prosperity of the state.

The second major development is the vigor of the state in the one and a half-odd centuries from Huni to Sahure.

This is the time of the greatest and only definite smiting. Sneferu smites Libya and Nubia, and brings from Libya 1 100 men and 13 100 large and small cattle, from Nubia 4 000 men, 3 000 women, and 200 000 large and small cattle.

It is the time also when the state undertakes to fulfill greater needs. Under Sneferu 40 ships bring cedar. Under Sahure 6 000 measures of copper, 80 000 measures of myrrh, 6 000 of electrum, 2 900 of gold, 23 000 of . . . are brought.

This also indicates prosperity.

And it is the time most of all of the largest tombs.

Khasekhemwy has built the largest tomb.

Djoser has build a larger tomb.

Sneferu builds a larger tomb, and a larger one.

Khufu builds a larger tomb.

And if the tomb of Khafre is not larger, it is nearly as large, it is aligned precisely with the largest, and it is adorned with the sphinx.

The tombs indicate very strongly the great stability and firm unity of the state. They indicate very strongly also the great prosperity of the state.

Herodotus reports: the Egyptians have an account of how much was spent on radishes, onions, and garlic for the workers; the interpreter who read the book for me told me that 1 600 silver talents were spent; and if so much was spent on radishes, onions, and garlic, how much more was spent on the iron with which they worked, or on food and clothing for the workers?

In the time of Herodotus, twenty-one and a half centuries later, the annual income of the great king was 14 560 talents. From Egypt the great king collected 700 talents.

They worked in gangs of 100 000, Herodotus reports, and they cannot have worked in gangs smaller than 25 000.

Imhotep was the builder of Djoser's pyramid, Hemiunu was the builder of Khufu's pyramid.

And the largest tombs indicate also the most difficult problems which the state has solved.

The engineering problem of constructing the edifices of increasing size and complexity, the largest and most complex a regular pyramid 230

m square, 147 m high.

And, far the more difficult of the two, the logistical problem of organizing gangs of 100 000, and not less than 25 000, to the end of constructing the edifices of increasing size and complexity, including the procuring of 1 600 silver talents worth of radishes, onions, and garlic for the workers – never mind the iron with which they worked, and the food and clothing for the workers – and through the successful completion of the construction, one edifice after another after another after another, for not less than one century, Sneferu through Khufu through Khafre through Menkaure.

Then the vigor wanes.

The third major development is the ruin of the state.

And the more dramatic its ruin is in that the state, one, large, stable, has continued for seven and a half centuries. In that also that it is sudden. Continuing stability is indicated strongly through the last princes, Pepi, Merenre, Pepi II. Then suddenly the state is no more.

In general, all of the above, the beginning of the state, its subsequent firm establishment, its continuing unity, the continuing counting, the great vigor, always the tombs – and spectacularly the tombs built by gangs of 100 000, and not less than 25 000 – and the ruin of the state, too, all of this indicates strongly the identity of the prince and the state. The prince is the state and the state is the prince.

And it is a large state. It is large spatially. Its domain extends some 800 km north to south. The circumference of the earth is some 40 000 km. The state has brought under itself, and maintained under itself, one fiftieth of the circuit of the earth. It is larger in kind. The human population of the state is some one and a half million at the time of its beginning, some two and a half million seven and a half centuries later. The entire human population of the earth is some twenty million at the time of the beginning of the state, some thirty million seven and a half centuries later. The state has brought under itself, and maintained under itself, not less than one thirteenth of humanity. And it is yet larger temporally. It is fifty-odd centuries since Narmer. The seven and a half centuries from Narmer to Pepi II are nearly one

seventh of the entire development of the state.

What the state, in general, is, is substantially and essentially what the state from Narmer to Pepi II, in particular, is.

The development of the state has been the whole of which the fundamental parts have been the development of the law, the development of religion, and the development of custom.

And of the law there is nothing. There is no inkling of the law in the nine and a half centuries from Narmer to Mentuhotep. Not in the valley of the Nile.

There is religion. Very much so.

And two major steps in the development of religion are indicated.

There are the gods. The second, the third, and the fifth princes already attest Horus, Wadjet, Nekhbet, Anubis, Seth, Sokar, Ha, Desher, Ptah, Seshat, Apis, and Mafdet.

The prince celebrates the gods. The third and the fifth princes already attest the birth of Anubis, the birth of Seth, the festival of Sokar, the birth of Ha, the festival of Desher, the festival of Seth, the festival of Wadjet, the running of Apis, the birth of Seshat and Mafdet.

The prince builds the temples, and ministers to them. Again, the third and the fifth princes already attest the house of the mighty gods, the temple of Ptah in Heka, the house of the thrones of the gods, the great door of Seshat.

The priests are the officials of the prince. The priest of Seshat under Den. Imhotep is the high priest of Heliopolis. Weni is overseer of the priests, priests march in his army. Harkhuf is a priest, his father is the priest Iri.

The prince is himself a god. He is Horus. He is Wadjet and Nekhbet.

Sneferu, great god.

Khufu, great god.

Sahure, great god.

Niuserre, great god.

Niuserre is six-odd centuries after the beginning of the state.

First, then, in these centuries religion is inseparable from the state, from the prince, in particular. The prince celebrates the gods, he builds the temples and ministers to them, the priests are his officials, he is great god.

Then, in the last century-odd of the seven and

he gave birth to the gods,
 he made the towns,
 he divided the country,
 he put the gods in their temples,
 he set their offerings,
 he established their shrines,
 he made them bodies such as each wanted (*id.*).
 so were into him all the gods gathered and their
 spirits,
 and so united with the lord of the two lands (*id.*).

And to collect the development of history, and

geography, there is very little to collect.

The state continued in largely indefinite space. Inside, there is, from the first, the division of the domain of the state into upper Egypt and lower Egypt. Outside, there are, later on, Tjemeh, which is mostly Libya, more to the west, and Yam and Wawat, which are mostly Nubia, more to the south. And other than that, there is not the remotest inkling of description of the surface of the earth. At the end of the seven and a half centuries of development of the state, Weni leads an army. In particular, he leads the army: from the northern isle and the gate of Iyotep in the district of Horus lord of truth (*id.*). Where the northern isle is, or the gate of Iyotep, or the district of Horus lord of truth, nothing in Weni, or anywhere else, indicates. He leads the army: against the sand-dwellers. The sand-dwellers are where the sand-dwellers are. Harkhuf leads an expedition: to Yam, to open the path into that country. In particular, he goes: from Thinis down the oasis road to Tjemeh (*id.*). Thinis is somewhere in upper Egypt. Where the oasis road is nothing in Harkhuf, or anywhere else, indicates. To open the path into Yam, which later on is mostly Nubia, in the south, Harkhuf reaches Tjemeh, which later on is mostly Libya, more to the west. Harkhuf meets there: the lord of Irtjet, Setju, and Wawat (*id.*). Wawat is Nubia, where Irtjet is, or Setju, nothing indicates. The state remained surrounded, as it is from the first, by easterners, troglodytes, and sand-dwellers.

The inkling of history is substantially more definite, and with this first predecessor of the historians the list of the historians should begin, 2480

Palermo stone.

The Palermo stone has the record of the labors of 11 princes, in their temporal series, year by year. It has also the level of the high Nile.

The dependance of this first predecessor of the historians, and thus of the remotest beginning of history, on the development of the state is indicated unambiguously. Not only is the stone the record of the labors of the prince. The last prince on the stone is Neferirkare. The time of the great vigor of the state culminates in the Palermo stone. After that, the state continues in time as indefinite as space.

Finally, taking it for granted, here, that the building of the state is a theoretical problem,

irrespective of the fact of its practical ends, the labors of the princes of advancing the development of the state are steps of advance in the acquisition of knowledge.

The labors of these princes, in particular, are. Narmer, with whom the state begins.

Aha, back to whom the identification of the prince with Horus and Wadjet and Nekhbet can be traced.

Djer, back to whom the celebration of the gods can be traced. Vigorous celebration, too.

Den, back to whom the continuing celebration of the gods, expansion of the celebration, much smiting, and beginning of the record of the level of the high Nile can all be traced.

Ninetjer, back to whom the counting can be traced.

Khasekhemwy, back to whom the explicit counting can be traced. He also builds the largest tomb.

The princes who solve the engineering problem, and the more so the logistical problem, of employing the state to the end of building the largest and most complex edifices, and again, and again, and again.

Djoser. And his official Imhotep.

Sneferu. Who also does the greatest and only definite smiting.

Khufu. And his official Hemunu.

Khafre.

And one century after Khafre is the Palermo stone.

Assigning 3040 the year of birth of Narmer, and counting centuries from that year, the distribution is,

3040-2941	4,
2940-2841	—,
2840-2741	2,
2740-2641	2,
2640-2541	4,
2540-2441	1,
2440-2341	—,
2340-2241	—,
2240-2141	—,
2140-2041	—.

All in all, five and a half centuries of advance in the development of the state and the acquisition of knowledge. Then four centuries of neither.

The six and a half centuries from Enmebaragesi to Ibbi-Sin

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The dates are,

Enmebaragesi prince c. 2680,

Ibbi-Sin prince c. 2037-13.

The sources are the Sumerian prince list, the inscriptions of the princes, and the oldest chronicles.

There is also all the other contemporary writing.

This valley has been excavated as vigorously as the other as well, and there are here as there all the excavated monuments, temples, tombs, smaller artifacts.

The Sumerian prince list is history *par excellence*.

The inscriptions of the princes are many, explicit, and steadily more, and more explicit. Beginning with the 1 inscription of the first prince, Enmebaragesi, the inscriptions of his immediate successors are already steadily more. One and a half centuries after Enmebaragesi, beginning with Ur-Nanshe, Ur-Nanshe and his eight successors in Lagash have left behind 9 and a half dozen inscriptions. Two centuries after Ur-Nanshe, beginning with Sargon, Sargon and his four successors in Akkad have left behind more than 20 dozen inscriptions. Two-odd centuries after Sargon, beginning with Ur-Nammu, the inscriptions of Ur-Nammu and his four successors in Ur have to be counted in hundreds. The princes of Ur have left behind also the oldest archive, 23 official documents collected under Ibbi-Sin.

The oldest chronicles are three. *Gilgamesh and Aka* and the Tummal chronicle, from the time of the princes of Ur, and the Esagil chronicle, one and a half centuries later.

All the other contemporary writing is also voluminous.

The importance of the monuments in this valley is thus very small.

In the other valley, the propositions in the sources are few, the chains of inferences connecting the propositions are very few, the gaps in the chains of inferences are very wide. There is little

of the reference and the true. In this valley, the propositions in the sources are many, the chains of inferences connecting the propositions are steadily more, the gaps in the chains of inferences are steadily narrower. There is much of the reference and the true.

Analysis is propositions and chains of inferences aiming at the reference and the true.

And in the other valley, only a small fraction of the propositions and chains of inferences, which the analysis of the state, and of history – and of anything else – has to be, can be the propositions and chains of inferences of the sources. Analysis has to build much on little. In this valley, a substantial part of the propositions and chains of inferences, which the analysis of the state, and of history – and of anything else – has to be, can be the propositions and chains of inferences of the sources. Analysis has much to build on. In this valley, in general, the acquisition of knowledge has advanced very greatly, and in particular, the analysis of the state, and of history, has, in fact, begun.

The sources have been presented in detail above.

53 important particulars have been collected.

In this way.

First, there is the list, and there are 120 princes in the list.

Next, there are the inscriptions of the princes, attesting some 5 to 6 dozen more princes.

And given the list and the inscriptions of the princes, three kinds of princes can be distinguished. First, princes attested by the list and the inscriptions, both. Second, princes not attested by the list, but attested by the inscriptions each independently of himself, either by his own inscriptions and the inscriptions of other princes or by the inscriptions of other princes only. Third, princes attested each by his own inscriptions only.

Of the first kind, attested by the list and the inscriptions, both, there are 30 princes.

Of the second kind, not attested by the list, but attested by the inscriptions each independently of himself, either by his own inscriptions and the inscriptions of other princes or by the inscriptions of other princes only, there are 22 princes.

$30 + 22 = 52$.

Of the third kind, attested each by his own inscriptions only, there are 3 to 4 dozen princes, who can be assigned on paleographic grounds to the time before Ibbi-Sin. The evidence is in each case meager, a fragmentary inscription or two. Nor can of any of these princes be determined where exactly in the temporal and spatial series and order of the princes he belongs. Nor, consequently, can these princes be counted precisely. These princes are not important at all. And rather, given that there has to be a standard for what is a prince, what is not – minimally, for instance, to be attested by 1 other prince – none of these is, in fact, a prince.

Still 52.

Finally, there are the chronicles.

Gilgamesh and Aka attests 3 princes. All 3 are in the list. 1 has left his inscriptions behind.

The Tummal chronicle attests 11 princes through Ibbi-Sin. All 11 are in the list. 8 have left their inscriptions behind.

The Esagil chronicles attests 13 princes through Ibbi-Sin. All 13 are in the list. 9 have left their inscriptions behind.

There are thus 7 princes who, although not attested by the inscriptions, are attested by the agreement of the list and the chronicles.

$52 + 7 = 59$.

53 are important, 6 are not important.

Their dates have been fixed above explicitly.

The particulars indicate 12 important states.

The state appears in the valley of the Nile as one large state, and so it remains. The state appears in the valley of the two rivers as several small states. The states begin smiting one another. Under Ur-Nanshe and his successors Lagash first rises. The smiting continues. Sargon smites all other states, and under Sargon and his successors through Sharkalisharri there is for one and a half centuries in this valley as well the one and only one large state of Akkad. This state as well falls. Disorder is brief, however. Ur-Nammu restores order, and under Ur-Nammu and his successors the state of Ur is again the one and only one state in the valley. And the state of Ur is the time also of the first code of laws, of the Sumerian prince list and the oldest chronicles, and of very massive writing.

The six and a half centuries from Enmebaragesi to Ibbi-Sin can thus be divided into four

parts. The one and a half centuries from Enmebaragesi to Ur-Nanshe. The two centuries from Ur-Nanshe to Sargon. The one and a half centuries from Sargon to Sharkalisharri. And the one and a half centuries from Sharkalisharri to Ibbi-Sin.

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The one and a half centuries from Enmebaragesi to Ur-Nanshe.

And, to begin with, these are the facts showing that in this valley Enmebaragesi is, in fact, the first prince.

The Sumerian prince list begins:

when princship descended from heaven, it came to Kish;

Kish,

Gashur was prince, he reigned 1 200 years,

Kullassinabel, he reigned 900 years,

Nangishlishma, he reigned 670 years,

Endaraana, he reigned 420 years, 3 months, and $3 \frac{1}{2}$

days,

Babum, he reigned 300 years,

Puannum, he reigned 840 years,

Kalibum, he reigned 960 years,

Kalumum, he reigned 840 years,

Zuqaqip, he reigned 900 years,

Atab, he reigned 600 years,

Mashda, son of Atab, he reigned 840 years,

Arwium, son of Mashda, he reigned 720 years,

Etana, he was a shepherd, he went to heaven, he made all the lands firm, he reigned 1 500 years,

Balih, son of Etana, he reigned 400 years,

Enmenuna, he reigned 660 years,

Melamkish, son of Enmenuna, he reigned 900 years,

Barsalnuna, son of Enmenuna, he reigned 1 200 years,

Samug, son of Barsalnuna, he reigned 140 years,

Tizqar, son of Samug, he reigned 305 years,

Ilku, he reigned 900 years,

Iltasadum, he reigned 1 200 years,

Enmebaragesi, he smote Elam, he reigned 900 years,

Aka, son of Enmebaragesi, he reigned 625 years, 23 princes, they reigned 17 920 years, 3 months,

and $3\frac{1}{2}$ days.

All by itself this report of the list will not appear to be the report of facts.

Princeship descends from heaven to Kish.

These princes of Kish also reign an average of 780 years each.

But there is the independent evidence.

And, on the one hand, of these princes of Kish the best attested independently is Etana, he was a shepherd, he went to heaven, and Etana is attested independently, as far as facts are concerned, with nothing good.

The Akkadian composition *Etana*, five centuries after the list, reports: the gods build a city for men, the greater gods directing the work, the lesser gods doing it; they choose Etana to be the prince of the city; but Etana has no heir; in the meantime, an eagle and a serpent swear to their brotherhood; but the eagle devours the children of the serpent; to punish the perfidy, the gods throw the eagle into a pit to die of hunger; Etana saves the eagle; he mounts the eagle, and flies to heaven in search of the plant that will give him an heir.

On the other hand, 5 705 years after Etana, Enmebaragesi, he smote Elam, and Enmebaragesi is also attested independently.

Gilgamesh and Aka reports: the envoys of Aka, son of Enmebaragesi, came from Kish to Gilgamesh in Uruk.

The Tummal chronicle reports: Enmebaragesi, prince of Kish, built the Irinanam, the temple of Enlil; Aka, son of Enmebaragesi, made the Tummal preeminent.

The Esagil chronicle reports: . . . Aka, son of Enmebaragesi . . .

And in 1959 Edzard published the inscription IM 30590. On a potsherd, the inscription reports: Enmebaragesi, prince of Kish.

The list reports facts. Enmebaragesi, he was the prince of Kish.

The list continues:

Kish was smitten, princeship was taken to Uruk; Uruk,

Meskiaggasher, son of Utu, he reigned 324 years, he went into the sea and came out in the mountains,

Enmerkar, son of Meskiaggasher, he built Uruk,

he reigned 420 years,

divine Lugalbanda, he was a shepherd, he reigned 1 200 years,

divine Dumuzi, he was a fisherman, his city was Kuara, he reigned 100 years,

divine Gilgamesh, his father was a ghost, he was the lord of Kulaba, he reigned 126 years,

Ur-Nungal, son of divine Gilgamesh, he reigned 30 years,

Utukkalama, son of Ur-Nungal, he reigned 15 years,

Labashir, he reigned 9 years,

Enundarana, he reigned 8 years,

Meshe, he was a smith, he reigned 36 years,

Melamana, he reigned 6 years,

Lugalkigin, he reigned 36 years,

12 princes, they reigned 2 309 years.

Princeship does not descend from heaven any longer. Princeship is taken by smiting from Kish to Uruk.

The length of the reigns has decreased dramatically. The average of the reigns of these princes of Uruk is less than 200 years.

And these princes are attested independently as well.

On the one hand, the second best attested independently is Dumuzi, he was a fisherman, and he is attested with nothing good.

The series of compositions about Inanna and Dumuzi, contemporary with the list, reports: Dumuzi, the shepherd, courts Inanna, the lady of the sky; he marries her; but Inanna is the lady of love and war, her older sister Ereshkigal is the lady of death and the netherworld, and the two are bitter enemies; Inanna wants to be the lady of the netherworld as well; she descends there; Ereshkigal outwits her younger sister and turns her into a corpse; but Inanna has asked Enki, the lord of wisdom, to help her if she does not return; the lord of wisdom revives the lady of love and war; but she cannot leave the netherworld unless someone else takes her place; she offers Dumuzi, who is now the prince of Uruk; and demons drag the recalcitrant prince of Uruk to the netherworld.

The best attested independently is Gilgamesh. And, on the one hand, the same hand still, the five compositions comprising the Sumerian *Gilgamesh* are contemporary with the list, too, and in four of them Gilgamesh battles the guard-

ian of the forest of cedar, battles the bull of heaven, descends to the netherworld, and dies. Along the way he encounters Inanna and Ereshkigal as well as Dumuzi. Later on, these four compositions were assimilated into the Akkadian *Gilgamesh*.

On the other hand, in the fifth composition, the one which was not assimilated into the later Akkadian *Gilgamesh*, Gilgamesh encounters no divinities, battles no monsters, does not descend to the netherworld, and is very much alive.

Gilgamesh and Aka reports: the envoys of Aka, son of Enmebaragesi, came from Kish to Gilgamesh in Uruk; the envoys of Aka told Gilgamesh, submit; the old men of Uruk told Gilgamesh, let us submit; the young men of Uruk told Gilgamesh, let us wage war; Gilgamesh told Enkidu, ready the arms; Aka laid siege to Uruk; Gilgamesh climbed the walls of Uruk; myriad fell; Aka submitted; Gilgamesh let Aka go free back to Kish.

And the Tummal chronicle reports: Gilgamesh, prince of Uruk, built the Dunumunbura, the temple of Enlil; Ur-Nungal, son of Gilgamesh, made the Tummal preeminent.

And the list continues:

Uruk was smitten, princeship was taken to Ur;
Ur,
Mesanepada, he reigned 80 years,
Meskiagnuna, son of Mesanepada, he reigned 36 years,
Elili, he reigned 25 years,
Balulu, he reigned 36 years,
4 princes, they reigned 177 years.

Princeship is again taken by smiting from Uruk to Ur. Smiting is becoming the uniform means of acquiring princeship.

The length of the reigns has decreased catastrophically. The average of the reigns of these princes of Ur is 44 years.

The Tummal chronicle also reports: Mesanepada, prince of Ur, built the Burshushua, the temple of Enlil; Meskiagnuna, son of Mesanepada, made the Tummal preeminent.

Mesanepada has also left behind 3 inscriptions, Meskiagnuna has left behind 1 inscription, Elili has left behind 1 inscription.

The list attests spectacularly the striving for truth which forces us to advance from the thought

and the sense to the reference and the true. Princeship descends from heaven at first, then it is taken from one city to another uniformly by smiting. The average of the reigns of the princes decreases from 780 years to less than 200 years to 44 years. The inscriptions of the princes increasingly corroborate the list. The list reports facts. Reaching six and a half centuries into its past, back to Enmebaragesi, prince of Kish, the first prince.

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In the first one and a half centuries of the development of the state in the valley of the two rivers, then, the particulars are 8, 3 princes of Kish, 2 princes of Uruk, and 3 princes of Ur.

Kish.

The particulars are 3,

Enmebaragesi prince c. 2680,

Aka prince c. 2650,

Mesalim prince c. 2555.

It is not a continuous series. There are no important princes of Kish in the one century between Aka and Mesalim, and again in the one and a half centuries after Mesalim.

The city of Kish is in the lower valley, close to the Euphrates.

And the facts are at first but a few.

The inscription reports: Enmebaragesi, prince of Kish.

The list reports: Enmebaragesi, he smote Elam.

The valley of the two rivers is bounded in the east by the Zagros range, rising to a height of 4.4 km. Elam is the country at the foot of the Zagros in the south, close to the Persian Gulf.

And the Tummal chronicle reports: Enmebaragesi, prince of Kish, built the Irinam, the temple of Enlil.

The city of Nippur is 70 km southeast of Kish. The Tummal is the district of Nippur where the temple of Enlil is.

Next, the list reports: Aka, son of Enmebaragesi.

Gilgamesh and Aka reports: the envoys of Aka, son of Enmebaragesi, came from Kish to Gilgamesh in Uruk, they told Gilgamesh, submit, Gilgamesh did not submit, Aka laid siege to Uruk, myriad fell, Aka submitted.

And the Tummal chronicle reports: Aka, son of Enmebaragesi, made the Tummal preeminent.

The state begins with Kish. And that the state begins with Kish is indicated also by the fact that the successors of the first princes in the following millennium will style themselves: prince of Kish, when they are the princes of Kish and when they are not, when they rule Kish and when they do not.

The state begins with smiting. And so it will continue.

The state begins also with building temples of the gods. And so it will also continue.

But there are no important princes of Kish in the one century after Aka. The 6 princes of Kish after Aka in the list have left no other trace behind.

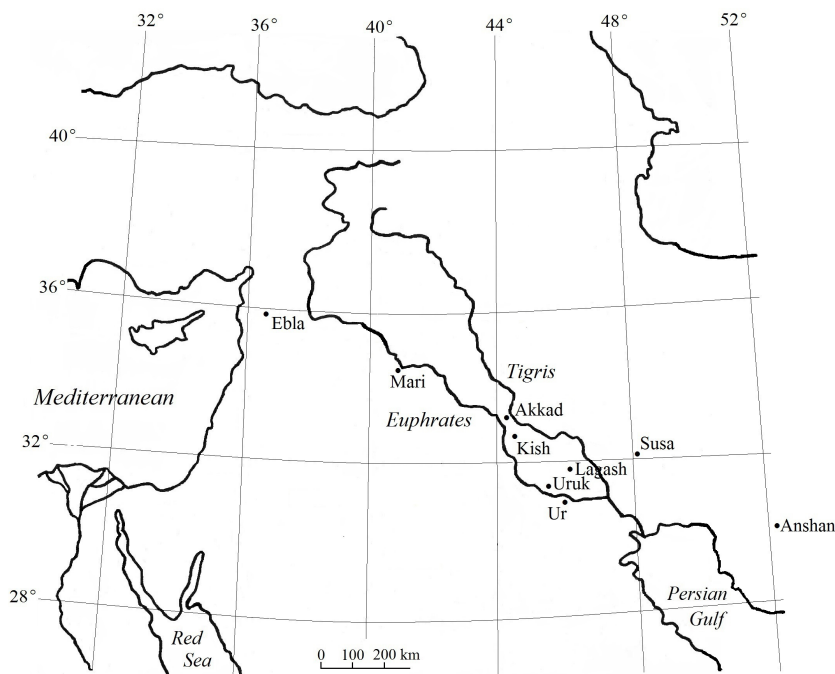
It can be concluded that, because Kish does not rise, in the century after the first prince independent princes establish themselves in the nearby cities. In Uruk, then also in Ur. Conversely, that independent princes establish themselves in the nearby cities can explain the fact that there are no important princes of Kish in the one century after Aka. This is corroborated also by *Gilgamesh and Aka*.

Next, one century after Aka, Mesalim is not in the list. Mesalim, however, has left behind 3 inscriptions. And the facts are now more. Mesalim is attested forcefully.

1 inscription is on a macehead:

Mesalim, prince of Kish, built the temple of Ningirsu, for Ningirsu; Lugalshaengur, governor of Lagash (ins. 1).

The other 2 inscriptions are on bowls:



Lambert conic equal area projection. The coastline and the course of the two rivers are again those of today.

Mesalim, prince of Kish, celebrated the rite;

Ninkisalsi, governor of Adab (ins. 2).

Mesalim, prince of Kish, beloved son of Ninhursag (ins. 3).

Mesalim is the first prince whose inscriptions record 3 cities.

Lagash is 210 km southeast of Kish, Adab is 120 km southeast of Kish, halfway between Kish and Lagash.

And one century later, when Lagash has risen greatly, Enmetena, prince of Lagash, tracing the quarrel of Lagash with Umma back to its beginning, reports:

Enlil, father of the gods, drew the border between Lagash and Umma; Mesalim, prince of Kish, measured the border and set up a monument there (ins. 1).

Umma is 50 km northwest of Lagash, between Kish and Lagash.

Mesalim, then, like his predecessors, builds temples of the gods.

Mesalim, however, also appoints governor of Lagash and governor of Adab. He also fixes the border between Lagash and Umma.

It is the first report of one city dominating other cities. Under Mesalim Kish is the dominant state in the valley.

But then there are no important princes of Kish for one and a half centuries.

Uruk.

The particulars are 2,

Gilgamesh prince c. 2650,

Ur-Nungal prince c. 2620.

After Ur-Nungal there are no important princes of Uruk for one and a half centuries.

The city of Uruk is also on the Euphrates, 170 km southeast of Kish.

The facts are again but a few.

The list reports: Gilgamesh, he was the lord of Kulaba.

Kulaba is a district of Uruk.

Gilgamesh and Aka reports: Aka told Gilgamesh, submit, the old men of Uruk told Gilgamesh, let us submit, the young men told him, let us wage war, Gilgamesh told Enkidu, ready the arms, Aka laid siege to Uruk, myriad fell, Aka submitted.

And the Tummal chronicle reports: Gilgamesh, prince of Uruk, built the Dunumunbura, the temple of Enlil.

Next, the list reports: Ur-Nungal, son of Gilgamesh.

And the Tummal chronicle reports: Ur-Nungal, son of Gilgamesh, made the Tummal preeminent.

The report of *Gilgamesh and Aka* is consistent with the list: Kish was smitten, princeship was taken to Uruk.

And that the princes of Uruk build temples in the Tummal, in Nippur, where the princes of Kish first build temples, is consistent with the fact that the city of Nippur will never become a state of its own, it will remain a cluster of temples, contested by the states in the valley.

Then there are no important princes of Uruk for one and a half centuries.

Kish does not rise, and Uruk does not rise.

Ur.

The particulars are 3,

Meskalamdug prince c. 2600,

Mesanepada prince c. 2570,

Aanepada prince c. 2540.

And there are important princes of Ur for three

generations after Aanepada as well.

The facts are thus also more.

The city of Ur is also on the Euphrates, 60 km southeast of Uruk. Four and a half millennia ago the city was also close to the Persian Gulf, today its site is some 250 km inland as the two rivers have continued to silt the gulf.

The list has Mesanepada.

The Tummal chronicle reports: Mesanepada, prince of Ur, built the Burshushua, the temple of Enlil.

But the inscriptions are now 10. Meskalamdug has left behind 1 inscription, Mesanepada has left behind 3 inscriptions, Aanepada has left behind 6 inscriptions.

The inscriptions are on seals and bowls.

Meskalamdug reports:

Meskalamdug, prince . . .

Mesanepada reports:

for Lugalkalama, Mesanepada, prince of Ur, son of Meskalamdug, prince of Kish (ins. 1).

His 2 other inscriptions attest his consort:

Ninbanda, wife of Mesanepada (ins. 2-3)

Aanepada reports:

for Ninhursag, Aanepada, prince of Ur, son of Mesanepada, prince of Ur, built the temple of

Ninhursag (ins. 3).

His 5 other inscriptions, more fragmentary, are also votive.

Thus, for smiting the evidence is only that of the list: Uruk was smitten, princeship was taken to Ur.

The building of temples is indicated more strongly.

And why Mesanepada, prince of Ur, is the son of Meskalamdug, prince of Kish, is not clear. The smiting of Kish by Ur can be inferred. It can also be inferred that the first prince of Ur first styles himself: prince of Kish.

Either way, Mesanepada's is the first inscription recording 2 cities. His is the first inscription also recording a predecessor of his.

Aanepada's is the first inscription recording a predecessor of his who has himself recorded a predecessor of his. His is the first inscription also recording 2 princes of the same city.

At the same time Mesalim's are the first inscriptions recording 3 cities.

In general, these inferences from experience,

connected in chains of inferences, too, are the first recorded inferences from experience, and the first recorded chains of inferences.

Adam cannot have inferred from the fluidity and transparency of water that it will suffocate him, or from the light and warmth of fire that it will consume him. If Adam was the first man but not the first animal, however, his ancestors could have yet taught him that water will suffocate him and fire will consume him. If there were no princes among earlier organisms, including men, nothing but his own experience could teach the first prince that he is a prince. If Enmebaragesi is the first prince, he discovered that: Enmebaragesi, prince of Kish. And not only is: Enmebaragesi, prince of Kish, an inference from experience. How difficult an inference from experience it is the fact shows that, six and a half centuries after the first prince, the list will infer: princeship descended from heaven. Five centuries later still, *Etana* will infer: the gods built a city for men, the greater gods directing the work, the lesser gods doing it, and they chose Etana to be the prince. Two millennia later still, the philosophers will infer that the state begins with a covenant, or a compact, or a contract.

Mesaneпада has brought propositions in connection with one another in a chain of inferences. And how difficult it is to bring in connection with one another these propositions the fact shows that in the four and a half millennia since princes have continued to propose to be the princes of states of which other princes propose to be the princes. The king of England, for one, styled himself: king of France, in the eighteenth Christian century still.

And when Aanepada affirms: Aanepada, prince of Ur, son of Mesaneпада, prince of Ur, the propositions are brought in connection with one another in a chain of inferences with perfect clarity and distinction.

Thus, the fact that there are princes is established explicitly.

Mesaneпада records 2 cities, attesting the first inkling of spacial relations.

He records also a predecessor of his, attesting also the first inkling of temporal relations.

Mesalim records 3 cities.

Aanepada records a predecessor of his who

himself records a predecessor of his. He records also 2 princes of the same city. It is the first inkling that the state is a series of princes.

The state, then, begins with Kish. Then there is also Uruk. Then there is also Ur. Three states have appeared within three generations of the first prince, within 230 km of one another.

The princes smite one another. Still not very vigorously.

They build temples of the gods. This more vigorously. Temples of Enlil, Lugalkalama, Ningirsu, Ninhursag. The temple of Enlil is in Nipur, halfway between Kish and Uruk.

Development is also indicated by the accumulation of the inscriptions of the princes. Three generations separate Enmebaragesi and Meskalamdug, the oldest inscription and the next. One generation then separates the 1 inscription of Meskalamdug and the 3 inscriptions of Mesanepada. From this time are also the 3 inscriptions of Mesalim. And one generation separates the 3 inscriptions of Mesanepada and the 6 inscriptions of Aanepada. The accumulation has accelerated, too.

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The two centuries from Ur-Nanshe to Sargon.

The important particulars are 24. Included in the enumerations below are also 3 not important.

And the particulars indicate 6 important states. Kish, Uruk, and Ur continue. But Lagash rises. Umma and Akshak also join the smiting, and the smiting is very much more vigorous now.

Unlike the other 5, the city of Akshak has not been unearthed. It was not far from Kish. The other 5 are all in the quadrilateral with vertices at Kish, Uruk, Ur, and Lagash, 170 km from Kish to Uruk, 60 km from Uruk to Ur, 60 km from Ur to Lagash, 210 km from Lagash to Kish.

Lagash.

The particulars are 9,

Ur-Nanshe	prince c. 2535,
Akurgal	prince c. 2505,
Eanatum	prince c. 2475,
Enanatum	prince c. 2470,
Enmetena	prince c. 2440,
Enanatum II	prince c. 2410,
Enentarzi	prince c. 2390,
Lugalanda	prince c. 2360,

Urukagina prince c. 2340.

The list does not have Lagash. Ur-Nanshe predates the list by four and a half centuries, Urukagina predates it by two and a half centuries. It is the one major error of the list, that it failed to recover Lagash.

The 9 princes of Lagash, however, have left behind between them 110+ inscriptions.

Ur-Nanshe has left behind 30+.

In all inscriptions Ur-Nanshe describes himself:

Ur-Nanshe, prince of Lagash, son of Gunidu (*id.*).

Mesalim, prince of Kish, has appointed governor of Lagash. Gunidu is not prince of Lagash. Ur-Nanshe is prince of Lagash.

Ur-Nanshe is the first prince of Lagash.

In 4 inscriptions Ur-Nanshe lists his sons and daughters (ins. 2-5), in all of them Akurgal, who will succeed him.

All inscriptions report building. Ur-Nanshe has built: the temple of Ningirsu (ins. 2), the temple of Nanshe (*id.*), the temple of Gutamdug (ins. 6), the temple of Ninmarki (*id.*), the temple of Tirash (ins. 26). He has built many shrines and sanctuaries. He has fashioned many statues of the gods.

He has built walls and he has dug canals (ins. 6, 9, 17).

1 inscription reports:

Ur-Nanshe, prince of Lagash, son of Gunidu; he went to war against the prince of Ur and the prince of Umma;

he vanquished the prince of Ur; he made burial mounds for them;

he vanquished the prince of Umma; he made burial mounds for them (ins. 6).

It is the first report of victories. Over Ur, 60 km away, and Umma, 50 km away.

And 6 inscriptions report:

Ur-Nanshe, prince of Lagash, son of Gunidu; he had ships of Dilmun bring timber (ins. 2, 5, 17, 20, 22-3).

Dilmun is somewhere in the Persian Gulf. Where exactly is not clear.

Ur-Nanshe's are the first inscriptions recording victories. And the first inscriptions recording 4 localities, Lagash, Ur, Umma, and Dilmun.

Next, Akurgal has left behind fewer inscriptions. But he is the first prince attested by a

succession of 4 princes.

His predecessor reports:

Ur-Nanshe, prince of Lagash, Akurgal, his son (ins. 2).

Akurgal reports:

Akurgal, prince of Lagash, son of Ur-Nanshe, prince of Lagash (ins. 1)

His successor Eanatum reports:

Eanatum, prince of Lagash, son of Akurgal, prince of Lagash, son of Ur-Nanshe, prince of Lagash (ins. 1).

And his successor's successor Eanatum reports:

Eanatum, prince of Lagash, son of Akurgal, prince of Lagash, brother of Eanatum, prince of Lagash (ins. 5).

Next, Eanatum has left behind 15+ inscriptions.

Like his predecessors, Eanatum reports building. Temples. Shrines and sanctuaries. Statues. Walls and canals.

Unlike his predecessors, Eanatum reports in all his inscriptions smiting. And major smiting. This is Eanatum's most comprehensive description of the smiting:

Eanatum, prince of Lagash, raised by Enlil, given strength by Ningirsu, chosen by Nanshe, nursed by Ninhursag, loved by Inanna, given wisdom by Enki, beloved of Dumuziabzu, trusted by Hendursaga, beloved of Lugalurub, son of Akurgal, prince of Lagash;

Eanatum vanquished Elam, the great mountain, made burial mounds for them;

he vanquished the ruler of Urua, made burial mounds for them;

he vanquished Umma, made 20 burial mounds for them;

he vanquished Uruk, he vanquished Ur, he vanquished Kiutu;

he sacked Uruaz and killed its ruler;

he sacked Mishime and destroyed Arua;

all foreign lands trembled before Eanatum, the chosen of Ningirsu;

the prince of Akshak attacked him, Eanatum vanquished Zuzu, prince of Akshak, and destroyed Akshak;

Eanatum, prince of Lagash, Ningirsu favored him, and because Inanna loved him, she gave him the princesship of Kish next to the lordship

over Lagash;

Elam trembled before him, Kish trembled before him, he vanquished the prince of Akshak, he subdued the foreign lands, he vanquished Elam, Subartu, and Urua, he vanquished Kish, Akshak, and Mari;

Eanatum, son of Akurgal, prince of Lagash, grandson of Ur-Nanshe, prince of Lagash (ins. 5).

9 other inscriptions describe parts of the smiting (ins. 1-4, 6-10). 4 of these describe in greater detail the smiting inflicted on Umma and the tribute imposed on it (ins. 1-4). The most detailed of these is the stele of the vultures (ins. 1), adorned with the depiction of vultures hovering over the corpses of Eanatum's foes.

Next to the 14 localities above, Eanatum records Susa and Sumer (ins. 1), for a total of 16, 4 times the greatest number recorded before him, by his predecessor's predecessor Ur-Nanshe.

Of some of the localities it is not clear where exactly they are, of others it is. Eanatum first records Mari, he first records Susa, and it is clear where both Mari and Susa are. Mari is upstream on the Euphrates, 620 km northwest of Lagash. Susa is across the Tigris, in Elam, the great mountain, 200 km northeast of Lagash. 730 km from Mari to Susa along the great circle.

His predecessor's predecessor Ur-Nanshe has campaigned from Lagash to Ur, 60 km away. Eanatum has campaigned more than ten times further.

And that Eanatum's is an attempt to smite all cities and all lands is not only indicated by the number of cities and lands he vanquished. Eanatum is explicit: all foreign lands trembled before Eanatum. And: he subdued the foreign lands.

Moreover: Inanna gave Eanatum the principality of Kish next to the lordship over Lagash. Eanatum's is the first attempt to bring all states under one prince, all states under one state.

The princes have been building the temples of the gods, fashioning their statues. And the gods are now reciprocating. Eanatum, raised by Enlil, given strength by Ningirsu, chosen by Nanshe, nursed by Ninhursag, loved by Inanna, given wisdom by Enki, beloved of Dumuziabzu, trusted by Hendursaga, beloved of Lugalurub.

And Inanna gave Eanatum the principality of

Kish next to the lordship over Lagash.

And Eanatum is the first prince to affirm explicitly: Enlil, lord of heaven and earth (ins. 1).

It can be concluded that as Enlil is the lord of heaven and earth, so all lands trembled before Eanatum. Or the other way around, as all lands trembled before Eanatum, so Enlil is the lord of heaven and earth.

Next, Enanatum has left behind 20+ inscriptions.

As Eanatum, so Enanatum:

Enanatum, prince of Lagash, raised by Enlil, given strength by Ningirsu, chosen by Nanshe, nursed by Ninhursag, loved by Inanna, given wisdom by Enki, beloved of Dumuziabzu, trusted by Hendursaga, beloved of Lugalurub, son of Akurgal, prince of Lagash, brother of Eanatum, prince of Lagash (ins. 2).

And:

Enanatum subdued the foreign lands (ins. 4); Lugalurub put all foreign lands under his rule (ins. 9);

Ningirsu put all foreign lands under his rule (ins. 11).

Eanatum has campaigned from Mari to Elam, and has reduced neighboring Umma to tribute. But Enanatum has to smite Umma again. He reports:

Enlil gave Umma to Ningirsu, and Ningirsu gave Umma to Enanatum;

but Ur-Luma, prince of Umma, crossed the border, and said, this land is mine;

Ningirsu was angry; he said, Ur-Luma must not transgress against Enanatum;

Enanatum beat Ur-Luma back to the border and . . . (ins. 2).

All his inscriptions as well report building.

Next, Enmetena has left behind 25+ inscriptions.

As his predecessors, so Enmetena:

Enmetena, prince of Lagash, raised by Enlil, nursed by Ninhursag, chosen by Nanshe, given strength by Ningirsu, beloved of Lugalurub, son of Enanatum, prince of Lagash (ins. 26).

And Enmetena attests the continuing dominion of Lagash over the neighboring cities:

Ningirsu put the foreign lands under Enmetena; Enmetena restored the men of Uruk, Larsa, and Badtibira to their cities (ins. 4).

Larsa and Badtibira are both halfway between Lagash and Uruk.

But Enmetena attests also that Uruk is now the equal of Lagash:

Enmetena, prince of Lagash, and Lugalkigine-dudu, prince of Uruk, swore to their brotherhood (ins. 3).

And Umma will not relent. Enmetena thus proposes to inform posterity of the entire difficulty, tracing it back to its beginning:

Enlil, lord of all lands, father of the gods, drew the border between Lagash and Umma; Mesalim, prince of Kish, measured the border and set up a monument there;

Ush, prince of Umma, smashed the monument and marched into the plain of Lagash; Lagash defeated Umma, made burial mounds for it;

Eanatum, prince of Lagash, uncle of Enmetena, marked the border with Enakale, prince of Umma; he restored the monument of Mesalim and did not march into the plain of Umma; Umma had to pay 8 640 000 guru of barley;

but Umma will not pay; Ur-Luma, prince of Umma, diverted the water, set fire to the monuments, brought foreigners in the land; Enanatum, prince of Lagash, made war on Ur-Luma;

Enmetena, son of Enanatum, defeated Ur-Luma; Ur-Luma was killed; Enmetena made 5 burial mounds for Umma;

Il took the principship of Umma; he diverted the water; Enmetena, prince of Lagash, sent envoys to Il, prince of Umma; he said, the border is mine; and he set up the monument (ins. 1).

In this one inscription Enmetena informs posterity of the labors of 8 princes of 3 cities across 3 generations. It is the first inkling of history.

Also, one century after Ur-Nanshe, Enmetena repeatedly styles himself:

Enmetena, descendant of Ur-Nanshe (ins. 5a, 12, 17).

Enmetena as well first affirms explicitly: Enlil, lord of all lands, father of the gods. The lord of all lands is the father of the gods. Dominion and descent depend on one another.

It can be concluded that as the lord of all lands is the father of the gods, so Enmetena is the descendant of Ur-Nanshe. Or the other way

around, as Enmetena is the descendant of Ur-Nanshe, so the lord of all lands is the father of the gods.

All inscriptions of Enmetena as well report building. One canal requires: 648 000 bricks (ins. 26).

Ur-Nanshe, Akurgal, Eanatum, Enanatum, and Enmetena are the first, in this valley, continuous series of five very important princes, all five attested forcefully, two of the five, Ur-Nanshe, the founder, and Eanatum, the warrior, attested very forcefully.

Lagash is thus the first firmly established state.

It is the first state to rise. The first state to expand. And the first to record 16 localities.

The first state to continue forcefully for one century. And the first to record its roots and its continuity.

Under Eanatum Lagash has also for the first time unified the valley by that tightest of bonds, smiting, across 730 km.

After Enmetena Lagash declines. Enanatum II, Enentarzi, and Lugaland have accordingly left behind fewer inscriptions. But Lagash continues.

And next, Urukagina has left behind 10+ inscriptions.

He also reports building. One canal requires: 432 000 bricks (ins. 8).

And Lagash is now the object of smiting. Urukagina reports:

the prince of Umma sacked Lagash; Urukagina, prince of Lagash, did not transgress; Lugalzagesi, prince of Umma, bears the guilt (ins. 5).

But 3 of Urukagina's inscriptions are also the first inscriptions concerned with laws.

Urukagina reports:

since time began, since life began, in the old days, the chief boatman took the boats, the chief herdsman took the asses and the sheep, . . . ;

the priests paid grain;

the shepherds paid silver for the sheep, the overseers paid silver for the lambs;

when a corpse was brought for burial, they took 7 jugs of beer, 240 loaves of bread;

the fields of the women and the children were all crowded together;

that is how it was from the border to the sea;

when they dug a well, they took for the well,
when they built a canal, they took for the canal;

that is how it was in the old days;

but when Ningirsu gave the princship of Lagash to Urukagina, choosing him among the myriads, Urukagina, on the order of Ningirsu, his master, changed the old ways;

he stopped the chief boatman from taking the boats, he stopped the chief herdsman from taking the asses and the sheep;

he stopped the overseer from taking the grain of the priests;

he installed Ningirsu over the fields, he installed Bau and Shulshagana over the fields of the women and the children;

when a corpse is brought for burial, they shall take 3 jugs of beer, 80 loaves of bread;

when a good ass is born to the weak, and the strong says, I want to buy it from you, and the weak says, pay me the price I want, the strong shall not strike him;

when the house of the strong is next to the house of the weak, and the strong says, I want to buy it from you, and the weak says, pay me the price I want, the strong shall not strike him;

this is what Urukagina said;

he cleared the debt of the debtors, for grain, for barley, for theft, for murder;

and Urukagina promised Ningirsu that he shall never let the strong take the widow and the orphan (ins. 1).

2 more inscriptions copy the laws (ins. 2-3). Promulgating them.

The beginning of the law cannot have been indicated more clearly and distinctly.

Since time began, since life began, that is how it was. That is how it was also not only from the border to the sea. That is how it was beyond the border and beyond the sea, too.

But Urukagina changed the old ways.

He stopped the chief boatman from taking the boats, he stopped the chief herdsman from taking the asses and the sheep, he stopped the overseer from taking the grain of the priests, he installed Bau and Shulshagana over the fields of the women and the children, he cancelled the debt of the debtors. They took 7 jugs of beer, 240 loaves of bread. They shall take 3 jugs of beer, 80 loaves

of bread. When the strong wants to buy the good ass of the weak, he shall not strike him. When he wants to buy his house, he shall not strike him. He shall not take the widow and the orphan either.

Nor can the law have begun more propitiously. As, forty-three and a half centuries later, the strong is yet to begin abiding by the law as diligently as the weak.

The state begins before Lagash. Lagash is yet – from Ur-Nanshe, the founder, through Eanatum, the warrior, through Enmetena, the keeper of the record, through Urukagina, the lawgiver – Lagash is the first state *par excellence*.

Urukagina is in the generation before Sargon. Sargon builds Akkad. And then the state of Lagash is no more.

Umma.

The particulars are 6, the 5 important on the left, 1 not important on the right.

Ush prince c. 2495,

Enakale prince c. 2475,

Ur-Luma prince c. 2445,

Il prince c. 2415,

Gishakidu prince c. 2395,

Uu prince c. 2370.

Umma is the other important state which the list failed to recover.

Ur-Luma, Il, and Gishakidu have left behind 1 or 2 inscriptions each.

The princes of Lagash attest more forcefully the princes of Umma.

Ur-Nanshe vanquished the prince of Umma, he made burial mounds for them.

Eanatum vanquished Umma, he made 20 burial mounds for them.

Enmetena defeated Ur-Luma, he made 5 burial mounds for Umma.

But the princes of Umma will not relent.

Ush smashed the monument, and marched into the plain of Lagash.

Ur-Luma crossed the border, and said, this land is mine.

Il diverted the water.

Umma does not relent for one century.

Umma, next to Lagash, is the state that has made smiting the way of the states in the valley.

And smiting becomes the way of the states in the valley.

In the first of the two centuries from Ur-Nanshe to Sargon, the reports of smiting are of the smiting of the princes of Lagash, and the princes of Umma. In the next century, the reports of smiting are of the smiting of the princes of all states.

And, hence, the princes most successful in the smiting are not princes of just one city any longer.

Thus, the prince who sacks Lagash, Urukagina reports, is: Lugalzagesi, prince of Umma. Lugalzagesi, however, describes himself: Lugalzagesi, prince of Uruk, son of Uu, prince of Umma (ins. 1). Uu is prince of Umma. Lugalzagesi is prince of Umma and prince of Uruk. Lugalzagesi describes himself also: Lugalzagesi, prince of Uruk and prince of Ur (ins. 2). Lugalzagesi is prince of Umma and prince of Uruk and prince of Ur.

But Lugalzagesi is in the same generation, the one before Sargon. Sargon builds Akkad. And then the states of Umma and of Uruk and of Ur are no more either.

Akshak.

The particulars are 2,

Zuzu prince c. 2475,

Puzur-Nirah prince c. 2420.

Akshak is in the list.

But no prince of Akshak has left inscriptions behind.

Zuzu is attested by Eanatum: Eanatum vanquished Zuzu, prince of Akshak, and destroyed Akshak.

Puzur-Nirah is in the list, and attested also by the Esagil chronicle.

Akshak is barely important.

Kish.

The particulars are 4, 3 important, 1 not important,

Enbi-Eshtar prince c. 2460,

Ku-Baba prince c. 2400,

Puzur-Sin prince c. 2370,

Ur-Zababa prince c. 2340.

Kish continues.

And the particulars indicate the waning of its importance. There are no important princes for one and a half centuries between Mesalim and Ku-Baba. The century after Mesalim is the century of the rise of Lagash.

Eanatum vanquished Kish, Inanna loved him,

and gave him the princship of Kish next to the lordship over Lagash.

The last important princes of Kish are also not nearly as forcefully attested as the princes of the other contemporary states.

Enbi-Eshtar is in the list.

So he is, however, in the inscriptions of Enshakushana, the first prince to style himself: lord of Sumer. Enshakushana reports:

Enshakushana, lord of Sumer, sacked Kish and captured Enbi-Eshtar, prince of Kish (ins. 1).

The list has 1 prince between Enbi-Eshtar and Ku-Baba.

Next it reports:

Ku-Baba, she made Kish firm,

Puzur-Sin, son of Ku-Baba,

Ur-Zababa, son of Puzur-Sin.

The Esagil chronicle also attests Ku-Baba and Ur-Zababa.

Ku-Baba, she made Kish firm.

But Kish, it does not remain firm.

Sargon, he was a cupbearer of Ur-Zababa, he built Akkad.

And then the state of Kish is no more either. Even if Sargon, too, styles himself: prince of Kish.

Ur.

The particulars are 3,

Meskiagnuna prince c. 2510,

Elili prince c. 2490,

Enshakushana prince c. 2460.

All 3 are in the list, Meskiagnuna and Elili among the princes of Ur, Enshakushana among the princes of Uruk.

Meskiagnuna and Elili have left behind 1 inscription each, Enshakushana has left behind 4.

Enshakushana reports:

for Enlil, lord of all lands, Enshakushana, lord of Sumer, prince of the people;

when the gods ordered him, he sacked Kish and captured Enbi-Eshtar, prince of Kish; he sacked Akshak;

he brought their gold and their lapis lazuli, their timber and their treasure, to Enlil in Nippur (ins. 1).

A more fragmentary inscription reaffirms:

Enshakushana, lord of Sumer, prince of the people, son of Elili (ins. 3).

The princes of Lagash have shown the way.

And Enshakushana, the son of Elili, is prince of Ur, the list has him among the princes of Uruk, and he first styles himself: lord of Sumer, prince of the people.

Sumer is the entire lower valley.

As Enlil is lord of all lands, so Enshakushana is lord of Sumer.

Enshakushana also first reports bringing the booty to Enlil in Nippur.

Eanatum affirms: all foreign lands trembled before Eanatum. And: Inanna gave Eanatum the princship of Kish next to the lordship over Lagash. His successor Enanatum reaffirms: Nin-girsu put all foreign lands under his rule.

And with Enshakushana, lord of Sumer, prince of the people, the attempt to bring the entire valley, and all states, under one prince, and thus under one state, has become still more explicit.

The inscriptions of Enshakushana as well report also building.

Uruk.

The particulars are 3,

Lugalkiginedudu prince c. 2440,

Lugalkisalsi prince c. 2410,

Lugalzagesi prince c. 2340.

The series of important princes of Uruk is also discontinuous. Nearly two centuries separate Ur-Nungal and Lugalkiginedudu. More than two generations separate Lugalkisalsi and Lugalzagesi.

The list has Lugalkiginedudu and Lugalzagesi.

Lugalkiginedudu has left behind 6 inscriptions, Lugalkisalsi 4, and Lugalzagesi only 1, but longer, and more dramatic, too.

Enmetena reports:

Enmetena, prince of Lagash, and Lugalkiginedudu, prince of Uruk, swore to their brotherhood.

Lugalkiginedudu himself reports:

for Enlil, lord of all lands, Lugalkiginedudu; when Enlil gave him the lordship and the princship, Lugalkiginedudu was the lord of Uruk and the prince of Ur; Lugalkiginedudu, in great joy, dedicated this to Enlil, his beloved lord (ins. 1);

for An, lord of all lands, and Inanna, the lady, Lugalkiginedudu, prince of Kish; when Inanna gave him the lordship and the princship, Lugalkiginedudu was the lord of Uruk and the

prince of Ur; . . . for Inanna, his lady (ins. 2). The other 4 inscriptions, also votive, are more fragmentary.

Lugalkiginedudu, lord of Uruk and prince of Ur, is prince of Kish. Enlil gave him the lordship and the princship. Inanna gave him the lordship and the princship. The attempt to bring the entire valley, and all states, under one prince, and thus under one state, is still more explicit.

Lugalkisalsi reports:

for Enlil, Lugalkisalsi, prince of Uruk and prince of Ur, son of Lugalkiginedudu, prince of Uruk and prince of Ur, dedicated this to Enlil, his lord (ins.1).

The other 3 inscriptions are also votive.

Lugalkisalsi is prince of Uruk and prince of Ur, but not prince of Kish.

Two-odd generations later, however, there is Lugalzagesi.

Urukagina reports:

the prince of Umma sacked Lagash; Lugalzagesi, prince of Umma, bears the guilt.

Lugalzagesi himself reports:

for Enlil, lord of all lands, Lugalzagesi, prince of Uruk, prince of the people, son of Uu, prince of Umma, beloved of An, lord of all lands, warrior for Enlil, given wisdom by Enki, counseled by Sin, warrior for Utu, sustained by Inanna, raised by Nisaba, nursed by Nin-hursag, chosen by Messangaunuga, brought up by Ningirim the lady of Uruk, chief servant of the gods;

when Enlil, lord of all lands, gave Lugalzagesi the princship over the people, the eyes of the land were fixed upon him;

Enlil put all lands at his feet, from the east to the west;

from the lower sea, along the two rivers, to the upper sea;

from east to west, Enlil gave him no rival;

the princes of Sumer submitted to him at Uruk;

Uruk rejoiced under him, Ur raised its head like a bull, Larsa the beloved city of Utu rejoiced, Umma the beloved city of Shara raised its horns, Zabalam cried out like a ewe reunited with its lamb, Kidingar raised its neck;

Lugalzagesi, prince of Uruk and prince of the land, brought food and water to his master Enlil in Nippur (ins. 1).

The attempt to bring all states under one prince, and thus under one state, is now as explicit as it can be.

Enlil gave Lugalzagesi the princship over the people. Enlil put all lands at his feet, from the east to the west. Lugalzagesi is prince of the land.

The attempt has now also succeeded.

From east to west, Enlil gave Lugalzagesi no rival. The princes of Sumer submitted to him at Uruk.

Lugalzagesi notes explicitly – rejoicing under him – Uruk, Ur, and Umma, as well as Larsa, Zabalam, and Kidingar.

Lugalzagesi also first records – from the lower sea, along the two rivers – the upper sea. The upper sea is the Mediterranean.

The Euphrates approaches the Mediterranean to some 160 km. From Uruk to that point at the Mediterranean is 1 050 km.

Ur-Nanshe has campaigned from Lagash to Ur, 60 km away. Two generations later, Eanatum has campaigned from Lagash to Mari, 620 km away. Not quite one and a half centuries later, Lugalzagesi has campaigned twice further.

And Enlil gave Lugalzagesi no rival from the lower sea, along the two rivers, to the upper sea.

Thus, Lugalzagesi brought food and water to his master Enlil in Nippur.

But Lugalzagesi as well is in the generation before Sargon.

And Sargon brought Lugalzagesi, the prince of Uruk, in a dog collar to his master Enlil in Nippur.

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In the valley of the two rivers, then, in the two centuries from Ur-Nanshe to Sargon the state advances very greatly.

Nearly all the inscriptions report building. The princes build temples, shrines, sanctuaries, statues, walls, canals.

Nearly all the inscriptions are votive. The princes honor Ningirsu, Nanshe, Gutamdug, Ninmarki, Tirash, Enlil, Ninhursag, Inanna, Enki, Dumuziabzu, Hendursaga, Lugalurub, Bau, Shulshagana, An, Utu, Sin, Nisaba, Messanga-unuga, Ningirim, Shara.

The major development, however, is the smiting. And the inscriptions indicate clearly and

distinctly that the smiting is the foundation of all advances, and they are, again, great advances.

The state does not begin as one large state, it begins as several small states.

It begins in Kish, then also in Uruk, then also in Ur. Then also, with Ur-Nanshe, in Lagash.

In the next two centuries there are in the quadrilateral with vertices at Kish, Uruk, Ur, and Lagash, all within 230 km of one another, the states of Kish, Uruk, Ur, Lagash, and Umma. The state of Akshak is also in the quadrilateral, or very close to it. In it are also the smaller cities of Adab, Larsa, Badtibira, and Zabalam. In it is also the city of temples, Nippur. When Sargon builds Akkad, too, Akkad is right outside, 100 km north of Kish.

Thus, smiting is indicated from the first. *Gilgamesh and Aka* is the account of smiting. In the list Kish is smitten, Uruk is smitten, Ur is smitten, Awan is smitten, Kish is smitten, Hamazi is smitten, Uruk is smitten, Ur is smitten, Adab is smitten, Mari is smitten, Kish is smitten, Akshak is smitten, Kish is smitten, Uruk is smitten. Thirteen smittings before the smiting of Uruk by Sargon. And the inscriptions of the princes provide the ample evidence over which the list generalizes.

The smiting reaches further, and further, and further. Under Ur-Nanshe from Lagash to Ur. Under Eanatum from Lagash to Mari and to Elam. Under Lugalzagesi from the lower sea to the upper sea.

And with the smiting, the power of the state grows very greatly, extensively and intensively.

Extensively, one and a half centuries into its development, by the time of Ur-Nanshe, the domain under the state is the lower valley, between Kish and Lagash. Two generations later, under Eanatum, the state has reached northwest, along the Euphrates, to Mari, and east, across the Tigris, to Elam, the great mountain. The state has expanded the domain under its reach not less than ten times. Not quite one and a half centuries later, under Lugalzagesi, the state has reached northwest, along the Euphrates, to the upper sea. It has expanded the domain under its reach not less than twice more.

The list has before Sargon princes also of Awan, Hamazi, Adab, and Mari. None of these

princes is attested independently. But the 4 cities or countries are attested by the princes who vanquish them. Adab is in the lower valley, halfway between Kish and Lagash. The other 3 attest the expansion of the state. Mari is in the northwest, upstream on the Euphrates. Awan and Hamazi are in the east, in the great mountain.

Intensively, Lagash is the first firmly established state. The princes of Lagash are the first series of 5 consecutive powerfully attested princes, and the first series of 9 consecutive well attested princes.

Thus, Inanna has given Eanatum the princship of Kish next to the lordship over Lagash.

Next, Enshakushana is prince of Ur, prince of Uruk, and lord of Sumer, prince of the people.

Next, Lugalkiginedudu is prince of Uruk, prince of Ur, and prince of Kish. Enlil and Inanna, both, have given him the lordship and the princship.

And next, Lugalzagesi is prince of Uruk, prince of Ur, and prince of Umma, lord of Larsa, Zabalam, and Kidingar, prince of the land. Enlil has given him the princship over the people, has put all lands at his feet, from the east to the west, and has given him no rival from the lower sea to the upper sea. The princes of Sumer have submitted to him at Uruk.

The princes cannot have been more explicit, and steadily more explicit from Eanatum to Enshakushana to Lugalkiginedudu to Lugalzagesi, in proposing to bring all cities and countries under one prince.

That Eanatum does not succeed Enshakushana attests, that Enshakushana does not succeed Lugalkiginedudu attests, that Lugalkiginedudu does not succeed Lugalzagesi attests, that Lugalzagesi does not succeed Sargon attests. The more clearly and distinctly all of which attests the determination of the princes. And Sargon then succeeds.

The list is compiled not quite three centuries after Sargon. In these centuries, the state is one and only one for one and a half centuries under Sargon and his 4 successors, and, after two-odd generations of disorder, the state is again one and only one for one century under Ur-Nammu and his 4 successors. The list presumes – compelled by the facts – that, taken by smiting from one city

to another, princship is one and only one.

Princship is one and only one.

The princes in the one and a half centuries before Sargon – Eanatum, Enshakushana, Lugalkiginedudu, and Lugalzagesi, in particular – have discovered that princship is one and only one.

And in the forty-three and a half centuries since the state has not abandoned the task of building the dominant power on earth, and bringing all states under one state.

As the relations of the princes with one another develop, so their relations with the gods develop.

Mesanepada first attests a dedication to a god: for Lugalkalama, Mesanepada, prince of Ur.

One generation later, Aanepada and Ur-Nanshe attest that the princes are concerned for the well-being of the gods: Aanepada, prince of Ur, built the temple of Ninhursag, and: Ur-Nanshe, prince of Lagash, built the temple of Ningirsu, the temple of Nanshe, the temple of Gutamdug, the temple of Ninmarki, the temple of Tirash.

Two generations later, Eanatum attests that the gods are reciprocating: Eanatum, raised by Enlil, given strength by Ningirsu, chosen by Nanshe, nursed by Ninhursag, loved by Inanna, given wisdom by Enki, beloved of Dumuziabzu, trusted by Hendursaga, beloved of Lugalurub.

Eanatum also first reports: Enlil, lord of heaven and earth.

Eanatum also first reports: Inanna gave Eanatum the princship of Kish next to the lordship over Lagash.

One generation later, Enmetena first reports: Enlil, lord of all lands, father of the gods.

In the same generation, Lugalkiginedudu first reports: Enlil gave Lugalkiginedudu the lordship and the princship.

As the gods, so the princes. And rather the other way around, as the princes, so the gods.

And in the forty-three and a half centuries since the state has not abandoned the task of receiving the lordship and the princship from the lord of heaven and earth, lord of all lands, either.

And the law is discovered.

Since time began, since life began, in the old days, that is how it was.

But Urukagina changed the old ways.

The ninth of the 9 consecutive princes of

Lagash discovers the law.

Lagash begins vigorously with Ur-Nanshe, rises greatly with Eanatum, continues strongly through Enmetena, declines yet continues, and Urukagina discovers the law.

And in the forty-three and a half centuries since the state has not abandoned the task of trying to bring the state under the law either.

Smiting has expanded greatly, then.

Hence, extensively, the state has expanded the domain under its reach by orders of magnitude.

Intensively, the state of one city has become the state of all cities. Enlil, lord of heaven and earth, lord of all lands, gives the lordship and the princship to the prince of the land, prince of the people. And the state has come under the law.

All of this, too – the prince smites, the prince campaigns further, the prince is the prince of the land and the prince of the people, Enlil gives the princship to the prince, the prince changes the old ways – indicates very strongly the identity of the prince and the state. The prince is the state and the state is the prince.

Throughout these two centuries the accumulation of the inscriptions of the princes has continued, and accelerated. Attesting the accumulation, and the acceleration of the accumulation, of inferences from experience, brought in connection with one another in chains of inferences, steadily more inferences, steadily longer chains, the gaps in the chains steadily fewer and smaller.

Attesting the discovery that princship is one. Attesting the development of religion. Attesting the discovery of the law.

Attesting also that the state is not in indefinite space and time.

The description of the surface of the earth has begun.

Ur-Nanshe records 4 localities.

Eanatum records 16 localities.

Lugalzagesi records fewer localities. But he describes his livestock: Uruk rejoiced under him, Ur raised its head like a bull, Larsa rejoiced, Umma raised its horns, Zabalam cried out like a ewe reunited with its lamb, Kidingar raised its neck. And it is not clear where exactly Kidingar is. But it is clear where exactly the rest of Lugalzagesi's livestock is. Lugalzagesi describes his domain. Indeed, Ur, Larsa, Umma, and Zabalam

are in a line southeast to northwest, in this order.

Also: from the lower sea, along the two rivers, to the upper sea. And this is where the upper sea is, from the lower sea, along the two rivers. It is the first inkling of orientation.

The description of the past has also begun.

Mesaneпада first records his predecessor. And every prince after him records his predecessor.

Eanatum, once again, first records his predecessor's predecessor: Eanatum, prince of Lagash, son of Akurgal, prince of Lagash, grandson of Ur-Nanshe, prince of Lagash.

His successor's successor Enmetena describes himself repeatedly: Enmetena, prince of Lagash, descendant of Ur-Nanshe. Ur-Nanshe is Enmetena's predecessor's predecessor's predecessor's predecessor.

And in one inscription Enmetena records the labors of 8 princes of 3 cities across 3 generations. The first inkling of history.

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The one and a half centuries from Sargon to Sharkalisharri.

The particulars are 5,

Sargon prince c. 2337-281,

Rimush prince c. 2281-72,

Manishtushu prince c. 2272-57,

Naram-Sin prince c. 2257-20,

Sharkalisharri prince c. 2220-195.

The state is one and only one.

The list reports:

Sargon, he built Akkad, he reigned 56 years,

Rimush, son of Sargon, he reigned 9 years,

Manishtushu, older brother of Rimush, son of Sargon, he reigned 15 years,

Naram-Sin, son of Manishtushu, he reigned 37 years,

Sharkalisharri, son of Naram-Sin, he reigned 25 years.

The list has 78 princes before Sargon. 9 of the 78 are attested by the inscriptions of the princes. It has 42 princes beginning with Sargon. 21 of the 42 are attested by the inscriptions of the princes.

Before Sargon the facts are few. Beginning with Sargon the facts are many.

Sargon and his 4 successors are a very great advance in the development of the state, and the acquisition of knowledge.

The list reflects this fact.

And the inscriptions of the princes reflect this fact.

Sargon has left behind more than 2 dozen inscriptions, Rimush 2 dozen, Manishtushu 1 dozen, Naram-Sin more than 8 dozen, Sharkalisharri more than 7 dozen. A substantial number of the inscriptions is also for the first time later copies. These are the first princes whose inscriptions were copied, and again, and again. The greatest of these princes, too, Sargon and Naram-Sin, were celebrated in literary compositions, like the gods. Also like the gods, celebrated in these compositions with saturation with ideas and feelings.

Sargon, he built Akkad, he reigned 56 years.

The city of Akkad has not been unearthed. It has disappeared under Baghdad. It was 100 km north of Kish.

Sargon reports:

Sargon, prince of Akkad, warrior of Ishtar, prince of Kish, anointed of An, lord of the earth, governor for Enlil;

he vanquished Uruk, conquered the city, razed its walls, captured Lugalzagesi, prince of Uruk, and brought him in a dog collar to the temple of Enlil;

he vanquished Ur, and razed its walls;

he vanquished Eninmar, and razed its walls;

he vanquished Lagash as far as the sea, and washed his weapons in the sea;

he vanquished Umma, . . . ;

to Sargon, lord of the earth, Enlil gave no rival from the upper sea to the lower sea; from the lower sea to the upper sea the men of Akkad held sway;

Mari and Elam bowed before Sargon, lord of the earth (ins. C-1);

Sargon, prince of Kish, won 34 battles; he razed the walls of the cities as far as the sea;

he brought the ships of Meluhha, Magan, and Dilmun to the quay of Akkad;

Sargon, the prince, honored Dagan, and Dagan gave Sargon the upper land, Mari, Jarmuti, and Ebla, as far as the forest of cedar and the mountain of silver;

to Sargon, the prince, Enlil gave no rival; 5 400 men ate bread daily before Sargon (ins. C-2).

What Sargon's predecessors proposed to

accomplish, Sargon accomplished.

The foundation is the smiting. And, first of all, Sargon advanced the smiting decisively.

5 400 men ate bread daily before Sargon.

Sargon's is the first record of the number of the prince's men.

And how decisive an advance a force of 5 400 men is, can be described in these two ways.

Uruk was the largest of the cities whose walls Sargon had to raze, and Uruk was a city of not more than a few tens of thousands. 5 400 were more than all able-bodied men of any city.

Also, the forty-three centuries after Sargon can be divided, with respect to smiting, into four parts. One, the fifteen and a half centuries before the great rise of the Assyrian princes, and throughout these centuries a force of 5 400 will remain irresistible. Two, the following eleven-odd centuries through the beginning of the decline of Rome, in these centuries armies will grow, and grow, and larger forces will be irresistible. Three, Rome will decline, and in the following eleven centuries, through the fifteenth Christian century, a force of 5 400 will again be irresistible. Four, in the last five-odd centuries armies will again grow, and grow, and larger forces will be irresistible. All in all, in twenty-six and a half of the forty-three centuries after Sargon a force of 5 400 will be irresistible. In the other sixteen and a half centuries, 5 400 will be in Rome one legion and one legion will be a massive weapon, 5 400 will be in world war two one division, and one division will be a massive weapon still.

Sargon is a decisive advance in the development of warfare.

Sargon is also clear that this is the foundation.

To Sargon Enlil gave no rival; 5 400 men ate bread daily before Sargon.

The implied because connecting the two propositions.

So Sargon won 34 battles.

And so Sargon brought the states of the lower valley, established for three and a half to two centuries by that time, under himself.

He built Akkad.

He is the prince of Kish.

He vanquished Uruk, Ur, Lagash, and Umma, and razed their walls.

And he brought the entire valley from the

lower sea in the south to the great mountain in the east to the upper sea in the northwest under himself.

In the south, he washed his weapons in the sea. He brought the ships of Meluhha, Magan, and Dilmun to the quay of Akkad.

He first attests Magan. Magan are the southern shores of the Persian Gulf.

In the east, he vanquished Eninmar, and razed its walls. Elam bowed before him.

In the north, Mari bowed before him. And Dagan gave him the upper land, Mari, Jarmuti, and Ebla, as far as the forest of cedar and the mountain of silver.

The forest of cedar and the mountain of silver are on the shores of the Mediterranean. He first attests Ebla. Ebla is 90 km from the Mediterranean.

The upper sea and the lower sea are 1 300 km apart.

And Sargon cannot have been clearer that princship is one and only one.

He is: lord of the earth. It is with him also that the reference of 'prince of Kish' becomes lord of the earth, as it will remain in the inscriptions of his successors.

So with Sargon also, also as a consequence, the description of space and of time advances.

Next to the 16 localities above, his inscriptions attest 11 more, for a total of 27.

And the record of reckoning years by the names bestowed on them by the deeds of the prince begins with him. He has left behind the names of 4 of his years, all 4 appropriate names: the year Sargon went against Simurru (ins. D-1),

the year Sargon destroyed Urua (ins. D-2),
the year Sargon destroyed Elam (ins. D-4),
the year Sargon destroyed Mari (ins. D-5).

Sargon is a great advance in the development of the state, and so are his 4 successors. What Sargon built they made firm. The great state Sargon built they maintained great for nearly one century after him.

The great state Sargon built posed a twofold problem. In the lower valley, in its center, it had brought under itself states, which had continued for centuries before their conquest, some of them had been powerful states, too. In these the at-

tempts to restore their own states had to be prevented. Outside the lower valley, in its periphery, the state had brought under itself countries, which had not been under a state. These had to be prevented from reverting to having no state over them.

Rimush, he reigned 9 years.

And he first solved both problems.

In the lower valley. Rimush reports:

Rimush, lord of the earth, won three times the fight for Sumer;

he destroyed 11 322 men; he captured 2 520 men; when Kazallu rebelled, he destroyed 12 052 men;

he captured 5 862 men;

altogether he captured 54 016 men (ins. C-1);

he vanquished Ur and Umma; he destroyed 8 040 men; he captured 5 460 men (ins. C-2);

he vanquished Adab and Zabalam; he destroyed 15 718 men; he captured 14 576 men (ins. C-4);

he vanquished Umma and Kian; he destroyed 8 960 men; he captured 3 540 men (ins. C-5).

Rimush, clearly, appreciated counting.

Outside the lower valley. Rimush reports:

Rimush, lord of the earth;

he vanquished Barahshum, Zahara, and Elam; he destroyed 16 212 men; he captured 4 216 men (ins. C-6).

In general:

Rimush, lord of the earth,

he holds the upper sea and the lower sea and all the mountains (C-7).

Rimush maintained the state great.

6 of the localities above are not attested by Sargon. The total for the 2 princes is thus 33.

Rimush has left behind the name of 1 of his years:

the year Rimush destroyed Adab (ins. D-2).

Manishtushu, he reigned 15 years.

Manishtushu reports:

Manishtushu, lord of the earth;

he conquered Anshan and Sherihum;

the lower sea . . . ;

the rulers of 32 cities gathered to fight him, he conquered their cities, he captured the rulers;

. . . as far as the mountain of silver;

he brought black stone from the mountains across the lower sea (ins. C-1).

Manishtushu maintained the state great as

well.

He also first attests Anshan. Anshan is beyond the great mountain, in the far east, 490 km east of the confluence of the two rivers. It is the farthest point east which the expeditions of the princes reached. Nor will any prince in the next one and a half millennia reach as far east as Manishtushu.

The 2 localities above are not attested by his predecessors. The total for the 3 princes is thus 35.

Manishtushu has not left behind any of the names of his years.

Naram-Sin, he reigned 37 years.

And Naram-Sin made the state greater.

At his accession, he had to solve again the problem of the lower valley.

Naram-Sin reports:

Naram-Sin, the mighty, lord of the four quarters; the prince of Kish rose against him, and led against him Kish, Kutha, Tiwa, Sippar, Kazallu, Girtab, Apilak, . . . ;

Naram-Sin, the mighty, filled the Euphrates with their corpses, captured Kish, and razed its walls;

the prince of Uruk rose against him, and led against him Uruk, Ur, Lagash, Umma, Adab, Shuruppak, Isin, Nippur, all cities down to the lower sea;

Naram-Sin, the mighty, vanquished them as many as they were (ins. C-1).

He also reasserted his hold on the south, east, and northwest. In the south:

Naram-Sin, lord of the four quarters;

he vanquished Magan (ins. 13).

In the east, he first attests Lullubum:

Naram-Sin, the mighty;

. . . in the battle of the mountains of Lullubum . . . (ins. 4).

In the northwest:

Naram-Sin, lord of the four quarters;

since man was created, no prince of all princes had conquered Armanum and Ebla (ins. C-5).

And he reached further north. He first attests the sources of the two rivers:

Naram-Sin, the mighty, prince of Akkad;

he reached the source of the Tigris and the source of the Euphrates (ins. 2).

From its source to its mouth the Tigris is 1 900 km long, from its source to its mouth the Euphra-

tes is 2 800 km long.

The successors of Sargon had all had to subdue the lower valley and to campaign throughout their domain. Naram-Sin undertook to bind the state more firmly.

He became a god.

Naram-Sin reports:

Naram-Sin, the mighty, prince of Akkad;

when the four quarters rose against him, because Ishtar loved him, he vanquished them in 9 battles in one year; he captured the princes who rose against him;

and because he thus made Akkad firm, they asked Ishtar in Eanna, Enlil in Nippur, Dagan in Tuttul, Ninhursag in Kesh, Enki in Eridu, Sin in Ur, Shamash in Sippar, and Nergal in Kutha that Naram-Sin be the god of Akkad;

and they built a temple for him in the middle of Akkad (ins. 1).

The causal connection of the propositions is explicit, too. Because he made Akkad firm.

Naram-Sin is also the first prince who has left behind a substantial number of the names of his retinue. Of 5 sons: Sharkalisharri (ins. S-33), who will succeed him, Binkalisharri (ins. S-7), Ukinulmash (ins. S-9), Nabiulmash (ins. A-3), and Rigmushalshu (ins. A-4), 4 daughters: Tutanapshum (ins. S-12), Enmenanna (ins. S-10), Simatulmash (ins. A-5), and Shumshani (ins. B-10), and 10 lesser officials: Mamahursag, overseer of arms (ins. B-8), Lugalushumgal, governor of Lagash (ins. S-14), Karshum, governor of Niquim (ins. B-7), Shuilishu, judge (ins. S-17), Urunababbi, priest of Enlil (ins. B-4), Ursaga, chief scribe for Enlil (ins. B-5), Sharrishtakal, scribe (ins. S-16), Urda, scribe (ins. S-18), Nasha, . . . (S-5), and Urenlil, . . . (ins. B-9). The name of his cupbearer is lost: . . . , cupbearer (ins. S-19).

As the father of the gods, so the god of Akkad. The father of the gods has under him Ishtar, Dagan, Ninhursag, Enki, Sin, Shamash, Nergal. The god of Akkad has under him his sons, daughters, overseers, governors, judges, priests, scribes, . . . , cupbearers.

Naram-Sin attests the development of administration. A major step toward exercising the power of the state – a state reaching from the Mediterranean to the source of the Euphrates to the Persian Gulf to the Zagros – by means less direct than

continuous campaigns over the domain of the state.

So also with Naram-Sin, also as a consequence, the description of space and of time continues to advance.

He attests 38 localities, 23 of them not attested by his predecessors. The total for the 4 princes is thus 58.

With Naram-Sin, too, the exploration of the surface of the earth is not implicit any longer. It is explicit.

Since man was created, no prince of all princes had conquered Armanum and Ebla. Further north Naram-Sin discovered the sources of the Tigris and the Euphrates. He writes also:

Naram-Sin, prince of Akkad;

when he took the path to Talhad, no prince of all princes had taken this path (ins. C-3).

Naram-Sin is probing, and he is clear that he is probing, the limits of the known earth.

He has left behind the names of 14 of the 37 years of his reign. 6 are years of smiting (ins. D-8/13). 1 is the year of reaching the sources of the Tigris and the Euphrates (ins. D-14). 2 are years of the building of temples (ins. D-15, D-19). 1 is an year of the building of a canal (ins. D-16). 1 is an year of the installation of the high prestress of Enlil (ins. D-20). 3 are fragmentary (ins. D-17/8, D-21).

Sharkalisharri, he reigned 25 years.

And Sharkalisharri, too, maintained the state great.

Naram-Sin had pacified the state, and bound it more firmly under the god of Akkad and administration.

Sharkalisharri attests that the bonds held.

He is himself:

Sharkalisharri, the mighty, the god of Akkad (ins. B-4).

And he has left behind the names of his consort (ins. S-23) and 13 lesser officials: a governor of Lagash (ins. S-32), a governor of Adab (ins. S-29), a priest of the temple in Niquim (ins. B-1), an overseer (ins. S-28), a metalworker (ins. B-2), two stewards (ins. B-3/4), and six scribes (ins. S-25/7, 30/1, 33).

In Sharkalisharri's inscriptions there is thus no report of unrest in the center, in the lower valley.

In the periphery, Sharkalisharri reports the

reassertion of the authority of the state in the north (ins. D-22/4) and in the east (ins. D-25/6).

But it was now a time of building more than smiting. Sharkalisharri is the first of the 5 princes of Akkad whose inscriptions report more building than smiting.

He attests 2 localities not attested by his predecessors. Bringing the total for the 5 princes to 60.

And he has left behind the names of 17 of the 25 years of his reign. 5 are years of smiting (D-22/6). 6 are years of building (D-27/33). 6 are fragmentary (D-35/41).

One of the years of building is the year also: of the capture of Sarlagab, prince of the Gutians (ins. D-27).

Sharkalisharri captured Sarlagab, prince of the Gutians.

But the Gutians will keep coming.

So later on, too, it will take time to build a great state, maintain it great, and pacify it. Once it is pacified, hordes of wild men will begin coming to prey on it, and keep coming.

After Sharkalisharri the great state is destroyed.

In the one and a half centuries from Sargon to Sharkalisharri the advance in the development of the state is very great.

It begins with the foundation. Sargon and his successors advanced the development of warfare very greatly. In two ways.

First, 5 400 men ate bread daily before Sargon. Sargon discovered the army. Its mustering, maintenance, seasoning, development into an invincible weapon.

And 5 400 is not only more than all able-bodied men of the largest contemporary city. The population of the entire valley was some three million. 5 400 is close to 1 % of all able-bodied men in the valley, lower sea to upper sea.

Second, the inscriptions of the princes indicate very strongly – and the fact of their continuous control over the entire valley, lower sea to upper sea, corroborates – that the years of the reigns of Sargon, Rimush, and Manishtushu are all, or nearly all, years of campaigns. Most of the years of Naram-Sin are years of campaigns. Nearly one half of the years of Sharkalisharri are years of campaigns. All in all, most of the 142 years of the

reigns of the 5 princes are years of campaigns, and all, or nearly all, years of the first century of their reigns are years of campaigns.

Sargon and his successors discovered the annual campaign, year after year after year, generation after generation after generation.

Sargon and his successors made warfare the major concern of humanity.

Hence victory. And hence power.

Sargon won 34 battles. Rimush won three times the fight for Sumer. Manishtushu conquered 32 cities. Naram-Sin conquered where no prince of all princes had conquered.

From the Mediterranean to Anshan their campaigns reached across 1 700 km. From the source of the Euphrates to Magan across 2 100 km.

And Sargon brought, and his successors maintained, the entire valley of the two rivers under one prince. They did not bring Anshan, in the far east, or Magan, in the far south, firmly into their domain. But the valley bounded by the upper sea in the west, the great mountain in the north, the great mountain in the east, and the lower sea and the desert in the south they brought firmly and maintained firmly into their domain.

So the lord of the earth, lord of the four quarters, is one and only one. The state is one and only one.

The power of the state has increased by many orders of magnitude.

Before Sargon states smite one another. Now all these states are smitten.

Before Sargon there are several states. Now there is one state.

Before Sargon the state is established, as several small states, in the lower valley, from Kish south to the lower sea. Now the state is established, as one large state, in the entire valley, from the lower sea to the upper sea.

Before Sargon each of the several states holds sway over its city and surrounding country, tens of kilometers across rather than hundreds. Now the state holds sway over the entire valley, not less than 1 300 km across.

Before Sargon each of the states is the state of tens rather than hundreds of thousands. Now it is the state of three million.

Thus extensively.

Intensively, after its discovery by Urukagina, the law is in abeyance under the princes of Akkad.

In religion there is a major development. Naram-Sin has discovered that the prince of Akkad is the god of Akkad.

The development of administration is a major advance. The discovery that the power of smiting can be transferred to officials.

And the princes of Akkad are an important step in the generalization of the practice of the virtues which must be practiced from the men of the tribe to the men of a larger tribe, and larger, and all the way to humanity. They have mixed the population of the entire valley, not less than one twelfth of humanity, for nearly one and a half centuries. Even if mostly by the not very effective means – as Naram-Sin has begun discovering – of campaigning continuously over that population.

The princes of Akkad are a great advance in the development of the state, and they are clear that they are. In their inscriptions the inferences from experience are more, connected in longer chains of inferences, with fewer and smaller gaps, and they indicate clearly the beginnings of a theory of the state.

5 400 eat bread daily before Sargon. Sargon wins 34 battles. Sargon has no rival from the lower sea to the upper sea. Sargon is lord of the earth. Rimush wins three times the fight for Sumer. Rimush is lord of the earth. The rulers of 32 cities gather to fight Manishtushu, Manishtushu conquers them. Manishtushu is lord of the earth. The four quarters rise against Naram-Sin, Naram-Sin vanquishes them. Naram-Sin is lord of the four quarters. He is the god of Akkad. Sharkalisharri is also the god of Akkad.

It is on this ground that the list will generalize. One and only one, princship is taken from one city to another by smiting.

The inferences from experience also attests 60 localities. There is no inkling of distance or orientation. But there is a clear inkling that the earth is explored. Naram-Sin is probing, and he is clear that he is probing, the limits of the known earth.

The inferences attest also the names of 36 of their 142 reign years.

To many of the princes before Sargon the list

assigns reigns of hundreds and thousands of years. To Sargon's immediate predecessor Ur-Zababa, of whom Sargon was a cupbearer, it assigns 400 years. Beginning with Sargon it assigns to no prince a reign longer than Sargon's 56 years. Clearly, no data before Sargon, data beginning with Sargon.

Akkad is the first great state.

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The one and a half centuries from Sharkalisharri to Ib-bi-Sin.

The particulars indicate 6 states.

The Gutian horde descended on the valley from the mountains in the east. In the ensuing disorder Akkad lingered on before it disappeared, and local rulers asserted themselves in Lagash, Uruk, and Elam. Then the princes of Ur brought the valley under one and only one state again.

Akkad.

The important particulars are 2, listing also 1 not important,

Eluldan	prince c. 2192,
Dudu	prince c. 2192-71,
Shudurul	prince c. 2171-56.

The list reports:

Sharkalisharri, son of Naram-Sin, he reigned 25 years;

then who was prince? who was not? Igigi was prince, Nanum was prince, Imi was prince,

Eluldan was prince, 4 princes in 3 years;

then Dudu, he reigned 21 years;

Shudurul, son of Dudu, he reigned 15 years;

Akkad was smitten, princship was taken to Uruk.

And rather, princship fell apart. Who was prince? who was not? for two-odd generations after Sharkalisharri.

Eluldan has left behind 1 inscription. Dudu has left behind 4, Shudurul also 4. All are brief, recording but the name of the prince and what he is.

Eluldan reports:

Eluldan, prince of Akkad (ins. 1).

Dudu reports:

Dudu, the mighty, prince of Akkad (ins. 1).

Shudurul reports:

Shudurul, the mighty, prince of Akkad (ins. 1).

Sharkalisharri first attests the Gutians: Shar-

kalisharri captured Sarlagab, prince of the Gutians. The Gutians are then attested throughout the reigns of Dudu and Shudurul. But local rulers of other cities are attested only toward the end of this time.

Dudu and Shudurul presided over the shrinking domain of Akkad.

Then the state first built by Sargon disappears altogether.

The Gutian horde.

The important particulars are 3, listing also 2 not important,

Sarlagab	prince c. 2206-0,
Laerab	prince c. 2152-0,
Yarlagan	prince c. 2138-1,
Sium	prince c. 2131-24,
Tirigan	prince c. 2124.

In the list the Gutian are the only princes of: a horde. They are the only princes whose series begins: they had no prince at first. The list enumerates 20 princes and totals: they reigned 91 years and 40 days. To 10 of the 20 it assigns reigns of 3 years or less each.

That the Gutian horde wreaked havoc on the valley has to be inferred from the list. Its contemporaries report the calamity more explicitly.

The century of the princes of Ur is the first time of massive writing. The list is from that time. Like all later times of massive writing as well, the writing is of literary compositions more than it is of history. One of those is the poem *The curse of Akkad*. The list anticipates Herodotus. *The curse of Akkad* anticipates the Hebrew chronicles. It finds the cause of the fall of Akkad in Naram-Sin. Naram-Sin offended Inanna. Hence:

from the wild mountain of savage men,
the land where people are without number,
the land that knows no rule,
Enlil brought down from the mountain the
Gutians,

who look like men,
but whose ways and words are those of the dog,
myriads, like locusts, they covered the earth,
nothing escaped, they spared no man (*id.*).

Of the 20 Gutian princes in the list 3 have left behind 1 inscription each.

Laerab reports:

Laerab, the mighty, prince of the Gutians (ins. 1).

Also:

Namhani, governor of Umma;
when Yarlagan was prince of the Gutians (ins. 1).

And:

Lugalanatuma, governor of Umma;
when Sium was prince of the Gutians (ins. 1).

Sium's successor is then attested by Utuhegal.
Utuhegal reports:

Utuhegal, prince of Uruk, vanquished Tirigan,
captured his men;

Tirigan, prince of the Gutians, ran away;

Utuhegal's men captured Tirigan, his wife, and
his children (ins. 4).

So, Enlil brings down from the mountain the
Gutians.

Sharkalisharri captures the prince of the Gu-
tians.

In the next generation, that of Dudu and
Shudurul, the Gutians overrun the lower valley.

In the next generation-odd they dominate the
lower valley. Laerab dedicates a macehead to
Ishtar. Yarlagan and Sium install governor of
Umma. At this time also another prince of the
Gutians leaves behind an inscription at Nippur,
emulating Naram-Sin:

Eridupizir, the mighty, prince of the Gutians, lord
of the four quarters (ins. C-1),

even as this lord of the four quarters is not among
the 20 Gutian princes in the list, nor has he left
behind any other trace in the record.

Then Utuhegal captures the prince of the
Gutians.

And Utuhegal's successor Ur-Nammu reports:
Ur-Nammu . . . the Gutians . . . to their mountain
. . . ;

Ur-Nammu, the prince, made the border of Sumer
firm (ins. 1).

The inscription is fragmentary, but the Gutians
disappear for some time from the record. Ur-
Nammu . . . the Gutians . . . to their mountain.

The first state of its kind, the Gutian horde is
very important. There will be many more states of
this kind.

Lagash.

The particulars are 2,

Ur-Baba prince *c.* 2165,

Gudea prince *c.* 2145.

After the fall of Akkad independent rulers
establish themselves in Lagash and Uruk.

Those of Lagash are not in the list.

Ur-Baba has left behind a half dozen inscrip-
tions. Gudea has left behind more than 2 and a
half dozen, most of them on statues of himself.
No prince, in fact, has left behind more statues of
himself than Gudea.

All inscriptions are votive. The most important
deed of which Gudea informs posterity is the
building of the Eninnu, the temple of Ningirsu. It
is the main concern of his inscriptions. Places
further afield, still in their relation to the Eninnu,
are noted twice. On one of his statues Gudea
reports:

he brought wood for the Eninnu from Meluhha
and Magan;

he brought diorite for the Eninnu from Meluhha
and Magan (statue D),

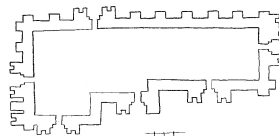
and on another of his statues he reports:

he defeated Anshan and Elam and brought the
booty to Ningirsu in the Eninnu (statue B).

Lagash is not an important state at this time.
This is indicated by its absence from the list. By
the presence of independent rulers in Uruk, 70
km away. By the presence of Gutian governors in
Umma, 50 km away. By the failure of a successor
of Gudea's to leave behind statues of himself,
too.

But Gudea is very important. Never mind the
other statues. On one of the statues, the one
reporting the delivery of the booty from Anshan
and Elam to Ningirsu, the Eninnu is drawn.

It is the decisive
step toward the dis-
covery of maps. Un-
der the Eninnu a
graduated ruler is



drawn, showing that the problem of the determi-
nation of distance and orientation across a build-
ing is solved. The first map, the map of Nippur,
will be drawn seven centuries later, when the
problem of the determination of distance and
orientation across a city, across 2 km, is solved.

Elam.

Or Susa, or Awan.

The particular is 1,

Puzur-Inshushinak prince *c.* 2110.

Puzur-Inshushinak styles himself indiscrimi-
nately: prince of Susa, lord of Elam (ins. 1-5),
and: prince of Awan (ins. 6-7).

Elam and Awan are both the country around

the city of Susa, Elam more to the south, Awan more to the north, in the east, in the wild mountain of savage men.

Puzur-Inshushinak is not in the list.

Elam, however, the list associates with the first prince already: Enmebaragesi, he smote Elam. And the princes continued to smite Elam. Eanatum smote Elam. Sargon smote Elam. Rimush smote Elam. Manishtushu smote Elam. Naram-Sin smote Elam. Sharkalisharri smote Elam. Even Gudea smote Elam.

Elam is thus well attested, as the object of smiting. The 1 prince of Elam who is well attested is – at this time when who was prince? who was not? – Puzur-Inshushinak.

Puzur-Inshushinak has left behind 1 dozen inscriptions. These as well are votive. 1 of them yet attests smiting by Elam. Puzur-Inshushinak reports:

Puzur-Inshushinak, prince of Susa, lord of Elam; he vanquished his enemies; he destroyed Hupsana (ins. 1).

Ur-Nammu, however, also reports:

Ur-Nammu, prince of Ur, prince of Sumer and Akkad . . . ; . . . marched against Elam; Puzur-Inshushinak, prince . . . ; . . . brought the booty to Enlil (ins. 29).

This inscription of Ur-Nammu is also fragmentary. But it is clear enough that Elam is once again the object of smiting.

Uruk.

The particulars are 3,

Ur-Nigin prince c. 2158-1,

Ur-Gigir prince c. 2151-45,

Utuhegal prince c. 2128-1.

These princes are in the list.

Ur-Nigin has left behind 1 inscription. Ur-Gigir also 1. After him the list has 3 princes who have left no other trace behind. Utuhegal, next, has left behind a half dozen inscriptions.

And beginning with Utuhegal, two generations after Sharkalisharri, the labors to restore order to the valley, and to recover the lost unity of princeship, begin succeeding.

Utuhegal reports:

the Gutian, the serpent of the mountain, defied the gods, took princeship to the mountain, filled Sumer with evil, took away the women, took away the children, brought evil to Sumer;

but Enlil, lord of all lands, ordered Utuhegal, the mighty, prince of Uruk, lord of the four quarters, the prince whose command cannot be changed, to destroy their name;

they had defiled everything; no one had stood against Tirigan, prince of the Gutians; he had seized the Tigris, he had diverted the water, he had let grass grow on the roads;

Utuhegal led the men of Uruk against the Gutians;

he laid a trap for them;

Utuhegal, the mighty, vanquished Tirigan, captured his men;

Tirigan, prince of the Gutians, ran away;

Utuhegal's men captured Tirigan, his wife, and his children; they brought Tirigan before Utuhegal; Utuhegal put his foot on his neck; Utuhegal brought princeship back to Sumer (ins. 4).

A votive inscription of Utuhegal also reports: for Utuhegal, prince of Uruk, lord of the four quarters;

Ur-Nammu, governor of Ur (ins. 2001).

And Ur-Nammu reports:

Ur-Nammu . . . the Gutians . . . to their mountain . . . ;

Ur-Nammu, the prince, made the border of Sumer firm.

So, Enlil brings down from the mountain the Gutians.

The Gutians overrun and dominate the valley.

Enlil orders Utuhegal to destroy their name.

Utuhegal defeats the Gutians.

Utuhegal's governor Ur-Nammu succeeds Utuhegal.

Ur-Nammu . . . the Gutians . . . to their mountain.

And with Ur-Nammu princeship is again one and only one.

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Ur.

The particulars are 5,

Ur-Nammu prince c. 2121-03,

Shulgi prince c. 2103-055,

Amar-Sin prince c. 2055-46,

Shu-Sin prince c. 2046-37,

Ibbi-Sin prince c. 2037-13.

The list reports:

Ur-Nammu, he reigned 18 years,
 divine Shulgi, son of Ur-Nammu, he reigned 48
 years,
 divine Amar-Sin, son of divine Shulgi, he reigned
 9 years,
 Shu-Sin, son of divine Amar-Sin, he reigned 9
 years,
 Ibbi-Sin, son of Shu-Sin, he reigned 24 years.

Ur-Nammu and his 4 successors are the next
 great advance in the development of the state, and
 the acquisition of knowledge.

The list, composed under Ibbi-Sin, reflects this
 fact.

The inscriptions of the princes, some hundreds
 of them, reflect this fact.

Ur-Nammu has left behind the names of 3 of
 his 18 reign years. Shulgi, Amar-Sin, Shu-Sin,
 and Ibbi-Sin have left behind the names of all 90
 of their reign years. These princes did restore
 order to the valley.

They maintained the valley under one and only
 one state for one century.

They greatly developed administration.

Under the code of Ur-Nammu, theirs is the
 first state under a code of laws.

Their state is the first time of massive writing.
 The bulk of the Sumerian record, by far, is from
 the one century of their state.

History begins in their state.

The state of Ur-Nammu and his 4 successors
 is the second great state.

Ur-Nammu, he reigned 18 years.

With Ur-Nammu the expulsion of the men
 from the mountain is over:

Ur-Nammu, the mighty, prince of Ur, prince of
 Sumer and Akkad;

Umma, Marad, Girkal, Kazallu, Usharum were
 subdued by Anshan;

by the might of Nanna, I, the prince, set them free
 (ins. 20).

The state is restored. The one state which the
 princes of Akkad had built is restored. Ur-
 Nammu affirms the continuity with his title. Ur-
 Nammu, the mighty, prince of Ur, is prince of
 Sumer and Akkad.

And the state is not just restored. The state
 flourishes. Other than the expulsion of the men
 from the mountain, the inscriptions of Ur-Nammu
 report no smiting. They report prosperity.

Ur-Nammu reports:

I put the boats in the Tigris, Euphrates, and all
 rivers in order;

I established road stations and planted orchards
 beside them; I, the prince, put gardeners in
 charge of the orchards (*id.*).

Ur-Nammu built temples of Nanna (ins. 2), An
 (ins. 5), Ninsuna (ins. 6), Ninshagepada (ins. 7),
 Ninutula (ins. 8), Enki (ins. 10), Ningal (ins. 13),
 Inanna (ins. 15), Enlil (ins. 24), Utu (ins. 35),
 Ninhursag (ins. 36), Ninlil (ins. 37). He built the
 wall of Ur (ins. 4) and the wall of Nippur (ins.
 38). He built canals (ins. 22, 26, 28, 39-40). One
 inscription quantifies his labors:

Ur-Nammu, the mighty, prince of Ur, prince of
 Sumer and Akkad;

he drained the swamps, he planted dates, he made
 a field of dates of 3 600 bur;

he made a canal for it 4 dana and 260 nidan long
 (ins. 19).

He made a field of dates of 230 km², he made a
 canal for it 45 km long.

Ur-Nammu's is the first report of the division
 of the state into administrative units:

from the tower of Numushda to the shrine of
 Numushda its southern side;

from the shrine of Numushda to the canal of
 Kazallu its eastern side;

from the canal of Kazallu to . . . ;

. . . to the tower of Numushda its western side;
 this is the district of Numushda, Ur-Nammu, the

prince, determined its boundary (ins. 21),
 and the boundaries of 4 more districts are legible
 on the inscription.

His is the first report of the establishment of
 standard units of measurement:

I fashioned a copper vessel, and said, it is 60 sila;

I fashioned a copper vessel, and said, it is 10 sila;

I fashioned a copper vessel, and said, it is 5 sila;

I fashioned a bronze measure, and said, it is 1
 mina;

I fashioned stones from 1 shekel to 1 mina (ins.
 20).

And his is the first code of laws.

The code begins with a preamble, and has then
 some 40 laws.

Ur-Nammu decrees:

Ur-Nammu, the mighty, prince of Ur, prince of
 Sumer and Akkad;

when An and Enlil gave the princship of Ur to Nanna, Nanna gave it to Ur-Nammu so that justice and truth prevail;

at that time, base people took the fields, the chief boatman took the trade, the chief herdsman took the cattle, the sheep, and the asses;

Ur-Nammu, the mighty, prince of Ur, prince of Sumer and Akkad, by the might of Nanna, . . . , established justice in the land;

he set them free from the chief boatman, he set them free from those who took the cattle, the sheep, and the asses (*id.*).

The proclamation of the establishment of standard units of measurement follows, and Ur-Nammu continues:

I put the boats in the Tigris, Euphrates, and all rivers in order;

I established road stations and planted orchards beside them; I, the prince, put gardeners in charge of the orchards;

I did not let the strong man take the orphan;

I did not let the man of 60 shekels take the man of 1 shekel;

I banished evil, violence, and complaint;

I established justice in the land (*id.*).

The laws follow. Among them:

if a man kills a man, he shall be killed;

if a slave marries a free woman, they shall give one male child to his master, the other children of the free woman shall not be given to his master;

if a man violates a virgin, he shall be killed;

if a man divorces his first wife, he shall pay 60 shekels;

if a slave escapes, and a man returns the slave, the master of the slave shall pay him . . . shekels;

if a man breaks the bone of another, he shall pay 60 shekels;

if a man knocks out the tooth of another, he shall pay 2 shekels;

if a man is a witness in a case and perjures himself, he shall pay 15 shekels;

if a man is a witness in a case and refuses to take the oath, he shall pay whatever is at stake in the case (*id.*).

The code attests continuity.

Two-odd centuries earlier, Urukagina reports: in the old days, the chief boatman took the boats,

the chief herdsman took the asses and the sheep; Urukagina changed the old ways; he stopped the chief boatman from taking the boats, he stopped the chief herdsman from taking the asses and the sheep.

Ur-Nammu reports: at that time, the chief boatman took the trade, the chief herdsman took the cattle, the sheep, and the asses; Ur-Nammu established justice in the land; he set them free from the chief boatman, he set them free from those who took the cattle, the sheep, and the asses.

The code attests also a great advance.

Ur-Nammu is clear that order in the state and the law depend on one another. I put the boats in all rivers in order, I established road stations and planted orchards beside them, I did not let the strong man take the orphan.

He is clear that the establishment of standard units of measurement is part of the law. I fashioned a copper vessel, and said, it is 60 sila.

Procedure is distinguished clearly. Perjury has been discovered.

The end of the law is affirmed unambiguously. So that justice and truth prevail.

That princship is the source of the law is affirmed unambiguously as well. Nanna gave the princship to Ur-Nammu so that justice and truth prevail. And Ur-Nammu, the mighty, established justice in the land.

Shulgi, he reigned 48 years.

Ur-Nammu has established the state firmly in the lower valley. The inscriptions of Shulgi attest the expansion of the state in the northeast. About a quarter of the names of his years are of smiting, all of it in the northeast, and most of all of Simurru:

the year Shulgi destroyed Simurru;

the year Shulgi destroyed Simurru for the second time;

the year Shulgi destroyed Simurru for the third time;

the year Shulgi destroyed Simurru and Lullubum for the ninth time.

Simurru and Lullubum are in the wild mountain in the northeast, clearly, well destroyed.

The inscriptions of Shulgi, however, also attest most of all building. The continuing prosperity of the state. Ur-Nammu built walls, canals, and

many temples. Shulgi built walls, canals, and many more temples. He built temples of Enki (ins. 1), Nimintaba (ins. 4), Ninurima (ins. 5), Inanna (ins. 6), Ninsiana (ins. 7), Ninshubur (ins. 8), Nanshe (ins. 9), Ningirsu (ins. 11), Ninmarki (ins. 15), Ninhursag (ins. 16), Damgalnuna (ins. 17), Enlil (ins. 18), Ennugi (ins. 19), Nergal (ins. 24), Tishpak (ins. 27), Ninazu (ins. 28), Inshushinak (ins. 31).

The building of temples indicates the domain brought firmly under the state. Ur-Nammu built temples in Ur, the center of the state, as well as Eridu, Larsa, Uruk, and as far as Nippur, 170 km northwest of Ur. Shulgi built temples in Ur, as well as Lagash, Adab, Nippur, Kutha, and as far as Eshnunna, 320 km northwest of Ur, and Susa, 250 km northeast of Ur.

The installation of governors indicates the domain brought firmly under the state as well.

The inscriptions of Ur-Nammu attest the installation of a governor in 1 city: in Lagash (ins. 20). The inscriptions of Shulgi attest the installation of governors in 9 cities, and in several of them of several governors over the 48 years of his reign: in Sharrakum (ins. 2026), Lagash (ins. 2010-9), Shuruppak (ins. 2027), Umma (ins. 2029), Adab (ins. 2001-5), Nippur (ins. 2022-4), Marad (ins. 2021), Babylon (ins. 2006-8), and as far as Eshnunna (ins. 2009).

The inscriptions of Shulgi attest also the names of 7 of his wives, many sons and daughters, generals, overseers of arms, overseers of stores, overseers of grain, overseers of dispatches, overseers of priests, priests, scribes, heralds, suppliers, herdsmen, gardeners, cupbearers, chair bearers.

Shulgi is a major step in the development of administration.

Also:

Shulgi, the mighty, prince of Ur, prince of Sumer and Akkad, lord of the four quarters, is once again:

Shulgi, god of the land (ins. 33, 83).

Amar-Sin, he reigned 9 years.

And:

Amar-Sin, the mighty, prince of Ur, lord of the four quarters,

is also:

Amar-Sin, god of the land (ins. 16-7).

His inscriptions as well attest most of all building. The continuing prosperity of the state.

Shulgi has destroyed Simurum nine times. Amar-Sin attests the installation of a governor of Simurum (ins. 2005).

He attests also a general in Ashur (ins. 2001). The state has expanded in the northwest.

Shu-Sin, he reigned 9 years.

And his inscriptions as well attest building.

They attest the installation of a governor of Hamazi (ins. 13), in the northeast beyond Simurum. A fragmentary inscription records also Shu-Sin's presence at the upper sea:

. . . , Ebla, Mari, Tuttul, . . . ; . . . the land where the cedars are cut down; from the land at the upper sea to Megan in the lower sea (ins. 2).

The campaigns of the princes of Ur have extended over the entire domain over which the campaigns of the princes of Akkad have extended.

At this time, however, Enlil again brought down from the wild mountain savage men. And this time not only from the wild mountain in the east, he brought them down from the wild mountain in the north as well.

Shu-Sin reports:

Shu-Sin, the mighty, prince of Ur, lord of the four quarters,

in the land of Shimashki men rose like locusts from Anshan to the upper sea;

Shu-Sin, the mighty, prince of Ur, lord of the four quarters, at the command of Ninlil, vanquished them all;

he killed the strong and the weak, he piled their corpses into a heap, he took their princes captive, he brought the booty to Enlil and Ninlil;

he took their cattle, sheep, goats, and asses, he took their people in bondage, he put them to work in the silver mines;

Shu-Sin, the mighty, prince of Ur, lord of the four quarters;

he took the silver from the land of Shimashki (ins. 3).

Thus in the east. In the north:

the Amorites . . . rose to do battle . . . , their princes came to do battle;

Shu-Sin, the mighty, prince . . . ;

he smote the men of Simanum, Hubura, and all other countries;

. . . the Amorites, whose ways are those of the beast, like the dog, . . . from the big mountain . . . ;

. . . he flew like an eagle against them;

he ravaged their country (ins. 1).

But the Amorites, too, will keep coming.

Ibbi-Sin, he reigned 24 years.

Ibbi-Sin, the mighty, prince of Ur, lord of the four quarters, is also: god of the land (ins. 1-3)

His inscriptions, however, attest no building of temples. Ibbi-Sin built: the great wall of Ur (ins. 1).

His inscriptions attest governors of Lagash (ins. 2004), Umma (ins. 2012), Adab (ins. 2001), Nippur (ins. 2007), and Kutha (ins. 2006).

Early in his reign Ibbi-Sin held firmly the lower valley.

But he has left behind the names of all 24 of his reign years, and these attest the retreat of the state. Shulgi has built temples in Susa. One of Ibbi-Sin's years is: the year he destroyed Susa. Amar-Sin has installed a governor of Simurru. Another of Ibbi-Sin's years is: the year he destroyed Simurru. Shu-Sin has flown like an eagle against the Amorites. Yet another of Ibbi-Sin's years is: the year he smote the Amorites who have no cities.

The oldest archive, collecting 23 royal letters, is from this time. And the royal letters attest the ruin of the state.

Ishbi-Erra writes to Ibbi-Sin:

Ishbi-Erra, his servant, to Ibbi-Sin, the prince; you sent me to Isin to buy grain; but the Amorites have seized the cities (*id.*).

Ibbi-Sin writes to Ishbi-Erra:

Ibbi-Sin, the prince, to Ishbi-Erra, his servant; I gave you 20 talents of silver to buy grain; you bought 2 bur per shekel, but sent me only 1 bur per shekel; and why did you let the Amorites enter my land (*id.*)?

Puzur-Numushda writes to Ibbi-Sin:

Puzur-Numushda, his servant, to Ibbi-Sin, the prince;

Ishbi-Erra writes to me, Enlil has given me the princship; and it is as he says;

he has built a wall around Isin, he has seized Nippur, he has seized the governor of Eshnunna, he has seized the governor of Kish, he leads his own troops, he has seized the banks of the Tigris and the Euphrates;

let my prince know, he strikes great terror in me (*id.*).

Ibbi-Sin writes to Puzur-Numushda:

Ibbi-Sin, the prince, to Puzur-Numushda, governor of Kazallu;

Enlil has given the princship to me;

I am sending you troops; do not turn against me; will Enlil give the princship to a worthless man like Ishbi-Erra (*id.*)?

Enlil will. The servant of Ibbi-Sin, Ishbi-Erra became the prince of Isin.

Ur was smitten, princship was taken to Isin.

And the state of Ur comes to an end.

Another literary composition from this time is the *Lamentation over the destruction of Sumer and Ur*. It anticipates the Hebrew prophets. The cause of the fall of Ur it finds in the command of An and Enlil:

and who can stand against the command of An and Enlil (*id.*)?

The instrument of the command are the men from the wild mountain:

the snake of the mountain,
the wild beasts (*id.*).

The *Lamentation* thus implores An and Enlil:

may the storm that destroyed Sumer destroy its enemies,

may it destroy the Tidnumites,

may it destroy the Gutians,

may it destroy the Anshanites (*id.*).

The Gutians and the Anshanites in their mountain in the east, the Tidnumites in their mountain in the north. And the *Lamentation* laments the destruction of the cities, the houses, and the people, the devastation of the fields, the loss of the cattle, the sheep, and the asses. But first of all:

the law came to an end;
princship was taken away;
order came to an end in Sumer;
the princship and order of Ur was destroyed (*id.*).

Under the princes of Ur, then, the state is one and only one for one century.

Two-odd generations separate Sharkalisharri and Ur-Nammu. The time of disorder – through the decline and fall of Akkad and before the rise of Ur – is brief. And the continuity of the state from the princes of Akkad to the princes of Ur is indicated strongly.

The prince of Ur is the prince of Sumer and Akkad. The god of Akkad is the god of the land.

The domain which the princes of Akkad have brought under the state is the domain of the princes of Ur. The princes of Akkad have subdued the older states in the lower valley, have eventually pacified the lower valley, and the lower valley prospers under the princes of Ur. The princes of Akkad have brought the countries outside the lower valley, in the east, northeast, and northwest, under the state, have had to continue campaigning over these countries, and the princes of Ur have to continue campaigning over these countries.

To bring this entire domain under the state, and pacify the lower valley, the princes of Akkad have had to campaign over it continuously for one century, and yet to continue campaigning over it.

Under the princes of Ur there is order in the state, and great prosperity. The boats in all rivers are put in order. Road stations are established, orchards planted beside them. The swamps are drained, fields of dates planted. Canals are built. Standard units of measurement are established. The state is divided into administrative units. Governors are installed, and overseers of arms, overseers of stores, overseers of grain, overseers of dispatches, overseers of priests. Ur-Nammu builds 12 temples in 5 cities, Shulgi builds 17 temples in 7 cities.

The state is brought under a code of laws.

And the law of the princes of Ur depends on the smiting of the princes of Akkad.

The annual campaigns of the princes of Akkad have pacified the center of the state and secured its periphery. And it is the same pacified center and secured periphery of the state that is brought under the law.

The development of administration begins under the princes of Akkad. The power of smiting is transferred to officials. One century of annual campaigns has to precede this development. And

the success of administration will depend on the degree to which smiting has subdued those who will heed the administration. Under the princes of Ur the law is promulgated. Transferred to the law, power is further removed from smiting. The expulsion of the men from the wild mountain has to precede this development. And the more the success of the law will depend on the degree to which smiting has subdued those who will heed the law.

Ur-Nammu is clear that order in the state and the law depend on one another.

And the men from the wild mountain cannot have shown more clearly and distinctly, if negatively, that order in the state – and *ipso facto* the law – depends on smiting. They are the men from the wild mountain, the land that knows no rule, the savage men who look like men, but whose ways and words are those of the dog, who are like locusts, who are wild beasts, who have no cities.

Ur-Nammu is clear also that princesship is the source of the law.

In general, the theory of the state is the same.

Ur-Nammu is the prince of Sumer and Akkad. Shulgi is the lord of the four quarters. He is also the god of the land. And Amar-Sin is the lord of the four quarters, the god of the land. Shu-Sin is the lord of the four quarters, the god of the land. Ibbi-Sin is the lord of the four quarters, the god of the land.

Ishbi-Era writes, Enlil has given me the princesship. Ibbi-Sin writes, Enlil has given the princesship to me.

In the list, too, princesship is one and only one.

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And the following conclusions can be drawn from the development of the state in the six and a half centuries from Enmebaragesi to Ibbi-Sin.

First of all, the state is plural.

It begins in Kish. The beginning is small, Kish does not rise, and independent princes establish themselves in the nearby cities. In Uruk. In Ur. Two centuries after the beginning of the state there are independent princes strong enough to attest one another in 6 cities, Kish, Uruk, Ur, Lagash, Umma, and Akshak. Lagash rises, but not decisively, the other states continue. Three and a half centuries after the beginning of the

state yet another state, Akkad, rises greatly and brings all other states under itself. The state is now one. For one and a half centuries. Akkad falls, and there are again several states. The Gutian horde, Lagash, Uruk, Elam. Then Ur rises and brings all other states under itself. The state is again one. For one century. Then Ur, too, falls.

It is a fundamental fact, the dynamic character of the development. Several small states, one large state, several small states, one large state, and this one large state falls, too.

Hence, smiting is indicated from the first. And smiting is the most fundamental fact.

Not too vigorous at first, smiting becomes steadily more vigorous, and more, and reaches steadily further, and further.

Distances alone, 6 states within 230 km of one another, can explain the beginning of smiting.

And not quite one and a half centuries after the beginning of the state, the second prince to leave 3 inscriptions behind, Mesalim, prince of Kish, is the first prince to attest one state dominating others. Mesalim appoints governors of Lagash and Adab, and arbitrates between Lagash and Umma.

One generation later, the first prince to leave more than 2 dozen inscriptions behind, Ur-Nanshe, prince of Lagash, is the first prince to report victories. Ur-Nanshe smites Umma and Ur. Ur is 60 km away.

Two generations later, Ur-Nanshe's successor, Eanatum, smites Elam, Urua, Umma, Uruk, Ur, Kiutu, Uruaz, Mishime, Arua, Akshak, Kish, Subartu, and Mari. Mari is 620 km away.

Smiting becomes the way of the states. The prince is not just the prince of his own state any longer. Eanatum, prince of Lagash, is prince of Kish. Enshakushana, prince of Ur, is prince of Uruk. Lugalkignedudu, prince of Uruk, is prince of Ur and prince of Kish. Lugalzagesi, prince of Umma, is prince of Uruk and prince of Ur.

And after three and a half centuries of increasingly vigorous smiting Sargon and his successors are a decisive advance in the development of warfare.

Sargon discovers the army. 5 400 eat bread daily before Sargon. And Sargon wins 34 battles.

Sargon and his successors discover also the annual campaign. Most of the 142 years of their

reigns are years of smiting, and all, or nearly all, years of the first century of their reigns are years of smiting.

And Naram-Sin, when he campaigns from the source of the Euphrates to the southern shores of the Persian Gulf, has led expeditions across 2 100 km.

Akkad then falls. The smiting continues.

The Gutians cover the earth, nothing escapes, they spare no man.

Utuhegal destroys their name.

Under the princes of Ur order, the law, and prosperity prevail. The smiting continues.

Shulgi destroys Simurru nine times. In the mountain men rise like locusts, Shu-Sin kills the strong and the weak, takes their cattle, sheep, goats, and asses, takes their people in bondage.

The locusts, for their part, in the next generation, destroy order, the law, and Sumer.

And the smiting is the foundation of all advances.

First of all, with respect to the smiting itself, the army, the annual campaign, and expeditions across 2 100 km are all three major theoretical advances, irrespective of the fact of their practical ends. The magnitude of the advances is indicated by the fact that it will be twelve and a half centuries before another state, Assyria, develops the capability of the annual campaign and fifteen centuries before another state, the same, Assyria, develops the capability of expeditions across 2 100 km. As to a force of 5 400, it remains a massive weapon forty-three centuries after Sargon. Theory is the search for truth, practice is the search for action. And that they are all three theoretical advances, irrespective of the fact of their practical ends, the fact shows that the problem of mustering 5 400 to any end whatsoever, never mind maintaining them, or seasoning them, still does not have, forty-three centuries after Sargon, trivial solutions. Nor does the problem of mustering them annually. Nor does the problem of leading them across 2 100 km.

Next, smiting is the foundation of unification.

Several at first, the state becomes one. Several again, it becomes one again.

To Sargon, lord of the earth, Enlil gave no rival from the upper sea to the lower sea. Because 5 400 men ate bread daily before Sargon. Again,

Ur-Nammu, the prince, made the border of Sumer firm. Because Ur-Nammu . . . the Gutians . . . to their mountain.

Next, smiting is the foundation of expansion.

The domain under the state has increased by many orders of magnitude.

The state begins in one city. Three and a half centuries later the entire valley is under the state, 1 300 km from the Persian Gulf to the Mediterranean.

When the state begins, it is the state of thousands rather than tens of thousands. When the state brings the entire valley under itself, it is the state of millions.

Next, smiting is the foundation of power.

And the power of the state has increased by many orders of magnitude.

Extensively, the domain brought under the state and the reach of the expeditions of the princes indicate the growth of the power of the state.

Intensively, the promulgation of the law, the development of religion, and the transformation of custom indicate the growth of the power of the state.

When it brings the entire valley under itself, the state borders, like the valley, the sea and the desert in the south, the sea in the west, the mountain in the east and in the north.

The state borders the not state.

And this is what – the state reports – there is in the east and in the north.

Utuhegal: the serpent of the mountain, who defies the gods, takes away the women, takes away the children, brings evil to Sumer.

Shu-Sin: men like locusts, whose ways are those of the beast, like the dog.

Ibbi-Sin: who have no cities.

The curse of Akkad: savage men, who know no rule, who look like men, but whose ways and words are those of the dog.

The *Lamentation over the destruction of Sumer and Ur*: the snake of the mountain, the wild beasts.

This is the not state. No cities, no rule, men who look like men, but whose ways and words are those of the dog.

The not state points to the beginning of the state. To what the state has to begin from.

And in one way, the fundamental, the state is the same, very much like the not state. The not state takes away the cattle, the sheep, and the asses, takes away the women and the children. The state takes the cattle, sheep, goats, and asses, takes the people in bondage.

In other ways, however, the state is very different from the not state.

They have no cities, they know no rule.

The state has developed the army, the annual campaign, and expeditions across 2 100 km.

The boats are in order, there are road stations, orchards beside them, fields of dates, canals, very many temples.

There is administration.

Sargon wins 34 battles. Rimush yet has to win three times the fight for Sumer. The rulers of 32 cities yet gather to fight Manishtushu. The four quarters yet rise against Naram-Sin.

And after one century of annual campaigns, Naram-Sin develops administration. The god of Akkad attests his sons, daughters, overseers, governors, judges, priests, scribes, . . . , cupbearers.

The power of smiting has been transferred to officials.

One century-odd later, Shulgi appoints governors of 9 cities, as far as Eshnunna, 320 km from the center of the state at Ur. Shulgi smites Simurum nine times, and Amar-Sin appoints governor of Simurum. Shu-Sin appoints governor of Hamazi beyond Simurum, not less than 550 km from the center of the state.

Smiting has subdued the population which will heed the administration.

And there is the law.

The law begins with Urukagina, the ninth of the series of 9 princes of Lagash, who first report victories, first reports campaigns across 730 km, first report smiting over more than one century.

Since time began, since life began, that is how it was. But Urukagina changed the old ways.

The new ways are new. The strong shall not strike the weak. He shall not take the widow and the orphan.

The new ways are still vague. When the strong wants to buy the good ass of the weak, he shall not strike him. When he wants to buy his house, he shall not strike him. But the new ways have

not yet made it clear who is the strong, who is the weak. The only definite new way is that, when a corpse is brought for burial, they shall not take 7 jugs of beer and 240 loaves of bread, they shall take 3 jugs and 80 loaves.

Under Sargon and his successors the law is in abeyance. Much smiting has to be done.

But then Nanna gives the princship to Ur-Nammu so that justice and truth prevail, and Ur-Nammu establishes justice in the land.

And Ur-Nammu's are laws *par excellence*.

The relations which the laws regulate – if a man kills a man, if a man violates a virgin, if a man knocks out the tooth of another – are as old as man, virgin, and tooth. As old as men gathered in a tribe. The ways in which the laws regulate the relations – he shall be killed, he shall pay – are just as old. As old as men gathered in a tribe.

What is new, and shows the laws *par excellence*, are the numbers. A knocked-out tooth 2 shekels, perjury 15 shekels, a broken bone 60 shekels, a divorce also 60 shekels. 30 knocked-out teeth = 4 perjuries = 1 broken bone = 1 divorce.

The numbers show procedure clearly distinguished, too. Witnesses are as old as the tribe as well, and perjury is no doubt as old as witnesses. The numbers, 1 perjury = $7\frac{1}{2}$ knocked-out teeth = $\frac{1}{4}$ broken bone = $\frac{1}{4}$ divorce, show that the witness has become an officer of the law.

Thus, Ur-Nammu, like Urukagina, did not let the strong take the weak. But it is now clear who is the strong, who is the weak. Ur-Nammu did not let the man of 60 shekels take the man of 1 shekel.

Having fashioned the relevant stones, too. The stone of 1 mina, or 60 shekels, and the stone of 1 shekel.

So that justice and truth prevail.

Part of custom has been abolished, and replaced by the law.

Part of natural law has been replaced by civil law.

Ulpian, the jurist, twenty-three and a half centuries later, writes: whenever we add something to natural law or subtract something from it, we thus make a law particular to ourselves, and this is civil law (*Digest*, I, 1.6).

Civil law begins with Urukagina. Urukagina's

new ways add something to natural law and subtract something from it. Taking it for granted that, if not prevented by Urukagina, the strong will strike the weak, Urukagina's new ways add with respect to the weak, and subtract with respect to the strong.

Urukagina's new ways are vague.

With Ur-Nammu's code the additions and subtractions have become definite. Ur-Nammu's code is civil law *par excellence*.

And how greatly, and definitely, the additions and subtractions add and subtract, respectively, the equations show. 1 strong man = 4 perjuries. 15 weak men = 1 perjury. 1 strong man = 30 knocked-out teeth. 2 weak men = 1 knocked-out tooth. In general, 1 strong man = 60 weak men.

The power of smiting has been transferred to the law, and how much power it is, the installation of governors and the building of temples indicate clearly and distinctly. The installation of governors indicates the domain brought firmly under the state, the building of temples indicates the domain prospering under the state.

Shulgi appoints governors as far as Eshnunna, Shu-Sin appoints governor of Hamazi. Ur-Nammu builds temples in 5 cities, Shulgi builds temples in 7 cities, and as far as Eshnunna and Susa. Within these limits, not less than two million – out of the three million in the valley – have been favored with the installation of governors and the building of temples.

Not less than two million, not less than one eighteenth of humanity, has been subdued by smiting sufficiently to begin heeding the law. Or in any case subdued sufficiently to begin being presumed by the state heeding the law.

And the discovery of the law is a major theoretical advance, irrespective of its practical ends. The magnitude of the advance the fact shows that it will be more than two millennia before the jurists begin investigating the law, and define civil law. That it is a theoretical advance, the fact of the jurists suffices to show.

The development of religion is inseparable from the development of the state, from the prince, in particular.

Mesaneпада first attests a dedication to a god. Aaneпада first attests the building of a temple. In the same generation Ur-Nanshe attests the build-

ing of 5 temples.

The prince ministers to the gods, and the more powerful the prince the more so.

By this time also: Enlil drew the border between Lagash and Umma; Mesalim, prince of Kish, measured the border and set up a monument there.

The prince acts for Enlil.

The gods begin reciprocating.

Eanatum, raised by Enlil, given strength by Ningirsu, chosen by Nanshe, nursed by Ninhursag, loved by Inanna, given wisdom by Enki, beloved of Dumuziabzu, trusted by Hendursaga, beloved of Lugalurub.

So much so: Inanna gave Eanatum the principship of Kish next to the lordship over Lagash.

Eanatum also first affirms: all lands trembled before Eanatum, and first affirms: Enlil, lord of heaven and earth.

As all lands trembled before Eanatum, so Enlil is the lord of heaven and earth.

And the relation continues to intensify. The prince builds more temples, and more, the gods favor the prince more, and more, and most particularly, Enlil favors him more, and more.

Lugalzagesi, beloved of An, lord of all lands, warrior for Enlil, given wisdom by Enki, counseled by Sin, warrior for Utu, sustained by Inanna, raised by Nisaba, nursed by Ninhursag, chosen by Messangaunuga, brought up by Ningirim, chief servant of the gods; Enlil, lord of all lands, gave Lugalzagesi the principship over the people; Enlil put all lands at his feet; Enlil gave him no rival.

Later in the same generation, to Sargon, lord of the earth, Enlil gave no rival.

The intensification of the relation culminates in Naram-Sin, the god of Akkad.

And Ur-Nammu builds 12 temples, Shulgi builds 17 temples, Shulgi is god of the land, Amar-Sin is god of the land, Shu-Sin is god of the land, Ib-bi-Sin is god of the land.

The princes – Eanatum, before whom all lands trembled, Enshakushana, lord of Sumer, prince of the people, Lugaliginedudu, to whom Enlil gave the lordship and the principship, and Lugalzagesi, prince of the land, to whom Enlil gave the principship over the people, put all lands in his feet, gave him no rival from the lower sea to the upper

sea – have discovered that principship is one.

The princes – Sargon, lord of the earth, Rimush, lord of the earth, Manishtushu, lord of the earth, Naram-Sin, lord of the four quarters, god of Akkad, and Sharkalisharri, god of Akkad – have shown that principship is, in fact, one.

The princes have discovered that the lord of heaven and earth gives the lordship to the lord of the earth. And rather conversely, that the lord of the earth decides to whom the lord of heaven and earth gives the lordship.

The development of religion is inseparable from the unification of all states under one state, the expansion of the state, and the growth of the power of the state.

Thus also the law. When Ningirsu gave the principship of Lagash to Urukagina, Urukagina changed the old ways. When An and Enlil gave the principship of Ur to Nanna, Nanna gave it to Ur-Nammu so that justice and truth prevail. And rather conversely, as the prince decides who gives him the principship, so he decides to what end.

And hence also the transformation of custom.

Darwin writes: it seems to me highly probable that any animal with well-marked social instincts, parental and filial affections included, would inevitably acquire a moral sense or consciousness as soon as its intellectual powers had become as well, or nearly as well, developed as in man; this view of the origin and nature of the moral sense accords well with what we see of the early undeveloped condition of this faculty in mankind; the virtues which must be practiced are those which are still recognized as the most important; but they are practiced almost exclusively in relation to the men of the same tribe.

The generalization of the practice of the virtues which must be practiced from the men of the tribe to the men of a larger tribe, and larger, and all the way to humanity, begins with the princes of Akkad, and continues with the princes of Ur. The princes of Akkad mixed the men of all tribes in the valley of the two rivers, lower sea to upper sea, into one larger tribe, comprising not less than one twelfth of humanity, for nearly one and a half centuries, even if by the not very effective means of campaigning continuously over them. The princes of Ur continued mixing the men of all those tribes into the same one larger tribe, the one

twelfth of humanity descended from that earlier one twelfth of humanity, for nearly one century, and by the much more effective means of bringing them all under the law.

The custom of each member of each of the tribes in the valley will be curtailed severely by the smiting. It will be curtailed in, both, those who are the instrument of the smiting, in the army, in the annual campaigns, and in the expeditions across 2 100 km, and those who are the object of the smiting, again, and again, and again. And the more severely will the custom of each member of each of the tribes in the valley be curtailed by the additions and subtractions of the law. And it will be curtailed again in, both, those to whom the law adds, and those from whom it subtracts.

The ensuing uniformity will be the practice of the virtues which must be practiced. The practice of these virtues will be the custom of the new larger tribe, comprising one twelfth of humanity for one and a half centuries, and again for one more century. It is a major transformation of custom, even if the new custom of that larger tribe is yet, four-odd millennia later, to take root against all the customs of all the smaller tribes.

It is the beginning of the taming of humanity, the locusts, who look like men, but whose ways and words are those of the dog.

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And the development of the state in the six and a half centuries from Enmebaragesi to Ibbi-Sin attests a very great advance in the acquisition of knowledge, too.

To begin with, there is the accumulation of the inscriptions of the princes from the first, the acceleration of the accumulation from the first, and great acceleration with the rise of the state. Enmebaragesi leaves behind 1 inscription, Mesanepada 3, Anepada 6. Lagash rises, and the princes of Lagash leave behind 9 and a half dozen inscriptions. Akkad rises, and the princes of Akkad leave behind more than 20 dozen inscriptions. Ur rises, and the princes of Ur leave behind several hundred inscriptions.

The inscriptions are steadily longer. And the largest inscription of Ur-Nammu, preserved in several copies, too, the one recording the code, is

several hundred lines long.

The inscriptions are steadily more explicitly informed by one another. And from the princes of Ur as well is the first archive, collecting 23 documents.

Thus, when writing becomes massive under the princes of Ur, the accumulation of the inscriptions of the princes, its acceleration, and great acceleration, in time of order and prosperity as well, suffices to explain the rise of writing.

Longer compositions appear. Among these are the artistic masterpieces, the compositions about Gilgamesh, the compositions about Inanna, *The curse of Akkad*, the *Lamentation over the destruction of Sumer and Ur*. These are all about the gods. In particular, about the princes. Gilgamesh is a god on the authority of the list as well as the compositions about Gilgamesh. Dumuzi is prominent in the compositions about Inanna, and Dumuzi is also a prince of Uruk and a god on the authority of the list as well as the compositions about Inanna. *The curse of Akkad* is about Naram-Sin, the god of Akkad. The *Lamentation over the destruction of Sumer and Ur* is about Ibbi-Sin, god of the land.

In all these, as in all later artistic masterpieces, the thought and the sense predominates.

In the inscriptions of the princes the reference and the true predominates from the first.

The inscriptions attest the accumulation, and the acceleration of the accumulation, of inferences from experience, brought in connection with one another in chains of inferences, steadily more inferences, steadily longer chains, the gaps in the chains steadily fewer and smaller.

And the inferences and chains indicate clearly the development of a theory of the state.

When Ur-Nanshe affirms: Ur-Nanshe, prince of Lagash, the reference of 'prince of Lagash' is Ur-Nanshe.

When Akurgal next affirms: Akurgal, prince of Lagash, son of Ur-Nanshe, prince of Lagash, Eanatum next affirms: Eanatum, prince of Lagash, son of Akurgal, prince of Lagash, son of Ur-Nanshe, prince of Lagash, Enanatum next affirms: Enanatum, prince of Lagash, son of Akurgal, prince of Lagash, brother of Eanatum, prince of Lagash, and Enmetena next affirms: Enmetena, prince of Lagash, son of Enanatum,

prince of Lagash, and Enmetena affirms also: Enmetena, prince of Lagash, descendant of Ur-Nanshe, prince of Lagash, the reference of 'prince of Lagash' is prince of Lagash. The general, prince of Lagash, is abstracted from the particulars Ur-Nanshe, Akurgal, Eanatum, Enanatum, and Enmetena. The object, prince of Lagash, reaches in time across one century.

And when Eanatum affirms: Inanna gave Eanatum, prince of Lagash, the princship of Kish next to the lordship over Lagash, the reference of 'the princship of Kish' is princship. The general, princship, is abstracted from the particulars prince of Lagash as well as Lagash and Kish. The object, princship, reaches in space from Lagash to Kish.

The generalization and the abstraction continue. With: Enshakushana, lord of Sumer, prince of the people, then: Lugalkiginedudu, to whom Enlil gave the lordship and the princship, then: Lugalzagesi, prince of the land, to whom Enlil gave the princship over the people. The princes have discovered that princship is one. The reference of 'princship' is very much more general. The prince is prince of the people, and prince of the land. The reference is also further removed from the particulars. Earlier Inanna bestows the princship of Kish next to the lordship over Lagash. Now Enlil bestows outright the lordship and the princship.

With Sargon the generalization is complete as far as the earth is concerned. Sargon, prince of Akkad, prince of Kish, lord of the earth. From Akkad – to Kish – to the earth. The reference of 'princship' is now as general as it can be on earth.

So Rimush is lord of the earth, and Manishtushu is lord of the earth. But with Naram-Sin, completed on earth, the generalization yet continues. Naram-Sin, lord of the four quarters, the god of Akkad.

Next, in Utuhegal, the abstraction as well is rather complete: the Gutian took princship to the mountain, Utuhegal brought princship back to Sumer. Like any other portable object, princship is now taken to the mountain, now brought back to Sumer.

The princes of Ur corroborate the results of their predecessors. They are each lord of the four

quarters, god of the land.

In the meantime, princship has greatly advanced warfare.

Princship has developed administration.

Princship has discovered the law. Ur-Nammu is clear that princship is the source of the law, too.

The development of princship has been attended by development of religion. As the prince has become lord of the earth, lord of the four quarters, and god, so Enlil has become lord of heaven and earth, lord of all lands.

Princship is the state, and the state is princship.

And the facts one and all, smiting, unification, expansion, power, the law, religion, corroborate the results of the princes. The results of the princes are an empirical generalization.

Counting from Sargon, it will be eighteen and a half centuries before the investigation of the state by the philosophers begins, and generalized further, and abstracted from princship as well, the state acquires its general and abstract name, the state. Eighteen and a half centuries before the investigation of the state by the philosophers begins, the investigation of princship, and *ipso facto* of the state, begins with the princes in the valley of the two rivers. Quite explicitly, too.

Thus, the state is one. It is established by smiting. It rules the earth. The four quarters. If it falls apart, it has to be made one again. By smiting. If it is taken to the mountain, it has to be brought back to Sumer. By smiting. It also establishes justice in the land.

It is this theory also that the list develops further. The state is one, taken from one city to another by smiting. The list also first solves the problem of the beginning of the state. The state descends from heaven.

The building of the state is a theoretical problem, irrespective of its practical ends. The greatest princes, Sargon, Naram-Sin, Ur-Nammu, are rather clear about this, too.

The magnitude of this advance the fact of the state suffices to show. That it is a theoretical advance the fact of the philosophers, when they begin investigating the state, will show. Before the philosophers the fact of the princes in the valley of the two rivers, their inferences and

chains of inferences, suffices to show.

The building of the state attests the acquisition of knowledge. So does the theory of the state.

So does the development of warfare.

So does the development of the law.

And with the advance in the development of the state the description of the surface of the earth begins and advances greatly.

Ur-Nanshe attests 4 localities. Eanatum attests 16. Sargon attests 27. Naram-Sin attests 38. Altogether, Sargon and his 4 successors attest 60 localities.

Naram-Sin discovers the sources of the Tigris and the Euphrates. When he takes the path to Talhad, no prince of all princes has taken this path. Naram-Sin is clear that he is probing the limits of the known earth.

And on a statue of Gudea a temple is drawn, a graduated ruler showing that the problem of the determination of distance and orientation across the temple is solved.

The development of the state is in increasingly definite space.

The inkling of geography is on all three counts, collection of localities, exploration, maps, unambiguous.

On all three counts the development of the state is the principal cause.

The development of the state is in increasingly definite time as well. And of history it is not just an inkling.

Enmetena records in one inscription the deeds of 8 princes of 3 cities across 3 generations. This is the first unambiguous inkling.

Sargon leaves behind the names of 4 of his reign years. Naram-Sin leaves behind 14. Altogether, Sargon and his 4 successors leave behind the names of 36 of their 142 reign years.

Ur-Nammu leaves behind the names of 3 of his reign years. His 4 successors Shulgi, Amar-Sin, Shu-Sin, and Ib-bi-Sin leave behind the names of all 90 of their reign years.

And under the princes of Ur history begins. The list is history *par excellence*. The explicit collection of the historians thus has to begin.

2103 ***Gilgamesh and Aka,***
2077 ***Sumerian prince list,***
2077 ***Ur archive,***
2067 ***Tummal chronicle.***

The list is a list of 120 princes of 10 cities.

It is an advance in the description of the surface of the earth.

The 10 cities are 10 localities. West to east: Mari, Kish, Akkad, Akshak, Adab, Uruk, Ur, the Gutian horde, Hamazi, and Awan. From Mari to Ur the list reaches across not quite 4° of latitude, from Mari to Awan across 7° of longitude. States, by smiting one another, define themselves spatially as sharply as no natural feature of any size defines itself. The collection of localities by the resident states begins with the list.

It is an advance in time reckoning.

It records the reign years of each prince, totals the years for each group of princes, and totals the totals. From the beginning of the reign of Sargon to the end of the reign of Ib-bi-Sin its total is 417 years, 6 months, and 47 days. The total is, in fact, 324 years ± 15 years. Reckoning time across centuries begins with the list.

It is an advance in the theory of the state.

And it is the beginning of history.

All important princes in the valley through the time of the list are 53.

Dividing them into those in the list and those not in the list, and into earlier and later, those before Sargon and those beginning with Sargon, the 53 are,

	in the list	not in the list	total
earlier	15	17	32,
later	18	3	21,
	33	20	53.

Of the earlier princes 46.9 % are in the list, of the later princes 85.7 % are in the list, of all important princes 62.3 % are in the list.

Today, three centuries into the past would be right after Louis XIV, before Walpole, before Maria Theresa, the time of Frederick William, of Peter, before the seven years' war, long before the United States. Six and a half centuries into the past would be right after Frederick II, the time of Edward, of Louis IX, of Alfonso X, before Osman, the time of the seventh crusade, long before the hundred years' war.

And next to the 33 important the list has 87 other princes.

Counting the early princes of Kish, Uruk, and Ur, those before Sargon, and the later princes of Kish, Uruk, and Ur, those after Sharkalisharri,

separately, the 53 princes indicate 12 states. The states and the number of princes of each state are,

	in the list	not in the list	total
Kish	5	1	6,
Uruk	4	1	5,
Ur	5	1	6,
Lagash	–	9	9,
Umma	–	5	5,
Akshak	1	–	1,
Akkad	7	–	7,
Gutian horde	3	–	3,
later Lagash	–	2	2,
later Uruk	3	–	3,
Elam	–	1	1,
later Ur	5	–	5,
	33	20	53.

Of all these states 75.0 % are in the list. Very important are Kish, Uruk, Ur, Lagash, Akkad, the Gutian horde, and the later Ur. Of the very important states 87.5 % are in the list.

And the list has also princes of Mari, Adab, Awan, and Hamazi, who are not attested independently, but their cities are all well attested by the princes smiting them.

When Herodotus, sixteen centuries after the list, proposes to research the great and magnificent deeds of Greeks and barbarians and the cities once great now small and now great once small, both, research, in general, and research of the great and magnificent deeds and the cities once great now small and now great once small, in particular, begin with the list. When Voltaire, thirty-eight centuries after the list, proposes to concern himself only with what merits the attention of all times, and Gibbon proposes to perform the indispensable duty of examining all original materials, both, the performance of the indispensable duty of examining all original materials, in general, and its performance to the end of what merits the attention of all times, in particular, begin with the list. When Spinoza, too, proposes that the method of history does not differ from the method of physics at all, but agrees with it entirely, thirty-seven centuries earlier, thirty-six and a half before Bacon and Descartes, the list follows the method as staunchly in the search for truth as the thread of Theseus must be followed in the labyrinth.

That *Gilgamesh and Aka* is different from the

other compositions about Gilgamesh in that it is not saturated sufficiently with the thought and the sense, the fact indicates that, when the other compositions were assimilated into the later Akkadian masterpieces about Gilgamesh, *Gilgamesh and Aka* was left alone. That it attests the reference and the true its agreement with the list shows. Next to Gilgamesh, it is about Aka, son of Enmebaragesi, and all 3 are in the list. Attesting Enmebaragesi, it agrees with the inscriptions of the princes, too.

What it reports is very much what the princes report, if indeed more picturesquely.

The envoys of Aka told Gilgamesh, submit. The old men of Uruk told Gilgamesh, let us submit. The young men of Uruk told Gilgamesh, let us wage war. Gilgamesh told Enkidu, ready the arms. Aka laid siege to Uruk. Gilgamesh climbed the walls of Uruk. Myriad fell. Aka submitted.

Clearly, Kish was smitten, princesship was taken to Uruk.

Gilgamesh and Aka is the first chronicle. The Tummal chronicle is the second.

The Tummal chronicle also reports, and in this case not too picturesquely, very much what the princes report.

Enmebaragesi built the Irinam, the temple of Enlil. Aka made the Tummal preminent. The Tummal fell into ruin. Mesanepada built the Burshushua, the temple of Enlil. Meskiagnuna made the Tummal preminent. The Tummal fell into ruin. And three more times, built, made preminent, fell into ruin.

8 of the 11 princes in the Tummal chronicle have left inscriptions behind. All 11 are in the list.

The oldest collection of 23 documents in the Ur archive includes correspondence of Shulgi, Shu-Sin, and Ibbi-Sin. All 3 are in the list, and Shulgi and Ibbi-Sin are in the Tummal chronicle.

The list, the first chronicle, the second chronicle, the first archive – history does not just begin, history flourishes.

And that the development of the state is the principal cause of this as well can hardly have been indicated more clearly and distinctly.

And with the list not just history, in particular, begins. Research, the examination of all original

materials, and the making of enumerations so complete and reviews so general as to omit nothing, in general, begin with the list.

All in all, then, the steps of advance in the acquisition of knowledge indicated by the development of the state and the development of history, including geography, are these.

Enmebaragesi, with whom the state begins.

Gilgamesh, the first prince of Uruk.

Meskalamdug, the first prince of Ur.

Mesaneпада, who first records 2 cities, and first records a predecessor of his.

Mesalim, who first records 3 cities, and first attests one city dominating others.

Aanepada, who first records a predecessor of his who records a predecessor of his.

Ur-Nanshe, the first prince of Lagash, who first records victories, and attests 4 localities, 1 in the Persian Gulf.

Eanatum, who campaigned across 730 km, first held the princship of Kish, and attests 16 localities.

Enshakushana, the first lord of Sumer, prince of the people.

Enmetena, who records the deeds of 8 princes of 3 cities across 3 generations.

Lugalkignedudu, to whom Enlil first gave outright the lordship and the princship.

Lugalzagesi, to whom Enlil first gave no rival from the lower sea to the upper sea.

Urukagina, who discovered the law.

Sargon, who discovered the army, began the discovery of the annual campaign, won 34 battles, brought all states under one state, brought the entire valley under the state, became the lord of the earth, attests 27 localities, and established the reckoning of years by the deeds of the prince.

Rimush and Manishtushu, who continued the discovery of the annual campaign, and remained the lord of the earth each.

Naram-Sin, who completed the discovery of the annual campaign, became the god of Akkad, developed administration, led expeditions across 2 100 km, attests 38 localities, discovered the sources of the Tigris and the Euphrates, explored the limits of the known earth, and has left behind the names of 14 of the 37 years of his reign.

The drawing of the Eninnu.

Ur-Nammu, who brought all states under one

state again, and promulgated the first code of laws. First quantifying justice, too, from the man of 1 shekel through the man of 60 shekels.

Shulgi, who maintained the state one, developed administration, and has left behind the names of all 48 years of his reign.

Gilgamesh and Aka.

The list.

The Ur archive.

The Tummal chronicle.

Counting centuries, for the sake of uniformity, with respect to 3040, the year of birth assigned to Narmer, in the other valley, the distribution is,

2740-2641	2,
2640-2541	5,
2540-2441	4,
2440-2341	3,
2340-2241	3,
2240-2141	2,
2140-2041	5.

In the six and a half centuries from Enmebaragesi to Ibbsi-Sin, then, the advance in the development of the state, and the acquisition of knowledge, is very great.

The entire valley has become the domain of the state, 1 300 km northwest to southeast. The state has brought under itself, and kept under itself, one thirtieth of the circuit of the earth. Toward the end of that time the human population of the valley is some three million. The human population of the earth is some thirty-five million. The state has brought under itself, and kept under itself, not less than one twelfth of humanity. The state has asserted itself, and again, and again, for six and a half centuries. Six and a half centuries are nearly one eighth of the entire development of the state.

What the state, in general, is, is substantially and essentially what the state from Enmebaragesi to Ibbsi-Sin, in particular, is.

And the state has developed and greatly advanced warfare.

It has developed administration.

It has discovered and developed the law.

Writing has become massive.

A theory of the state has begun being formulated.

The description of the surface of the earth has begun.

History has begun.

Following the method has begun.

All this – from the not state. Such as the state, having developed, describes this condition: no cities, no rule, locusts, who look like men, but whose ways and words are those of the dog.

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Finally, the following conclusions can be drawn from the development of the state in these centuries in both valleys, the first nine and a half centuries of the development of the state in the valley of the Nile and the first six and a half centuries of the development of the state in the valley of the two rivers.

There are fundamental differences. Yet more fundamentally the development is the same.

In the valley of the Nile the state is one. In the valley of the two rivers the state is plural.

In the valley of the Nile the state begins as one state and remains the same one state for seven and a half centuries.

In the valley of the two rivers the state begins as several states. In Kish, then also in Uruk, then also in Ur. Then also in Lagash, and Lagash rises. And when Akkad rises, the state is one. When Akkad falls, the state is plural briefly. Ur rises, and the state is one again.

The state is fundamentally one.

In the valley of the Nile the state begins as one large state, and remains one large state.

In the valley of the two rivers the state begins as several small states, and becomes one large state. When it becomes several small states again, it becomes one large state again.

In the valley of the Nile it has brought under itself one fiftieth of the circuit of the earth, in the valley of the two rivers one thirtieth. In the valley of the Nile it has brought under itself not less than one thirteenth of humanity, in the valley of the two rivers not less than one twelfth. In the valley of the Nile it has asserted itself for seven and a half centuries, in the valley of the two rivers for six and a half.

Fundamentally one, the state is also fundamentally large.

In the valley of the Nile the state begins with unification, establishes its unity firmly, and maintains its unity for seven and a half centuries.

In the valley of the two rivers the state achieves unification in three and a half centuries, maintains its unity for one and a half centuries, when unity is lost achieves unification again, and maintains its unity again for one century.

The magnitude of the feats, in the valley of the Nile, of unification from the first, of establishing unity firmly, and of maintaining unity for seven and a half centuries, the fact shows that in the valley of the two rivers unification is achieved in three and a half centuries, unity is lost after one and a half centuries, and when unification is achieved again, unity is again lost after one century. The magnitude of the feats, in the valley of the two rivers, of achieving unification in three and a half centuries, of maintaining unity for one and a half centuries, of achieving unification again when unity is lost, and of maintaining unity again for one century, the fact shows that these feats are attended by great advance in the development of warfare, the development of administration, and the discovery and development of the law.

Fundamentally one, fundamentally large, the state is also fundamentally made one and large.

Which all shows most fundamentally power.

With Hobbes, the state is a power contrary to our natural passions, a power keeping men in awe, a power reducing the wills of men unto one will.

In the valley of the Nile, Narmer smites his kneeling foe. Aha, Djer, Djet, Den make the state firm. In the following six centuries there is very little smiting. The state is bounded by the desert in the west, by the desert and the sea in the east, by the sea in the north. In the south, seven and a half centuries after the beginning of the state Harkhuf is sent to open the path into the country beyond the first cataract.

The state has no external foes. And it does not expand.

And it has no internal foes either.

A year of the following of Horus is followed by a year of another festival, another year of the following of Horus, a year of another festival, another year of the following of Horus, a year of another festival, another year of the following of Horus.

Offices remain few, differentiated little.

They suffice for the counting. It is one of the two things which the state does most vigorously. The counting is recorded first under Ninetjer, two centuries after the beginning of the state. The 3rd counting, the 4th counting, the 5th counting, the 10th counting. Under Khasekhemwy, the 7th counting of the gold and the fields, the 8th counting of the gold and the fields. Under Sneferu, the 2nd counting of the silver and lapis lazuli, the 7th counting. Under Pepi, the 18th counting. Under Merenre, Weni does everything perfectly, he counts everything that is counted twice, Harkhuf is the chief of counting.

The counting shows how great the power is. Over one fiftieth of the circuit of the earth, and one thirteenth of humanity, for five and a half centuries – counting only from Ninetjer to Pepi II – counted is everything that is counted.

The other thing which the state does most vigorously is the building of the tomb of the prince. At the time of its greatest vigor the state builds the tombs of Sneferu, Khufu, Khafre, and Menkaure. The largest edifices on earth for the following forty-four centuries. If they worked in gangs of 100 000 for three months each, in one gang worked one fifth of all able-bodied men in the state, and if the gangs rotated, in one year and three months in the gangs rotated all able-bodied men in the state. And the edifices were completed, and they cannot have worked in gangs smaller than 25 000, all able-bodied men in the state taking five years to rotate in the gangs.

The building shows the power greater. The largest edifices on earth, built by gangs of 100 000, and not less than 25 000, for one century, counting only from Sneferu to Menkaure.

Other than mustering, maintaining, and seasoning the gangs of 100 000, and of not less than 25 000, the state procured 1 600 silver talents worth of radishes, onions, and garlic, never mind the iron with which they worked and the food and clothing for the workers. The successful solution of the engineering and logistical problems, both, over one century, counting again only from Sneferu to Menkaure, shows the prosperity of the state, in general, as well as of the workers in the gangs, in particular. As do indeed the radishes, onions, and garlic.

The counting is recorded first under Ninetjer.

The tombs become very large one century later, with Khasekhemwy, in the years of the 7th counting of the gold and the fields, the 8th counting. The tombs become the largest one century later, with Sneferu, in the years of the 2nd counting of the silver and lapis lazuli, the 7th counting.

The counting shows how great the power is. The building shows the power greater. And the state has transferred the power from the counting to the building, and the transfer of the power from the counting to the building shows the power greater yet.

In the valley of the two rivers, the state also counts, and counts even more, and also builds, and builds even more, even if not quite as magnificently.

From the first, however, Enmebaragesi, he smote Elam. Aka told Gilgamesh, submit, Gilgamesh told Enkidu, ready the arms, myriad fell, Aka submitted. More smiting follows, and more, and more. In this valley smiting is the one thing which the state does most vigorously.

So three and a half centuries after the beginning of the state Sargon discovers the army.

And the smiting shows how great the power is. 5 400 are more than all able-bodied men of any city, close to 1 % of all able-bodied men in the valley, one legion in the Punic wars still, one division in world war two still.

In this valley the state expands. At its greatest after Sargon, it is bounded by the sea and the desert in the south and in the west, by the mountain in the east and in the north.

And the state now has external foes, the savage men from the mountain. The state has smitten them, and again, and again, then the savage men begin descending on the state from the mountain, and keep descending.

The state has internal foes, too. It has brought under itself states established for centuries before their conquest. These will not relent for one century. But they are eventually subdued, the valley is pacified.

When the one state falls, and the savage men descend from the mountain, they are expelled, the one state is restored, and order and prosperity prevail again. The state is brought under the law.

And the law shows the power greater.

The state is populated by men of 1 shekel and

men of 60 shekels, their bones worth 60 shekels each, their teeth 2 shekels, their perjuries 15 shekels, their divorces 60 shekels. Taking it for granted that these men will do as all their predecessors not favored with the law will have done, and all their successors favored with the law will do, these men, when the law adds to them and subtracts from others, will eagerly heed the law. But when the law subtracts from them and adds to others, they will much rather others heed the law. And if so, the presumption that they can be forced to heed the law in all cases, when they much rather others heed the law, too, shows their, reluctant as it is, acquiescence.

Under Ur-Nammu, Shulgi, Amar-Sin, and Shu-Sin, for nearly one century, over one thirtieth of the circuit of the earth, one twelfth of humanity has been forced to acquiesce not only to subtractions from themselves, but to additions to others.

And again the transfer of the power from the smiting to the law shows the power greater yet.

Sargon conquers the valley. Rimush then has to subdue the lower valley. Manishtushu then has to subdue the lower valley. Naram-Sin then has to subdue the lower valley. It takes one century of annual campaigns to subdue the lower valley. But subdued the lower valley is. In the later years of Naram-Sin and under Sharkalisharri no one rises. And when Ur-Nammu expels the savage men, under him, Shulgi, Amar-Sin, and Shu-Sin no one rises. Subdued the lower valley is.

Naram-Sin becomes the god of Akkad, and installs his sons, daughters, overseers, governors, judges, priests, scribes, . . . , cupbearers. Sharkalisharri is also the god of Akkad, and installs his consort, governors, priests, overseers, metalworkers, stewards, scribes.

Ur-Nammu smites the men of the mountain.

The promulgation of the law follows.

Ur-Nammu builds 12 temples in 5 cities. He puts the boats in order, establishes road stations, plants orchards, drains the swamps, plants fields of dates, builds canals, establishes standard units of measurement, divides the state into districts, installs governors. Shulgi is god of the land. He build 17 temples in 7 cities. He installs his wives, sons, daughters, governors, generals, overseers of arms, overseers of stores, overseers of grain, overseers of dispatches, overseers of priests,

priests, scribes, heralds, suppliers, herdsmen, gardeners, cupbearers, chair bearers.

To become men of 1 shekel and men of 60 shekels, these men have been first very well subdued, and then, and hence, brought under a god and very well overseen. So that justice and truth prevail.

The state is a power reducing the wills of men unto one will.

In the valley of the Nile to the end of counting and building. In the valley of the two rivers to the further end of smiting and the law.

In both valleys it is the prince's will. The prince is the state and the state is the prince.

Religion is much older than the state. In both valleys it is taken over by the state from the first. The prince ministers to the gods, he is favored by the gods, he is great god, god of the land.

Custom is transformed. In each valley out of the many smaller earlier tribes the state has built one large tribe. In the valley of the Nile the custom of each member of each of the earlier tribes has been curtailed by the counting and the building. In the valley of the two rivers it has been further curtailed by the smiting and the law. The ensuing uniformity in each of the two new large tribes is the practice of the virtues which must be practiced.

And in one of the new tribes, the tribe of the men become counters become builders, one thirteenth of humanity has continued for eighteen generations, counting only from Ninetjer to Pepi II, in the other new tribe, the tribe of the men become smiters become lawgivers, one twelfth of humanity has continued for eleven generations, counting only from Sargon to Ibbi-Sin.

What the state, in general, is, is substantially and essentially what the state in the first nine and a half centuries of the development of the state, in particular, is.

It is a power reducing the wills of men unto one will.

It is a power contrary to our natural passions.

It is contrary to our natural passions when we are the counted, but not so much when we do the counting. It is contrary to our natural passions when we build the edifices, but not so much when the edifices are built for us. It is contrary to our natural passions when we are the smitten, but not

so much when we do the smiting. And it is contrary to our natural passions when the law subtracts from us, but not so much when it adds to us.

And taking it for granted that nearly all of us are the counted, and but a few do the counting, that nearly all of us build the edifices, and but a few have the edifices built for us, that many more of us are the smitten than do the smiting, and that, when it adds to some of us, and when it adds to many of us, and when it adds to all of us, the law always subtracts from all of us, it is a power contrary to our natural passions. It is contrary to the passions of the organisms whose wills the power reduces unto one will.

The development of the state – of the power – is nevertheless a natural process.

The state develops from the not state.

And the fundamental way in which the state is the same as the not state, and all the ways in which the state becomes different from the not state, indicate a natural process clearly and distinctly.

The not state takes away the cattle, sheep, asses, women, and children. In the valley of the Nile the state takes the men, women, large and small cattle. In the valley of the two rivers it takes the cattle, sheep, goats, asses, and people.

This is natural.

The state counts. It counts very much to the same end, to take the cattle, sheep, asses, and people.

The state smites. Very much to the same end.

This is also natural.

The state learns to count. It counts, counts 10 times, counts the gold and the fields, counts them 8 times, counts the silver and lapis lazuli, counts them 7 times, counts 18 times, counts everything that is counted, counts it twice, under a chief of counting – five and a half centuries, eighteen human generations, from the first record of the counting to the first record of the chief of counting. The state learns to count, gradually, slowly, better.

The state learns to smite. It vanquishes 2 cities, vanquishes 13 cities, wins 34 battles, vanquishes 32 cities, wins 9 battles in 1 year – three centuries, ten human generations, from the first record of 2 victories to the first record of 9

victories in 1 year. The state learns to smite, gradually, and faster in this case, and yet better.

Learning is also natural.

The state builds. If the end is to store everything that is counted, this is also quite natural. If the end is to improve the prince's odds of going to heaven to eat the gods and have any woman he wants, this is quite natural, too.

Either way, the state learns to build. Four centuries, thirteen human generations, from the tomb 21 x 20 m to the tomb 230 m square 147 m high. Two and a half more centuries, eight human generations, from the largest tomb to the discovery of what exactly the prince does in heaven.

The state discovers the law. If the end is to keep the smitten smitten, this is quite natural as well. If the end is justice, even this is natural – if the state is a power contrary to our natural passions, and five and a half centuries after the beginning of the state, eighteen human generations, the state has at long last recognized that it is a power contrary to our natural passions.

Either way, the state learns in this case, too. Three and a half centuries, twelve human generations, from the first prince to the first attempt to change the old ways. Two more centuries, seven human generations, from the first smiting of the entire valley to the first code of laws.

And if the end of its transfer from the counting to the building is to give the power permanence, and the end of its transfer from the smiting to the law is to give the power permanence, this is quite natural, too.

A natural process is indicated even by the fragility of all that is learned. After seven and a half centuries the state that has built the greatest edifices on earth falls apart. After one and a half centuries the state that has discovered the army falls. After one century the state that has promulgated the law also falls. To learn is hard, to keep learning very hard.

And a natural process can explain the independent beginning of the state in each of the two valleys.

If the state will take the cattle, sheep, asses, and people, the state has to be increasingly likely to begin wherever the people have become increasingly many, accumulated cattle, sheep, and asses, and *ipso facto* become increasingly capable

of taking the cattle, sheep, asses, and people.

It can explain the differential development in the two valleys.

In one of the valleys the state is one and large from the first, established firmly, and then has no external foes, it is surrounded by sand-dwellers, and no internal foes either, the counting proceeds undisturbed. Development is thus stately, accelerates slowly to a greater vigor, and continues long after the vigor wanes, before it stops.

In the other valley the state is small and several at first, expands, and develops foes as it expands, the several states internally, the men from mountain externally, themselves quite capable of taking the cattle, sheep, asses, and people. Development is thus turbulent, accelerates quickly to a great vigor, and continues to accelerate to a greater vigor, and greater.

Finally, in both valleys one of the outcomes of the development is complexity, and much greater complexity in the valley of the two rivers. And with the complexity an end has appeared which cannot be the end of an organism. The deeds have become great and magnificent, and the end has become lofty.

The princes have solved the engineering

problem of constructing a regular pyramid 230 m square 147 m high of 2 300 000 blocks of stone. They have solved the logistical problem of organizing gangs of not less than 25 000 for one century.

They have discovered the army. They have discovered the annual campaign. They have led expeditions across 2 100 km.

They have begun developing the theory of the state.

They have discovered the law. So that justice and truth prevail.

The description of the surface of the earth has begun.

History has begun.

Research, the examination of all original materials, and the making of enumerations so complete and reviews so general as to omit nothing has begun.

The organism has continued to take the cattle, sheep, asses, and people. As it will also continue to do, and still does. But the organism has also quit being an organism, it has begun acquiring knowledge. As it will also continue to do, and still does, even if this never nearly as eagerly as that.

The thirteen centuries from Mentuhotep and Ibbsi-Sin to Tiglath-pileser III

cdlii

In the first two of these centuries the development of the state in the valley of the Nile and the development of the state in the valley of the two rivers remain altogether independent of one another.

In the following eleven centuries the two developments begin to converge, slowly, gradually, haltingly, remaining throughout largely independent of one another.

It is when the state rises greatly with Tiglath-pileser III and his successors, and Esarhaddon conquers the valley of the Nile, that the two become one joint development.

In both valleys in these centuries the state rises, disappears, rises again, disappears again.

Toward the middle of this time the state begins further north as well, in Asia Minor, and here as well the state rises, disappears, rises again, disappears again. The state has not acquired permanence yet.

It is with Tiglath-pileser III and his successors that the state acquires permanence, too.

First, then, the development of the state in the valley of the Nile in the thirteen-odd centuries from Mentuhotep to Piye is collected – as Tiglath-pileser III is not an important divide in the development of the state in this valley, his younger contemporary Piye is. Next the development of the state in the thirteen centuries from Ibbsi-Sin to Tiglath-pileser III in the valley of the two rivers is collected, as well as in the domain bordering the valley, as it is in these centuries that the

development of the state begins to spread beyond the valley. Then the problems of the relation of the two are addressed.

The thirteen-odd centuries from Mentuhotep to Piye

cdliii

The dates are,

Mentuhotep prince c. 2069-18,

Piye prince c. 729-08.

These are the two and a half-odd centuries of the middle kingdom, then the two-odd centuries of the second intermediate period, then the four centuries of the new kingdom, then the first four centuries of the late period.

The sources are, again, first, the predecessors of the historians and the historian – for as long as they continue the Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus, and throughout Manetho. Next, the inscriptions of the princes. Next, the inscriptions of lesser officials. Next, writing grows in these centuries, and there are thus also other writings. Finally, there are the other monuments, tombs, temples, smaller artifacts.

The state rises, falls, rises again, falls again.

When it rises under the princes of the middle kingdom, however, it is a greater state than it has been under the princes of the old kingdom. The state expands, becomes more powerful, there is a great advance in the acquisition of knowledge. And the sources reflect this fact. They are more abundant, and more explicit.

Then the state falls apart, and the sources reflect this fact. They are scantier, and less explicit.

When the state rises again, it is again greater than it has been. Under the princes of the new kingdom the state expands further, and it is more powerful than it has been under the princes of the middle kingdom. Once again the sources reflect this fact. They are at their most abundant, and most explicit.

Then the state falls apart once again, and once again the sources reflect this fact. The Karnak prince list, the Abydos prince list, the Saqqara prince list, and the Turin papyrus have all stopped

toward the end of the new kingdom. And the other sources are scantier, and less explicit.

The division of the thirteen-odd centuries from Mentuhotep to Piye is into the four parts, middle kingdom, second intermediate period, new kingdom, late period. More explicitly, into these four parts. The two and a half-odd centuries from Mentuhotep to Sobeknefru. The two-odd centuries from Sobeknefru to Ahmose. The four centuries from Ahmose to Ramesses III. The four-odd centuries from Ramesses III to Piye.

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The two and a half-odd centuries from Mentuhotep to Sobeknefru.

The princes are 10,

Mentuhotep prince c. 2069-18,

Mentuhotep II prince c. 2018-06,

Amenemhet prince c. 2006-1976,

Senwosret prince c. 1976-32,

Amenemhet II prince c. 1932-897,

Senwosret II prince c. 1897-78,

Senwosret III prince c. 1878-45,

Amenemhet III prince c. 1845-00,

Amenemhet IV prince c. 1800-790,

Sobeknefru prince c. 1790-86.

And when the official

Amenemhet under Senwosret,

is added, these are all the important particulars.

The state is one and only one.

After two centuries of disorder the state is restored. The state is restored much as the state begins, and its restoration is attested much as its beginning is attested.

Two blocks from a temple at Gebelen attest Mentuhotep. Gebelen is in upper Egypt, not far from Thebes. On both blocks the prince is depicted smiting his foe. On one of the blocks the prince is identified by his name as Horus:

Nebhetepre Mentuhotep (*id.*),

his foe is only depicted. On the other block his foe as well is identified. Mentuhotep smites four figures, three of them labeled:

the Nubians, the easterners, the Libyans (*id.*).

Clearly, his external foes. That the fourth figure is his internal foes can be inferred from the inscription over the scene:

the binding of the chiefs of the two lands, the

capturing of the upper land and the lower land, the highland and the two countries, the nine bows and the two lands (*id.*).

Another inscription, from Konosso, by the first cataract, generalizes:

all lands are in his feet (*id.*).

The state is restored by smiting, and hence unification.

And the monuments attest Mentuhotep massively. He built a temple and his tomb near Thebes. He is attested at sites from Abydos to the first cataract. He has left behind his statues. Next to his tomb are the tombs of several of his chancellors, viziers, and stewards.

In the tomb of his vizier Dagi, on his coffin, the oldest of the spells which go by the name the coffin texts are inscribed. The coffin texts have learned from the pyramid texts. The pyramid texts are the spells which will take the prince to heaven, inscribed on the walls of his tomb. The coffin texts are the spells which will take a lesser official to heaven, inscribed on his coffin. If there are other differences, they are in that the coffin texts are appropriately less dignified in their anxiety about the perils of the forthcoming journey.

Mentuhotep also began campaigning beyond the first cataract.

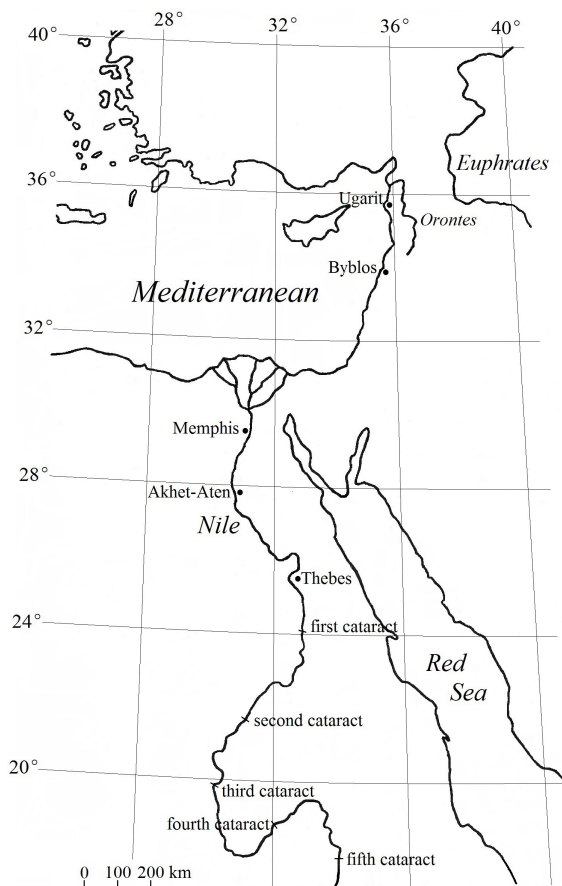
With Mentuhotep the state is restored, the one state of his predecessors of the old kingdom, as Mentuhotep everywhere affirms with his crowns and his names.

After him there is a minor difficulty involving the series and order of the princes.

He is Nebhetepre Mentuhotep, attested by the Abydos prince list, the Saqqara prince list, and the Turin papyrus, and massively by the monuments. After him the Abydos prince list has Sankhkare Mentuhotep, then Amenemhet. After him the Saqqara prince list also has Sankhkare Mentuhotep, then Amenemhet. After him the Turin papyrus has Sankhkare Mentuhotep, then a lacuna, then Amenemhet.

Other than the lists, Sankhkare Mentuhotep is attested by one long inscription and by monuments. Other than the lists, Amenemhet is attested massively by inscriptions and by monuments.

And one inscription attests Nebtawyre Mentu-



Lambert conic equal area projection.

hotep.

A Mentuhotep III has thus been inferred. From lacunae in the Karnak prince list a Mentuhotep IV has also been inferred. A Mentuhotep V has not yet been inferred.

Occam's razor will not tolerate more than two important princes of the name Mentuhotep. With the Abydos prince list, with the Saqqara prince list, and indeed with the lacuna in the Turin papyrus, too, the series of the important princes is Mentuhotep, then Mentuhotep II, then Amenemhet.

The inscription attesting Mentuhotep II is from his official Henenu, at Wadi Hammamat. Wadi Hammamat is east of Thebes, between the Nile and the Red Sea. Henenu begins by recording his offices:

favorite servant of his majesty, who does every-

thing which his majesty praises, bearer of the seal, sole companion, overseer of everything, overseer of temples, overseer of the grain, overseer of the horn and the hoof, chief of six courts, judge, . . . , who pleases his majesty by overseeing the upper districts, treasurer, . . . , who subdued Hebenu, to whom the two lands bow down, to whom all officials report, bearer of the seal, sole companion, steward, Henenu (*id.*).

Henenu then describes the particular office of leading 3 000 men east to the sea, smiting the troglodytes along the way, to procure stone for statues in the temples (*id.*). He concludes: never was anything like this done before by any of the prince's men (*id.*).

Henenu attests the stability of the restored state. He subdued Hebenu, and Hebenu is in the delta. Lower Egypt down to the Mediterranean is thus under the state. And the state has resumed its routines. One official suffices for more than a dozen offices, and rather redundantly, given that one of the offices is overseer of everything. The troglodytes are smitten. Stone for statues in the temples is procured.

The inscription attesting Nebtawyre Mentuhotep is also at Wadi Hammamat, on four stelae. It attests also Amenemhet. Mentuhotep is the prince, Amenemhet is his official:

overseer of the city, vizier, chief of works, the favorite of his majesty, Amenemhet (*id.*).

The particular office of Amenemhet is to procure a stone for the lid of the prince's sarcophagus (*id.*). To this end:

his majesty sent me with 10 000 men, gathered from the districts of upper Egypt and the country around Thebes (*id.*).

The expedition is successful:

the lid is a slab of 4 cubits by 8 cubits; and 3 000 men are now taking it safely to his majesty (*id.*).

The inscription is longer than any earlier. Gods are also involved in the events which the inscription reports in rather more detail than earlier. On the way out, a portent leads the expedition to the stone for the lid (*id.*). On the way back, a god leads the expedition to a well (*id.*). It is at this time that writing begins to grow, and with writing the saturation with the thought and the sense.

3 000 men under the prince's official, let alone 10 000, suffice to explain why the prince's official is the next prince.

Amenemhet established the center of the state at Itj-tawy, south of Memphis, in lower Egypt, as the center of the state had been under the princes of the old kingdom, affirming the unity of the state.

At Itj-tawy as well Amenemhet built his tomb, and his tomb is also once again a pyramid. It is smaller than the largest pyramids of his predecessors of the old kingdom, but the engineering problem is solved differently now, and it is a more advanced solution of the problem. The pyramids of the princes from Amenemhet through Amenemhet III were built of bricks, covered with a limestone casting. It also proved a less durable solution of the problem. When posterity robbed them of their limestone casting, and the interior collapsed, these former pyramids are now piles of bricks.

Amenemhet organized his domain. Khnumhotep, a governor of the district of Menet-Khufu under Amenemhet's successor's successor Amenemhet II, in his tomb inscription, reports:

his majesty Amenemhet, given life and prosperity forever, like Re, appointed the father of my mother hereditary governor of Menet-Khufu; he set up the southern stone and secured the northern stone like the heaven; he divided the great river in the middle, its eastern half as far as the highlands to be Menet-Khufu, the horizon of Horus;

when his majesty came, he cast out evil, he shone like Atum, he restored what was ruined, he restored all that one town had taken from another, he made them all know their boundaries, he secured their stones like the heaven, he separated their waters as they had been in the old days, because he greatly loved justice (*id.*).

Menet-Khufu is in the middle of the country, halfway between Itj-tawy and Thebes. And as there so everywhere. His majesty restored what was ruined.

And what was ruined restored, the internal foes of the state subdued, under Amenemhet the smiting of its external foes becomes vigorous.

The tomb inscription of the father of the

mother of Khnumhotep, Khnumhotep himself, has also been unearthed. And this Khnumhotep reports:

the lord of upper Egypt and lower Egypt, son of Re, Amenemhet, who lives forever;
he smote the southerners and the easterners, he seized the lowlands, he seized the highlands;
... the lands ...; ... the people ... (*id.*).

Another inscription corroborates:

he smote the easterners, the troglodytes, the sand-dwellers, he destroyed them as if they had never been (Louvre stele).

From the century after Amenemhet is also the poetic *Instruction of Amenemhet to his son Senwosret*. Amenemhet comes to his son Senwosret in a dream to instruct him that he was killed by his guards and is now with Re in heaven. Also:

no one is equal to my deeds;
I went to the first cataract, I returned to the delta,
I stood at the borders of the country,
I looked at all of it inside;
I subdued lions, I captured crocodiles;
I subdued Wawat, I captured Medjai,
I made the easterners work like the dog;
princship is once again what it was (*id.*).

The easterners and the sand-dwellers are in the north, in Sinai, beyond the delta. Wawat and Medjai are in the south, in Nubia, beyond the first cataract. Both are beyond the borders of the country. Princship is becoming more than what it was.

Senwosret built from one end of the state to the other. He built his tomb also at Itj-tawy, also a pyramid. He has also left behind the oldest obelisk, 20 m high, 120 tons.

And with Senwosret the smiting becomes conquest.

Wadi Halfa is by the second cataract, 290 km south of the first cataract along the meridian. A relief at Wadi Halfa shows Montu, the god of Thebes, and Senwosret, the prince. The god leads 10 bound captives to the prince. The inscription over the scene explains: I have brought all countries of Nubia in your feet (*id.*). The 10 captives are labeled, enumerating all countries of Nubia.

Where exactly the 10 captives are is not clear. But where the second cataract is is clear. North to south, it is 820 km from the Mediterranean to the first cataract, 290 km from the first cataract to the

second cataract. At long last the state in the valley of the Nile, too, has begun expanding, and expanding greatly.

The tomb inscription of the governor of Menet-Khufu who succeeded the first Khnumhotep and preceded the second, son of the former, uncle of the latter, himself named Amenemhet, has also been unearthed. And this Amenemhet records three expeditions in the south. The first: when his majesty Senwosret sailed south to smite his foes, I sailed with him; I led the men of my district;

I advanced to the end of Nubia, my renown reached the heaven;
when his majesty returned, having smitten his foes, I returned with him (*id.*).

The second:

I sailed south to bring gold for his majesty the lord of upper Egypt and lower Egypt, Senwosret, who lives forever; I sailed south with the prince Amenemhet, the firstborn of his majesty;

I sailed with 400 of my choicest men, and I returned safely, having lost no man; I brought the gold, and I was praised for it (*id.*).

And the third:

I sailed south again to bring gold, this time with the prince Senwosret, the son of his majesty; I sailed with 600 of my choicest men, and I returned safely, having lost no men; I did everything that I was told to do (*id.*).

Assaults by ships have brought the country up to the second cataract under the state. The numbers, 400 men, 600 men, none of them lost, indicate how firmly the country has been brought under the state.

Under Senwosret as well it becomes the norm to date the inscriptions with the reign year of the prince. The tomb inscription of the governor Amenemhet, for instance, was carved in: the 43rd year of his majesty Senwosret, who lives forever (*id.*)

Under Amenemhet II stability prevailed. The inscriptions attest the state's continuing control of Nubia and presence in Sinai.

Amenemhet II built his pyramid at Dahshur, not far from Itj-tawy. The base of the pyramid was 80 m square.

Under Senwosret II stability continued to

prevail. The state's control of Nubia and presence in Sinai continued.

The third governor of Menet-Khufu, the second Khnumhotep, reports that he was appointed governor by Amenemhet II and continued under Senwosret II (*id.*). His son was also appointed governor of a nearby district by Senwosret II (*id.*). Governor for not less than three decades, in the long account of his life Khnumhotep has no commotion to record, internal or external. The governor celebrated the gods, made offerings, restored the tombs of his ancestors, kept preparing his own (*id.*).

Senwosret II built his pyramid at Lahun, also not far from Itj-tawy. Next to the pyramid the town built to house the workers has been unearthed. It housed several thousand. The houses range from 10 x 10 m with 4 rooms to 40 x 60 m with 80 rooms. The solution of the logistical problem indicates the prosperity of the state, in general, and of the workers, in particular.

And under Senwosret III the state is at its greatest. South to north, Senwosret III campaigned across 1 100 km.

In the south, 13 forts between the first and the second cataracts, built in the century between Senwosret and Senwosret III, have been unearthed.

The second cataract is a series of rapids some 50 km long. Senwosret III had a canal built to circumnavigate part of the cataract:

the lord of upper Egypt and lower Egypt, Senwosret, who lives forever;
his majesty ordered that a canal be built, for his majesty to sail upriver to smite the Nubians, the wretched;
length of the canal 150 cubits, width 20 cubits, depth 15 cubits (Sehel ins.).

Four campaigns of Senwosret III beyond the second cataract are attested. And he established the border of his domain beyond the second cataract, at Semna, built a fortress there, and erected two stelae to inform posterity of the fact.

The first Semna stele informs posterity of the fact more particularly:

southern border;
made in the 8th year of his majesty, the lord of upper Egypt and lower Egypt, Senwosret, who lives forever;

to stop any Nubian from crossing, by water or by land, in a boat or in a horde, except such as comes to trade, to whom no evil shall be done; no boat is to pass downstream forever (*id.*).

The second Semna stele generalizes over the fact:

I set my border further than my forefathers;
I am the one who conquers; I am the one who is victorious;
I am the protector of my friends, merciless to the foe who attacks me;
he who retreats from this border is a coward;
to attack is valor, to retreat is cowardice; attack the Nubian, and he will retreat, retreat, and he will attack;

they are wretches; I saw them; I took their women, I carried off their offspring, I captured their wells, I killed their cattle, I cut down their grain, I set it on fire;

as my father lives in me, I speak the truth;
as for my son, who maintains this border, which

I made, he is my son, he was born to me;
but if he abandons this border, which I made, he is not my son, he was not born to me (*id.*).

In the north, Senwosret III first ventured into Asia beyond Sinai.

Yet another tomb inscription, of the official Khu-Sobek, reports:

his majesty went north to smite the Asiatics;
he came to Sekmem, and Sekmem fell;
then Retenu fell, the wretched;
when battle was joined, I was in the rear, I captured the Asiatic, his weapons were taken by two of my men, I never turned my back to the Asiatic;

his majesty, the lord of upper Egypt and lower Egypt, Senwosret, who lives forever, gave me a staff of electrum, a bow, and a dagger, next to the weapons of the Asiatic (*id.*).

Where Sekmem is is not clear. But where Retenu is is clear. Retenu is the Asian Mediterranean littoral, where far into the future the states of the Israelites and the Phoenicians will appear.

Artifacts from the one unearthed in the other attest traffic between the valley of the Nile and the Asian Mediterranean littoral earlier. Indeed, traffic from Africa through the valley of the Nile into Asia is, as far as men are concerned, as old as *homo erectus*. As far as the state is concerned,

all this earlier traffic between the valley of the Nile and the Asian Mediterranean littoral is substantially less frequent and less consequential than traffic between the valley of the Nile and the netherworld. More substantially, as far as the state is concerned, cedar is attested in the valley of the Nile first under Sneferu, seven and a half centuries before Senwosret III, and cedar had to come from the Asian Mediterranean littoral. Nevertheless, it is with the campaign of Senwosret III that Retenu enters the record. This is the first substantial contact of the state in the valley of the Nile with the Asian Mediterranean littoral. And for a long time to come also the last such contact.

Senwosret III built throughout the state. His pyramid, also at Dahshur, was larger than those of his immediate predecessors, 107 m square.

And under Senwosret III the first observation was made. In his 7th year Sirius was observed.

As for Amenemhet III, who maintained the border, which Senwosret III made, he was his son, he was born to him.

Many inscriptions and massive building attest prosperity, control of the second cataract, and presence in Sinai.

At Wadi Maghara, princes from Nebka, nine centuries earlier, through Pepi II, four and a half centuries earlier, had left inscriptions. Amenemhet III left the next:

2nd year of his majesty, the lord of upper Egypt and lower Egypt, Amenemhet, who lives forever;

the treasurer of the god, custodian of the palace, chief of the treasury, Khenemsu, was sent to bring malachite and copper;

the number of his soldiers 734 (*id.*).

Amenemhet III built two pyramids, one at Dahshur, 104 m square, the other not too far, at Hawara, 102 m square. The pyramid at Hawara is the first labyrinth. Herodotus (II, 148) and Strabo (XVII, 1.37) describe it.

And under Amenemhet III the book of 87 problems was composed.

Then the state declines rapidly.

Amenemhet IV is in the Abydos prince list, the Saqqara prince list, the Turin papyrus, and Manetho. But the inscriptions and monuments are few, even if one of the inscriptions is at Wadi

Maghara.

Sobeknefru is the first queen in the series of princes in the valley of the Nile. She is in the Saqqara prince list, the Turin papyrus, and Manetho. But there are no inscriptions or monuments.

Then the state falls apart.

In the two and a half-odd centuries from Mentuhotep to Sobeknefru, then, the major developments are three.

One is the expansion of the state.

The state is not new, it is rebuilt. The state of the princes of the middle kingdom is the state of the princes of the old kingdom. Continuity is asserted forcefully, the princes assert it with their crowns, names, titles, celebrations of the gods, temples, tombs. But the domain of the state has always been – for one millennium counting back to Narmer – as it is described in the name of Amenemhet: I went to the first cataract, I returned to the delta, I stood at the borders of the country, I looked at all of it inside. Now the state expands to the second cataract in the south, and ventures beyond Sinai in the north. Some 500 km west to east along the Mediterranean littoral, 1 100 km north to south from the Mediterranean to the second cataract at its greatest, the state has become substantially larger.

And it has external foes now. The wretches in the south, attack them, and they will retreat, retreat, and they will attack. If not yet so clearly the wretches in the north.

But expansion does not become the main concern of the state. Only 2 of the 10 princes are conquerors, Senwosret and, one century later, Senwosret III.

The state does not attest the development of sophistication in the exercise of its authority. Offices remain few and undifferentiated. The overseer of everything procures stone. The governor of a district collects the gold from Nubia. The chief of the treasury is sent for malachite. Nor is the need for sophistication indicated. In one report, indeed, next to portents and gods, 10 000 men are led. Otherwise 400 men, 600 men, 734 men suffice.

The main concern of the state are the tombs. This is not new. New is that, ubiquitous as it has been, this main concern is now attested yet more widely and more deeply. The tombs are now

everywhere, every lesser official is now an indestructible spirit going to Re in heaven.

The second major development is the growth of writing. The inscriptions of the princes are more, and longer. The tomb inscriptions are many more, and longer. Longer compositions appear.

One of these is the *Instruction of Amenemhet to his son Senwosret*. Killed by his guards, Amenemhet is now with Re in heaven.

Another is *The story of Sinuhe*. Sinuhe is a servant in the prince's harem. The prince is again Amenemhet. When his guards kill the prince, Sinuhe, afraid, runs away. He runs away to Retenu. He prospers there: the ruler of upper Retenu made me commander of his men, and every tribe against which I marched I vanquished (*id.*). Many years pass, Sinuhe's sons become men. But Sinuhe longs to go home: can the Asiatic become the friend of the man from the delta (*id.*)? The prince is now Senwosret, and he is told of Sinuhe's plight. He summons Sinuhe home. And: a pyramid was built for me amidst the pyramids, the builders built it who build the tombs, the master builder designed it who designs the tombs, the overseers themselves worked on it, everything was provided, mortuary priests were provided, a funerary domain was made with fields and a garden, my statue was overlain with gold, his majesty himself ordered it made; no commoner was ever honored like this (*id.*).

Yet another is *The prophecy of Neferti*. It is about Sneferu, the great prince of long ago. Sneferu summons the wise man Neferti, and tells him: speak to me fine words so that my majesty be entertained (*id.*). Neferti asks: about what has happened or about what will happen (*id.*)? Sneferu replies: about what will happen, for today is gone as soon as it is here (*id.*). And Neferti tells the prince about a future time of calamity and disorder, and the great prince Amenemhet who will arise to bring back prosperity and order.

The third major development is the very great advance in the acquisition of knowledge. And it is very great. The first observation. And the book of 87 problems.

Both are spectacular advances, yet not *ex nihilo*. Under Amenemhet the advance in the solution of the engineering problem of building the tomb of the prince begins. From the reign of

Senwosret is the first definite inkling of mathematics, the account of work on a building including dimensions of chambers and wages of workers. Under Senwosret III the canal 150 cubits long, 20 wide, 15 deep, is built. And Sirius is observed. And under Amenemhet III the book of 87 problems is composed.

The state is not in indefinite space any longer. There are the first definite inklings of spatial relations. The state extends from the first cataract to the delta, these are its borders. It expands upstream from the first cataract to the second. And it is bordered here, in the south, as it is in the north, by wretches. But the wretches here, in the south, are now definitely the Nubians. The wretches in the north are definitely the Asiatics.

Also, when he runs away to Retenu, Sinuhe describes the stations on his way: I crossed Maaty near Sycamore, I reached the island of Sneferu, I reached the quay of the cattle, I reached the red mountain, I reached the wall built to stop the sand-dwellers, I reached Peten, I stopped at the island of Kemwer, I went to Byblos, I returned to Qedem (*id.*). And where the other places are is not clear, but where Byblos is is clear. Byblos is in Retenu, the source of the cedar, 280 km north of the mouth of the Nile along the meridian.

The state is not in indefinite time either. Under Senwosret it becomes the norm to date inscriptions with the reign year of the prince.

Also: tell me about what will happen. Nevertheless, this is what has happened. There is the great prince Sneferu, then there is in his future a time of calamity and disorder, then there is a great prince Amenemhet who brings prosperity and order. Even if what will happen is more entertaining than what has happened. Not incidentally, it still is.

And in the second Semna stele of Senwosret III, the one in which the prince generalizes over the fact of setting his border further than his forefathers, the inkling of a theory of the state is remote. Clearly and distinctly, however, the doctrine of justice is formulated such as Plato, fourteen and a half centuries later, will fight against this doctrine in the *Republic*. I am the protector of my friends, merciless to the foe who attacks me. The doctrine also stands – as Plato's alternative doctrine in the *Republic* does not – on

strong empirical evidence. Attack the Nubian, and he will retreat, retreat, and he will attack. I saw them. I speak the truth.

cdlv

The two-odd centuries from Sobeknefru to Ahmose.

The important particulars are 3,

Apepi prince c. 1590,

Sequenre prince c. 1590,

Kamose prince c. 1580.

All 3 are at the end of this time, in the one generation before Ahmose.

The length of this time of disorder is not a difficulty. The state disappears after Sobeknefru. The state is restored by Ahmose. The date of Sobeknefru, a successor of Senwosret III, is fixed by the first observation of Sirius, the date of Ahmose, a predecessor of Amenhotep, is fixed by the second observation of Sirius. This time of disorder continued for two-odd centuries.

And that the state disappears altogether in these centuries is indicated by the sources clearly and distinctly.

The Abydos prince list has no princes between Amenemhet IV and Ahmose. The Saqqara prince list has no princes between Sobeknefru and Ahmose.

In the judgment of the Abydos prince list and the Saqqara prince list, after Sobeknefru and before Ahmose the state is not at all.

The Turin papyrus is increasingly fragmentary. It has Sobeknefru. After her the names or parts of the names of some 100 princes are legible. Of all these princes a half dozen are attested independently, none of them by more than his cartouche inscribed on an artefact or two. Then the Turin papyrus ends.

Manetho has both Sobeknefru and Ahmose. And between Sobeknefru and Ahmose he has five dynasties: dynasty XIII, 60 princes from Thebes who reigned 453 years, dynasty XIV, 76 princes from Xoïs who reigned 184 years, dynasty XV, 6 Hyksos princes who reigned 284 years, dynasty XVI, 32 Hyksos princes who reigned 518 years, dynasty XVII, 43 Hyksos princes from Thebes who reigned 151 years. For a total of 217 princes and 1 690 reign years. Of all these 217 princes Manetho has the names of 6, the 6 Hyksos

princes of dynasty XV. And of these 6, but 1 is attested independently.

And if there were in these centuries either 100 princes, who have all of them left behind nothing but a half dozen cartouches on a dozen artifacts, or 217 princes, who have all of them left behind 1 name attested independently of Manetho, this indicates more strongly even than the judgment of the Abydos prince list and the Saqqara prince list that the state is not at all.

The scantiness of inscriptions and monuments corroborates the fact.

The state is not at all.

And first of all, the state is not destroyed, the state disappears. Its domain disappears, and its authority disappears. Under Amenemhet III the domain of the state reaches from the second cataract to Sinai. The authority of the state is attested by the building of the prince's two pyramids, 104 m square and 102 m square. Two decades after Amenemhet III, all artifacts inscribed with cartouches are from the area immediately surrounding Itj-tawy, where the center of the state has been. The domain of the state is the area immediately surrounding Itj-tawy. The authority of the state is attested by the carving of cartouches on artifacts. And that it is not even clear how long exactly such remain the domain and authority of the state all by itself indicates the disappearance of the state.

Then the Hyksos descend on the valley.

Sinuhe encounters the Hyksos, in *The story of Sinuhe*. When the ruler of upper Retenu makes him commander of his men, and Sinuhe vanquishes every tribe against which he marches, he fights on the side of: the chieftains of the mountains (*id.*). Chieftains of the mountains renders Hyksos.

6 of the princes in the Turin papyrus are: chieftains of the mountains (*id.*). Three of the dynasties in Manetho are Hyksos, 81 princes. And this is how Manetho describes the beginning of the Hyksos dynasties:

a horde of wild men from the east descended on the country, and they seized the country without a blow;

they subdued the rulers of the land, burned the cities, razed the temples of the gods, destroyed the people; they killed many, led others cap-

tive, took the women and the children;
and they set up one of their own to be prince in
Memphis (Josephus, *Apion*, I, 75).

At this time, further east, men from the mountain in the north descended on the valley of the two rivers. The Hurrians this time. As hordes will do on later occasions, one horde setting in motion another, so they apparently did on this occasion, and the Hyksos descended on the valley of the Nile.

They took the country without a blow. There was no state in the country on which to deliver a blow.

They did what hordes do. Burned the cities, razed the temples, killed many, led others captive, took the women and the children.

And they set up one of their own to be prince in Memphis. Yet, for not less than one century nothing indicates that there is a state in the country, not even cartouches on artifacts. If there was any authority in the country – indicated by the hundreds of princes in the Turin papyrus and Manetho – local chieftains, and petty local chieftains, had the country to themselves.

The state begins to reappear in the generation before Ahmose. With 3 mightier chieftains, the first and only well attested Hyksos chieftain and two chieftains in Thebes, whom Ahmose will succeed.

The first and only well attested Hyksos prince is Apepi. He is the last of the 6 Hyksos princes whose names Manetho has: Apophis, reigned 61 years. The book of 87 problems reports: this book was copied in the 33rd year of Apepi, the prince of all Egypt, from an old book written in the time of Amenemhet III, the prince of all Egypt.

And the chieftain of Thebes Kamose reports:
3rd year of the mighty prince of Thebes Kamose,
appointed by Re to be the true prince;
his majesty said to his council,
to what end is this might of mine, if a chieftain
sits in Avaris and another in Kush, and I sit
here a friend of the Asiatic and the Nubian,
and they each hold a piece of Egypt, and I
cannot go north as far as Memphis?

I will smite the Asiatic and deliver the land;
so by the order of Amun I went downstream to
smite the Asiatic;
and I was upon him like a hawk, I overthrew him,

I razed his walls, I slew his people, my men
were lions, they took the prey, the men, the
cattle, the milk, the fat, and the honey;

you are undone, base Asiatic, you who said, I am
the lord, no one is equal to me;

and I captured a messenger sent from Avaris to
Kush;

this is what the message said;

the son of Re, Apepi, to my son, the chieftain of
Kush;

why have you made yourself chieftain without
telling me?

have you not seen what Egypt has done to me? its
chieftain Kamose, the mighty, after ravaging
your land, has ravaged mine; come, hasten, I
will hold him until you come; then the two of
us will divide Egypt between us (Karnak
stele).

Apepi is chieftain in Avaris. Avaris is in the
delta. A Nubian has made himself chieftain in
Kush. In between, in Thebes, chieftain is Kamose.

The son of Re Apepi says, I am the lord, no
one is equal to me. Appointed by Re, Kamose
smites Apepi. He takes the men, the cattle, the
milk, the fat, and the honey. But the base Asiatic
will have to be smitten again, and the base Nubian
will have to be smitten, before the state is
restored. Ahmose will do this smiting, and his
smiting is very well attested.

In his tomb inscription Ahmose son of Abana
records his services to Ahmose and his successors.
He reports:

my father was a soldier of the lord of upper Egypt
and lower Egypt Seqenenre;

a youth not yet married, I became a soldier on the
ship *The wild bull* in the service of the lord of
the two lands Ahmose;

when Avaris was besieged, I killed a foe and
carried off his hand;

when Avaris was sacked, I took 1 man and 3
women and his majesty gave them to me;

when his majesty had destroyed the Asiatics in
the north, he sailed south to destroy the Nubians;
he slaughtered a great many of them; I
brought in spoil 2 men and 3 hands (*id.*).

The father of Ahmose son of Abana was a
soldier of Seqenenre. Ahmose himself was a
soldier of Ahmose. And that Kamose belongs

between Seqenenre and Ahmose can be concluded from the report of an inspection of the tombs of the princes, conducted under Ramesses IX, four and a half centuries later. In the report the tombs of these 3 princes are listed in this order: Seqenenre, Kamose, Ahmose (*id.*). The inspection found the mummies of all 3 princes in good condition (*id.*).

The mummy of Seqenenre has also been unearthed, still in good condition. It has four wounds to the head.

Major smiting, from Seqenenre through Kamose through Ahmose, restored the state.

The most important development in these two-odd centuries is the disappearance of the state.

The state, which has continued powerfully for two and half centuries from Mentuhotep through Amenemhet III, which has built fortresses up to the second cataract, which has campaigned in Asia beyond Sinai, which has built pyramids for two centuries from Amenemhet through Amenemhet III, is reduced in less than two decades to nearly nothing, and then reduced to nothing at all. Nor is the horde from the east the cause, the horde comes later.

It is the second time the state disappears, too. After seven and a half centuries of great stability, the old kingdom just stops. And no horde at all is indicated on that occasion.

The ruin of the state indicates strongly the identity of the state and the prince.

It indicates strongly also the fragility of the state. The state is a great power. A great fragile power.

cdlvi

The four centuries from Ahmose to Ramesses III.

The princes are 23,

Ahmose	prince c. 1570-45,
Amenhotep	prince c. 1545-21,
Thutmose	prince c. 1521-09,
Thutmose II	prince c. 1509-491,
Hatshepsut	prince c. 1491-70,
Thutmose III	prince c. 1470-37,
Amenhotep II	prince c. 1437-11,
Thutmose IV	prince c. 1411-02,
Amenhotep III	prince c. 1402-364,
Amenhotep IV	prince c. 1364-47,

Smenkhkare	prince c. 1347-4,
Tutankhamun	prince c. 1344-35,
Ay	prince c. 1335-1,
Horemheb	prince c. 1331-04,
Ramesses	prince c. 1304-2,
Seti	prince c. 1302-291,
Ramesses II	prince c. 1291-24,
Merneptah	prince c. 1224-14,
Seti II	prince c. 1214-08,
Siptah	prince c. 1208-2,
Twosret	prince c. 1202-194,
Sethakhte	prince c. 1194-1,
Ramesses III	prince c. 1191-59.

The important officials are,

Ahmose son of Abana – first office under
Ahmose,

Ahmose Pennekhab – first office under
Ahmose,

Rekhmire under Thutmose III,

The state is one and only one.

And the state is at its greatest in these centuries.

In the first two of these centuries, from Ahmose to Amenhotep III, the state expands greatly and reaches its greatest extent and power. In the following one century-odd, from Amenhotep IV to Ramesses II, expansion stops but the state remains great and powerful. In the following one half century-odd, from Merneptah to Ramesses III, the state declines.

In his tomb inscription Ahmose son of Abana records his services to Ahmose, Amenhotep, and Thutmose. And his services were not to procure a lid for a sarcophagus. His were distinguished military services. Ahmose son of Abana reports: my father was a soldier of the lord of upper Egypt and lower Egypt Seqenenre;
a youth not yet married, I became a soldier on the ship *The wild bull* in the service of the lord of the two lands Ahmose;
when I was married, I was taken on the ship *The northern*, because I was brave; I followed his majesty's chariot on foot;
when Avaris was besieged, I fought bravely, and I was taken on the ship *The rise of Memphis*; in the fighting I killed a foe and carried off his hand; I was given the gold of valor; I captured a man alive, and I was given the gold of valor again;

when Avaris was sacked, I took 1 man and 3 women and his majesty gave them to me;
 then Sharuhén was besieged for three years; when it was destroyed, I brought in spoil 1 hand and 2 women; I was given the gold of valor and my captives;
 when his majesty had destroyed the Asiatics in the north, he sailed south to Khenthennefer to destroy the Nubians; he slaughtered a great many of them; I brought in spoil 3 hands and 2 men; I was given the gold of valor again and 2 women;
 then his majesty sailed north, rejoicing in his valor and victory; he had conquered the southerners and the northerners;
 then Aata rose in the south; his majesty caught him at Tentaa, carried him off alive, and took all his men as booty; I brought in spoil 2 young men; I was rewarded with 5 men and 5 aroura of land; and the same was given to all soldiers;
 then Tetian rebelled; his majesty slew him, and took all his men; I was given 3 men and 5 aroura of land;
 then I became a soldier of his majesty Amenhotep when he sailed south to Kush to enlarge the borders of Egypt;
 his majesty smote the Nubian bowmen, they were carried off in fetters, those who fled were destroyed as if they had never been; I carried off 2 hands, and in the pursuit of the men and the cattle I took 1 man alive; I was given the gold of valor and 2 women;
 then I became a soldier of his majesty Thutmose when he sailed to Khenthennefer to crush the intruders from the desert; I was brave when the ship was towed over the cataract and I was made commander;
 when the Nubian . . . his majesty sprung like a leopard against them; he slaughtered them, he carried off the women and the children;
 then his majesty sailed north, all foreign lands in his feet, the head of the Nubian hanging from his bow;
 then his majesty went to Retenu to unleash his wrath on all lands;
 when he reached Nahrin, he saw that his foe was gathering troops; his majesty made a great slaughter of them, he took countless captive; I

took a chariot, its horse, and the man who was on it; I was given the gold of valor again;
 I have now grown old, favored and loved; . . . this tomb which I myself made (*id.*).

This is how chariots enter the Egyptian record. Chariots are a major step in the development of warfare.

Avaris and Sharuhén are in the north, Avaris in the delta, Sharuhén in Sinai. Khenthennefer is in the south, beyond the second cataract. Retenu and Nahrin are in the north again, beyond Sinai, Retenu is the Asian Mediterranean littoral, Nahrin is the country inland, between the littoral and the Euphrates.

Ahmose son of Abana reports smiting over three generations across 1 800 km.

In particular.

Ahmose destroyed the Hyksos in the delta and Sinai. He then destroyed the Nubians, campaigning beyond the second cataract. He had thus conquered the southerners and the northerners. He then crushed a revolt in the south. He then crushed another revolt in the south. The domain of the state was restored as it had been at its greatest.

Amenhotep sailed south to enlarge the borders of Egypt. He destroyed the Nubians.

Thutmose crushed a revolt beyond the second cataract. And another revolt. Then he unleashed his wrath on all lands in Retenu. And in Nahrin. The domain of the state was enlarged greatly.

In his tomb inscription Ahmose Pennekhhab records his services to Ahmose, Amenhotep, Thutmose, and Thutmose II. And his services were not to procure a lid for a sarcophagus either. His services corroborate Ahmose son of Abana. Ahmose Pennekhhab took the following. In the campaign of Ahmose against the Hyksos 1 hand and 1 man (*id.*). In the campaigns of Amenhotep to enlarge the borders of Egypt in the south 3 hands and 1 man (*id.*). In the campaign of Thutmose in the south 5 men, in his campaign in Nahrin 21 hands, 1 chariot, and 1 horse (*id.*). And in a campaign of Thutmose II in Shasu, again in Asia: I took so many men alive I did not count them (*id.*). Ahmose Pennekhhab was still alive under: the divine consort Hatshepsut, the triumphant, who continued to honor me (*id.*).

With Ahmose, then, the state is restored. As

Ahmoose himself reports:

the Asiatics stand before his majesty in fear, his sword is in Khenthennefer, his wrath is in Fenkhu, fear of his majesty is in the land (Karnak stele)

Fenkhu is in Asia.

Like the princes of the old kingdom and the princes of the middle kingdom, the princes of the new kingdom also built their tombs. Their tombs are now smaller. They are now equipped, however, with the princes' mummies. And the mummy of Ahmoose has been unearthed, in excellent condition.

Amenhotep sailed south to enlarge the borders of Egypt. He destroyed the Nubians. Ahmoose son of Abana took part in one campaign, Ahmoose Pennekhab in two campaigns.

The center of the state is now Thebes.

And under Amenhotep massive building begins.

Another official, Ineni, records in his tomb inscription his services to Amenhotep, Thutmose, Thutmose II, and Hatshepsut. Ineni was: chief of all works at Karnak, in charge of the house of silver, sealer of contracts in the house of Amun, overseer of the granary (*id.*).

Karnak is at Thebes. Under Amenhotep Ineni oversaw the building of 3 temples there.

The mummy of Amenhotep has also been unearthed, also in excellent condition.

With Thutmose the smiting continued, and reached further, and further. Thutmose enlarged the borders of Egypt greatly.

Ahmoose son of Abana and Ahmoose Pennekhab attest his campaigns.

Thutmose established his border in the south at Tombos, at the third cataract, and erected a stele there. The Tombos stele begins by proclaiming the five names of the prince:

Horus, mighty bull, beloved of Mat, favorite of the two goddesses, shining in the diadem of the serpent, great in strength, golden Horus, great in years, who makes everything live,

lord of upper Egypt and lower Egypt, Akheperkhere, given life,

son of Re, Thutmose, who lives forever (*id.*).

All his successors will assume all five names.

Thutmose continues:

the lord of the two lands, who rules the circuit of the earth, south and north, who unites the two lands;

he extended the borders of Thebes so that the sand-dwellers and the troglodytes will work for her; the southerners come downriver and the northerners come upriver to bring their tribute to the great god Thutmose;

he has joined the ends, there is no one to stand against him;

he brought the ends of the earth under his rule; he reached lands his ancestors did not know; his southern border is in this land, his northern border is at the river which goes downstream by going upstream;

nothing like this has ever been done; his renown has reached all lands and as far as the netherworld; in all lands the oath is taken in his name (*id.*).

The Nile is the river which goes downstream by going downstream. The river which goes downstream by going upstream is the Euphrates. Tombos, at the third cataract, is 190 km south of the second cataract along the meridian. The bend in the river which goes downstream by going upstream closest to the Mediterranean is 500 km north of the mouth of the Nile along the meridian. South to north, Thutmose set his borders 1 800 km apart.

The beginning of a theory of the state is indicated unambiguously. He rules the circuit of the earth. He brought the ends of the earth under his rule. In all lands the oath is taken in his name. Moreover, he extended the borders of Thebes so that the sand-dwellers and the troglodytes will work for her.

The beginning of exploration is indicated unambiguously. He reached lands his ancestors did not know.

And Thutmose's Abydos stele generalizes further:

I set the border of Egypt as far as the sun reaches; those in fear I made strong, I cast out evil;

I raised Egypt above all lands (*id.*).

Those in fear I made strong, I cast out evil. Many after Thutmose will propound this doctrine, too. Not often on firmer grounds.

Ineni, chief of works, in charge of the silver, continued to build, temples, obelisks, the tomb of

the prince (*id.*).

The mummy of Thutmose has also been unearthed.

Thutmose II campaigned in the south and in the north. Ahmose Pennekhab reports the campaign in the north. In the south Thutmose II had to crush yet another revolt:

the army of his majesty crushed the wretches of

Kush; no man was left alive (Aswan ins.).

Thus under Thutmose II as well:

son of Re, Thutmose;

fear of his majesty is in the land; the Asiatics come bearing tribute, the Nubian troglodytes come bearing tribute; his southern border is as far as the horns of the earth, his northern

border is as far as the other end (*id.*).

His mummy has also been unearthed.

Ineni reports:

when his majesty Thutmose joined the gods, his son Thutmose became the lord of the two lands, and his sister and divine consort Hatshepsut ruled the two lands, all bowed their heads before her, superb seed of the gods, the mistress who commands (*id.*).

The widow of Thutmose II Hatshepsut ruled in her own right for two decades. As she affirms, on the obelisk she erected at Karnak, 30 m high, she is:

Horus, mighty of soul,

the two ladies, flourishing in years,

golden Horus, the divine diadem,

lord of upper Egypt and lower Egypt, Makare,

daughter of Re, Hatshepsut Khenemet-Amun, who lives forever (*id.*)

And under Hatshepsut as well:

in all lands no one stood against me, all foreign lands are in my feet, my borders are at the ends of the heaven (*id.*).

Hatshepsut built her mortuary temple near Thebes. A series of magnificent reliefs on its walls records an expedition to Punt. One of the pictures shows five ships, two still moored, the other three already under sail. An inscription explains:

the sailing of the sea, the journey to the land of

Punt, to bring the marvels of that country (*id.*).

Another picture shows the loading of the ships.

An inscription explains:

the marvels of Punt, fragrant woods, myrrh resin,

myrrh trees, ebony, ivory, gold, cinnamon wood, incense wood, apes, monkeys, dogs, skins of panther, natives, children (*id.*).

It is clear that the sea is the Red Sea, and that the land of Punt is far in the south. Where exactly is not clear.

Hatshepsut has also left behind an inscription at Wadi Maghara, continuing the series which has begun with Nebka, in the old kingdom, twelve-odd centuries earlier, and has continued before Hatshepsut through Amenemhet IV, in the middle kingdom, three-odd centuries earlier.

With Thutmose III major smiting resumed, and the state reached its greatest power and its greatest extent in the north.

Thutmose III built the most magnificent temple at Karnak. And on the walls of the temple are inscribed his annals:

his majesty commanded that his victories be recorded in the temple he built for his father Amun, every campaign and the booty he took in every campaign (*id.*).

In particular, recorded are his majesty's campaigns and the booty he took from his 1st year through his 19th year.

Thutmose III discovered the annual campaign independently of the princes in the valley of the two rivers.

His predecessors had for three generations campaigned in the south, and again, and again, and again. The south was now subdued. Thus, although other inscriptions attest campaigns of Thutmose III in the south, too, and beyond the third cataract, in the annals every year only the tribute of the south, of Kush and of Wawat, is recorded. In several years the marvels brought from Punt are also listed. The annual campaigns recorded in the annals are all in the north, in Retenu and Nahrin.

In his 1st year Thutmose III conquered Megiddo (*id.*). Megiddo is 150 km north of Sinai. In his 2nd year he received for the first time the tribute of Ashur (*id.*). Ashur is beyond the Euphrates. In his 6th year he conquered Kadesh (*id.*). Kadesh is on the Orontes, 220 km north of Megiddo. In his 8th year he crossed the Euphrates and erected a stele next to the stele erected there by Thutmose (*id.*). Some 100 km north of Kadesh. In his 8th year as well he received for the

first time the tribute of Babylon (*id.*). Babylon is also beyond the Euphrates. In his 8th year as well he received for the first time the tribute of Hatti (*id.*). Hatti is in Asia Minor. In his 9th year he received for the first time the tribute of Isy (*id.*). Isy is Cyprus, in the Mediterranean. In every year, from the 1st through the 19th, Thutmose III campaigned throughout the north, collected the booty, and received the tribute of lands further afield.

Thutmose III discovered the annual campaign, and its record. And the description of one of his campaigns, the first, is also the first explicit description of a battle. The annals report:

his father, the mighty Amun ordered his majesty to conquer;

so his majesty came to Gaza, summoned his army, and said,

the wretched foe of Kadesh has gathered the princes of the foreign lands as far as Nahrin and has come to Megiddo, so speak,

and they said, there are two roads to Megiddo; one of them is difficult, it is narrow, if we take it, when our van begins to fight, our rear cannot help; the other road is easy; do not make us take the difficult road;

his majesty said, I swear by my father Amun, I will take the difficult road; or they will say, his majesty is afraid;

he took the difficult road, and when he came to the foe, he called out to his army, look, they are already beaten;

he built a camp;

on the day of the battle, his majesty set out on a chariot of gold; his southern wing was south of the hill of Qina, his northern wing was north of Megiddo, his majesty was in the center;

then his majesty overwhelmed them; they abandoned their chariots and fled to Megiddo;

his majesty besieged Megiddo; he measured the city, surrounded it with a ditch, and built a wall around it from the timber of their fruit trees;

and the princes of the foreign lands came out and threw themselves on their bellies to kiss the ground in his majesty's feet, begging for their lives, bringing silver, gold, lapis lazuli, turquoise, grain, wine, large and small cattle (*id.*). The booty collected from Megiddo on this

occasion is:

men 340, hands 85, horses 2 041, foal 191, stallions 6, colts . . . , chariots 892, coats of mail 200, bows 502, . . . 397, cows 1 929, goats 2 000, sheep 20 500 (*id.*).

Also for instance, the booty collected on another occasion, from upper Retenu in his 2nd year, is:

the daughter of the chief, ornaments of gold, lapis lazuli, 30 slaves of the chief, 65 male and female slaves, 103 horses, 5 chariots wrought with gold and 5 wrought with electrum for a total of 10, 45 bullocks, 749 bulls, 5 703 goats and sheep, flat dishes of gold which could not be weighted, flat dishes of silver weighing 104 deben, 5 kidet, a gold horn inlaid with lapis lazuli, 823 jars of incense, 1 718 jars of wine, much ivory, fine wood, and all kinds of other jewels (*id.*).

The booty collected on these two occasions is not more than one hundredth of all the booty and tribute recorded in the annals.

On the walls of the Karnak temple are inscribed also four lists of countries which Thutmose III conquered, two lists of countries in the north, one of these with many lacunae, and two lists of countries in the south, one of these with many lacunae as well. The lists have, or had, respectively, 119 names, about 250 names, 115 names, and about 400 names. Only a small fraction of the names can be attached to a particular locality each.

On a stele, also at Karnak, a victory hymn is inscribed. Amun-Re addresses his son Thutmose III:

I gave you might; the fear of you is in every country, it supports the heaven; I brought all your foes in your feet; I gave you the earth in its breath and its length, west and east;

I brought in your feet Asia, you smote the Asiatics of Retenu;

I brought in your feet the eastern lands, you crushed the dwellers of the land of the gods;

I brought in your feet the western lands; Keftiu and Isy are in awe of you;

I brought in your feet the lowlands, Mittani cringes in fear of you;

the limits of the earth are in your power, the circuit of the sea is in your feet;

the border people, the Nubians as far as Shat are

your captives;
 your arms are raised to crush evil;
 Thutmose, who lives forever (*id.*).

The land of the gods is Punt, in the southeast. Keftiu is Crete, in the Mediterranean, in the northwest. Mittani is beyond the Euphrates, in the northeast. Shat is beyond the third cataract, in the southwest.

The theory is the same. The limits of the earth are in your power, the circuit of the sea is in your feet. The fear of you supports the heaven. Your arms are raised to crush evil.

Several officials of Thutmose III have left their tombs behind. The most important, and most magnificent, is the tomb of his vizier Rekhmire. Rekhmire describes himself:

there was nothing he did not know in the heaven,
 or on earth, or in any quarter of the netherworld (*id.*).

Rekhmire describes how he was charged by his majesty with the office of the vizier:

the charge was placed on the vizier Rekhmire, he
 was brought before his majesty, he was ushered in, and his majesty said to him,
 look to the office of the vizier, he is the pillar of the land;

it is not sweet to be a vizier, it is bitter as gall, the vizier is the copper which shields the gold his master;

petitioners come from the south and the north, the whole land is eager to hear the vizier;

so see that all is done according to right, see that all is done perfectly, that everyone is given his due;

do not judge unfairly, the gods abhor partiality, do not pass over a petitioner before you hear what he has to say, do not deny him before you hear him, do not scold him if he does not deserve, scold him if he deserves (*id.*).

The duties of the vizier are enumerated:

to report to the palace, to collect the reports of the overseers, to report every day to the prince, to oversee the treasurer, to open every day the doors of the palace, to oversee the retinue in the palace, to oversee the messengers, to hear petitions, to keep and to provide records, to deal with disputes over land, to collect reports from the district officials, to oversee the boundaries between towns, to settle boundary

disputes, to judge cases, to provide escort for the prince, to garrison cities, to oversee the commander of the army, to give counsel, to oversee the felling of trees for timber, to oversee the water supply, to oversee the ploughing, to oversee the fortresses, to oversee the districts, to oversee the temples, to oversee the canals, to collect the tribute, to observe the rising of Sirius and the level of the Nile, to oversee the ships (*id.*).

The list of his duties explains why there was nothing Rekhmire did not know in the heaven, or on earth, or in any quarter of the netherworld.

One of the pictures on the walls of the tomb shows Rekhmire in the performance of the duty of collecting the tribute brought by the overseers of districts. The overseers of districts are depicted in four lines, and over each figure are inscribed his title, his district, and the tribute he brings. The districts are 30. And these are the officials and tribute of 2 of the 30:

the mayor of Nekhen and an aide bring 7 deben of gold, 3 deben of silver, 4 oxen, 1 bead necklace of gold, and 2 chests of linen;

the overseer of Abydos, two scribes, and an aide bring 3 deben of gold, . . . of linen, 1 jar of honey, 4 oxen, 1 bead necklace of gold, and 3 heqat of grain (*id.*).

The state is prospering greatly.

The country from the third cataract to the Euphrates has been smitten. The power of the smiting has been transferred to officials. Sophisticated administration has been developed. And the state is prospering greatly.

Thutmose III also built massively.

The Karnak prince list is also inscribed on the wall of the temple at Karnak.

His mummy as well has been unearthed.

Amenhotep II was a greater warrior yet:

he had no equal in battle; no one knew horses better; no one could draw his bow; no one could approach him in running;

he rowed at the stern of his boat; when his men could row no longer, he continued to row six times further; his oar was 20 cubits long;

he hit with 1 arrow 4 targets behind one another 20 cubits apart (sphinx stele).

Amenhotep II campaigned in the north and in the south. In the north, he was victorious as far as

the Orontes again (Karnak stele). In the south, he continued the expansion of the state and reached the fourth cataract. The Amada stele reports: he slew with his own hand 7 Asiatic princes; the heads and hands of 6 of them he hung on the walls of Thebes;

the head and hands of the 7th he hung at Napata, to proclaim his victory forever and ever in all the lands of the black people in the south (*id.*). Napata is at the fourth cataract. The fourth cataract is 90 km south of the third along the meridian. Along the bend in the river, it is further away from the third than the third is from the second.

On the same stele Amenhotep II generalizes: all lands bring their tribute to him; he has no border; he is the prince of princes, he is the ruler of rulers; he has captured all borders, there is no border, under him all countries are united, all lands are tied together, he rules all that the sun encircles (*id.*).

There is no border. All countries are united, all lands are tied together.

Amenhotep II also built.

And his mummy has also been unearthed.

Thutmose IV campaigned in the north and in the south. He built. His mummy has also been unearthed.

And with Amenhotep III the state is at its greatest.

His predecessors had for three generations campaigned in the north, and again, and again, and again. The north was now subdued. How completely it was subdued the Amarna archive attests.

In the Amarna archive some 380 official documents from the court of Amenhotep III and his immediate successors are collected. Some 335 are communications from the rulers of the cities in the north installed by the prince of Egypt. The rulers of some two dozen cities as far as Ugarit (45), 450 km north of the mouth of the Nile along the meridian, write to the court. These communications are all addressed: to my lord, the prince, the sun of all countries (*passim*). They are all from: your servant, who prostrates himself before you seven times and seven times again (*id.*). As mere prostration seven times and seven times again may not be enough, many add: both on my

belly and on my back (*id.*). And they report: I am guarding your city for you (*id.*); I am keeping your city safe and sound (*id.*); and I have everything ready for you (*id.*). Namely: oxen, sheep, goats, excellent slaves, silver, chariots, excellent horses (*id.*). In short: I am doing everything you have ordered (*id.*).

Thus, Amenhotep III collected the tribute of the north, and continued the expansion of the state in the south. Several stelae record his victories in the south. On one occasion:

taken, men 150, archers 110, women 250, slaves 55, children 175, total 740; hands 312; total 1 052 (Semna stele).

On the same occasion:

and he installed an overseer for the entire land of Kush (*id.*).

Expansion has reached the fifth cataract. The fifth cataract is 300 km south of the fourth along the meridian. Along the next bend in the river, it is further away from the fourth than the fourth is from the third.

Amenhotep III as well generalizes. Amun addresses his beloved son Amenhotep III:

I nursed you to be the sole lord of all peoples, I made you the sun of the two shores; looking south, I made all Kush come to you to bring you tribute;

looking north, I made the ends of Asia come to you to bring you tribute;

looking west, I let you capture Tjehenu;

looking east, I made Punt come to you to bring you gifts (Thebes stele).

Amenhotep III also built. The tombs of several of his officials have also been unearthed. And his mummy has also been unearthed.

Amenhotep III is the culmination of two centuries of expansion of the state. It is a series of 9 princes from Ahmose through Amenhotep III. 6 of the 9, Ahmose, Amenhotep, Thutmose, Thutmose III, Amenhotep II, and Amenhotep III, are great warriors. And the domain brought under the state reaches from the fifth cataract in the south to the Euphrates in the north. In the west Amun has let Amenhotep III capture Tjehenu. In the east Amun has been making Punt bring gifts since Hatshepsut. The domain of the state extends some 700 km west to east along the parallel, 2 100 km south to north along the meridian.

Amenhotep III is also the culmination of two centuries of development of the administration of the state. The sophistication which the state has attained in the exercise of its power the very fact of the Amarna archive attests. The very fact of the collection of hundreds of official documents, and of communications of the state with its tributaries 1 100 km away from its center, counting from Thebes to Ugarit, and over not less than two successive reigns.

Some 335 of the communications in the Amarna archive are: to my lord, the prince, the sun of all countries. 44 are: to the great prince, the prince of Egypt, my brother (*id.*). These are communications from princes on the borders of the domain of the great prince, the prince of Egypt, their brother. And these communications document the relation of the state to all other states on earth. For the states attested by the Amarna archive are all states on earth. Thus, Amenhotep II affirms: there is no border, all countries are united, all lands are tied together. Amenhotep III affirms: he is the sole lord of all peoples. And these communications show that, pace Amenhotep II, there is a border, not all countries are united, not all lands are tied together. Pace Amenhotep III, he is not the sole lord of all peoples. These communications show also, however, how successful the attempt to unite all countries, tie all lands together, under the sole lord of all peoples, has been.

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In the two centuries from Ahmose to Amenhotep III, then, the state is at its greatest. The state in its independent development in the valley of the Nile is at its greatest.

It is the same state, the state of the princes of the old kingdom, then of the princes of the middle kingdom, now of the princes of the new kingdom. The same state, counting back to Narmer, for fourteen-odd centuries when it is restored by Ahmose.

It has continued for seven and a half centuries. It has then disappeared for two centuries. It has then been restored, become greater and more powerful, and continued for two and a half-odd centuries. It has then again disappeared for two-odd centuries. And it is then restored again, and

becomes much greater and more powerful now.

And first of all, the foundation is again the smiting. There is little smiting in the old kingdom. There is more smiting in the middle kingdom, but smiting does not become the main concern of the state. Smiting is very much the main concern of the state now. 6 of the 9 princes from Ahmose through Amenhotep III report nothing more than they do smiting. Counting 206 reign years for all the 9 princes, the reign years of the 6 warriors are 158 out of the 206.

The recorded numbers indicate the size of the forces led by the princes. Ahmose Pennekhab took 1 hand and 1 man under Ahmose, 3 hands and 1 man under Amenhotep, 21 hands, 5 men, 1 chariot, and 1 horse under Thutmose, so many men he did not count them under Thutmose II. In the generation after Thutmose II, the booty of Thutmose III at Megiddo alone included 892 chariots and 200 coats of mail. Thutmose III led not less than several thousand on his annual campaigns in the north. Three generations later, on one of his campaigns in the south Amenhotep III took 150 men, 110 archers, and 312 hands. Amenhotep III led not less than one thousand on his campaigns in the south.

Hence the expansion of the state.

For the first ten centuries of the development of the state its domain remains as Amenemhet, early in the middle kingdom, describes it: I went to the first cataract, I returned to the delta, I stood at the borders of the country, I looked at all of it inside. South to north, from the first cataract to the delta, 800 km. Senwosret III campaigns beyond the second cataract in the south, and ventures into Asia beyond Sinai in the north. At its greatest the domain of the state under the princes of the middle kingdom reaches, south to north, 1 100 km.

Ahmose restores the state. Amenhotep begins expansion in the south. Thutmose reaches the third cataract in the south and the Euphrates in the north. Thutmose III continues expansion in the north. Amenhotep II reaches the fourth cataract in the south. Amenhotep III reaches the fifth. South to north, 2 100 km. Beginning with Hatshepsut, Punt, in the southeast, is made to give gifts. Amenhotep III campaigns in Tjehenu, in the west.

The domain of the state has been increased by an order of magnitude.

And the power of the smiting has been transferred to officials.

Differently, however, in the different regions under the state. And three different regions are indicated clearly and distinctly. The center of the state, from the first cataract to the Mediterranean. The south, beyond the first cataract. And the north, Asia beyond Sinai.

This is how Thutmose describes the differences: he extended the borders of Thebes so that the sand-dwellers and the troglodytes will work for her; the southerners come downriver and the northerners come upriver to bring their tribute to the great god Thutmose.

This is how Amenhotep III describes the differences: looking south, I made all Kush come to you to bring you tribute, looking north, I made the ends of Asia come to you to bring you tribute.

And in the center of the state the power of the smiting has been transferred to officials in its entirety. And great prosperity prevails.

The vizier Rekhmire is the pillar of the land.

He reports to the palace, reports every day to the prince, opens every day the doors of the palace, oversees the retinue in the palace, provides escort for the prince, gives council.

He collects the reports of the overseers, oversees the treasurer, oversees the messengers, keeps and provides records, collects reports from the district officials, oversees the districts.

He garrisons cities, oversees the commander of the army, oversees the fortresses, oversees the ships.

He collects the tribute.

He oversees the felling of trees for timber, oversees the water supply, oversees the ploughing, oversees the temples, oversees the canals.

He hears petitions, deals with disputes over land, oversees the boundaries between towns, settles boundary disputes.

He judges cases.

He observes the rising of Sirius and the level of the Nile.

All attesting the sophistication which the state has attained in the exercise of its power. And the great prosperity of the state.

Also, the state has not discovered the law. The

additions to natural law and subtractions from it have not been made explicit. But the state has advanced substantially toward the discovery of the law. The pillar of the state is to see that all is done according to right, that everyone is given his due. He is not to judge unfairly, not to pass over a petitioner before hearing what he has to say, not to scold him if he does not deserve.

Thus the center of the state.

Its population is at this time some four million. Four million, some one twelfth of humanity, forced to live in peace and prosperity. The taming of this portion of humanity has advanced substantially.

In the south, Ahmose campaigns in the south, Amenhotep campaigns in the south, Thutmose campaigns in the south, Thutmose II campaigns in the south, Thutmose III campaigns in the south, Amenhotep II campaigns in the south, Thutmose IV campaigns in the south, Amenhotep III campaigns in the south. The south is thus very well subdued. But it is not pacified. Amenhotep III installs an overseer for the entire land of Kush. And from the mere count of the campaigns beyond each of the cataracts it can be concluded that peace and prosperity are reaching south, to the second cataract, and more tentatively to the third. But two centuries of smiting have not incorporated the south into the peace and prosperity of the state.

And the same is indicated more clearly and distinctly still in the north.

The 335 letters from the rulers of the cities installed by the prince of Egypt are all addressed: to my lord, the prince, the sun of all countries. They are all from: your servant, who prostrates himself before you seven times and seven times again. Many add: both on my belly and on my back. Many add: I am the dirt in your feet (*passim*). Many add: I am your dog, and is there a dog that will not obey its master (*id.*)? They report: I am guarding your city for you; I have everything ready for you; I am doing everything you have ordered.

And nearly all of them report commotion. The ruler of any of the cities complains loudly of the rulers of the neighboring cities who are again raiding the country and threatening his city (*id.*). So can my lord, the sun of all countries, send 200

men? 300 men? 200 men? to punish these wretches (*id.*)? One of these rulers, of Byblos, on the coast, alone sent not less than 70 letters (68-138), complaining more loudly than any of the others that those others are raiding the country and threatening his city. To judge by the facts that those others kept raiding the country and threatening the cities, and that this particular ruler of Byblos kept prostrating himself seven times and seven times again and doing everything he was ordered to do for two decades, this particular ruler of Byblos cannot himself have been too negligent of raiding the country and threatening the cities.

Thutmose begins campaigning in the north. By the time of Amenhotep III the north is very well subdued. It is well administered, too, it keeps delivering: oxen, sheep, goats, excellent slaves, silver, chariots, excellent horses. But it is not pacified. One and a half centuries of smiting have not incorporated the north into the peace and prosperity of the state either.

All in all, the center of the state has been brought under the state sixteen-odd centuries before Amenhotep III. Subtracting the centuries of disorder, by the time of Amenhotep III the center of the state has been under a state for twelve centuries. The south is brought under a state in the last two of these centuries, the north is brought under a state in the last one and a half of these centuries.

Building the state is difficult.

The state extends from the fifth cataract in the south along the valley of the Nile to the Mediterranean and then along the littoral in Asia to the Euphrates in the north.

And if the fact that there is a state is indicated, minimally, by the record of but one prince, there are no states further south.

There are no states further west either.

All other states on earth are in the east and in the north, all bordering the great state, all attested by the archive of the great state.

44 of the communications in the Amarna archive are addressed: to the great prince, the prince of Egypt, my brother. These are from – and a couple of them to – princes on the borders of the domain of the great prince, the prince of Egypt, their brother.

These lesser princes are 6.

The prince of Babylon, beyond the Euphrates, 14 letters (1-14).

The prince of Ashur, further north beyond the Euphrates, 2 letters (15-6).

The Mittani prince, still further north beyond the Euphrates, 14 letters (17-30).

The Hittite prince, in central Asia Minor, 4 letters (41-4).

The prince of Arzawa, on the southern coast of Asia Minor, 2 letters (31-2).

And the prince of Alashiya, or Cyprus, in the Mediterranean, 8 letters (33-40).

And there are no other states further east, or further north. These are all other states on earth. There is no record, Egyptian or any other, of but one other prince.

And these 6 other princes are lesser princes, they are not the equal of the great prince, the prince of Egypt, their brother. They are not equal among themselves either, and how they are different among themselves how they are different with respect to the great prince, the prince of Egypt, their brother, determines.

The prince of Alashiya is not really a prince. He styles himself prince – as many of the rulers of the cities who prostrate themselves seven times and seven times again also do – but he never names himself in his letters. The main concern of his letters is to report: I am sending you 100 measures of copper (34); I am sending you 500 measures of copper (35), even if he adds: since you are my brother, may you not send me silver (*id.*)? much silver, my brother, pure silver (37)?

Alashiya is not a state, it is a tributary of the great state.

The other princes name themselves.

The one concern of the letters of the prince of Arzawa is to report the delivery of a daughter to be the wife of the great prince, accompanied by the appropriate abundance of gifts, including a sack of gold (31).

Arzawa is not a state either, it is also a tributary of the great state.

The main concern of the letters of the princes of Mittani and of Babylon is the same. The prince of Mittani and the prince of Babylon each reports the delivery of a daughter to be the wife of the great prince. And the routine of this kind of

tribute is attested by both princes. The prince of Mittani delivers a daughter, as his father before him has delivered a daughter, and his grandfather before him has delivered a daughter (29). The prince of Babylon delivers a daughter, as his father before him has delivered a daughter (1), and as his son after him will deliver a daughter (11). The daughter is in each case accompanied by the appropriate abundance of gifts, the gifts supplied with an inventory to ensure delivery in their entirety. The more independent of these princes, the prince of Babylon, asks: and why will my brother not send me at least one woman; my daughters are all available, I do not refuse them to you (4). Even if the great prince has informed him: no daughter of Egypt since time immemorial has ever been given to anyone (*id.*). Even if these princes, too, complain: my brother, you have not sent me enough gifts (10); my brother, gold is like dirt in your country, why have you not sent me more (26)?

Mittani and Babylon are independent states. But not too independent.

The prince of Ashur writes to introduce himself: my predecessors have not written to you, I am now writing to you (15). He sends: one chariot, two horses, and lapis lazuli (*id.*). He also wonders: gold is like dirt in your country, you just pick it up from the ground; why have you sent me so little? send me more (16).

Ashur is asserting its independence.

The Hittite prince writes: now that you have ascended the throne of your father, let us be friends (41). He sends much silver (*id.*). And he adds: I want gold, send me gold; and tell me what you want (44).

Hattusa is an independent state.

These conclusions drawn from the Amarna archive, Alashiya and Arzawa are not states, Mittani, Babylon, Ashur, and Hattusa are states, Mittani and Babylon not too independent, Ashur asserting its independence, Hattusa independent, are corroborated amply by the entire record, Egyptian and all other.

This is shown below.

Thus, there are on earth four states other than the great.

Mittani is small, and continues for one half century. Then it disappears.

In Babylon there has not been a state for one and a half centuries before the princes attested by the Amarna archive. The state of these Babylonian princes is small, and continues for one half century. Then it disappears.

Beginning two and a half centuries before the time of the Amarna archive, there has been a larger and more powerful Hittite state for one and a half centuries. Then this state has disappeared for one and a half centuries. Beginning at the time of the Amarna archive, there is again a larger and more powerful Hittite state for one century-odd. Then the Hittite state disappears altogether.

The prince of Ashur attested by the Amarna archive is Ashur-uballit. Beginning with him Ashur will continue for seven and a half centuries and will rise very greatly. At the time of Ashur-uballit Ashur is small and just beginning.

All four are just outside the great state.

And all of this – the smiting, the expansion, the administration, the peace and prosperity, the incorporation of the south, the incorporation of the north, and all other states on earth, all very much lesser states, all bordering the great state – shows the success of the princes of Egypt in building the state.

And what, more particularly, they are building, the princes are explicit.

Ahmose. His sword is in Khenthennefer, his wrath is in Fenkhu, fear of his majesty is in the land.

Thutmose. He has joined the ends, there is no one to stand against him. He has brought the ends of the earth under his rule. He has set the border of Egypt as far as the sun reaches.

Thutmose II. His southern border is as far as the horns of the earth, his northern border is as far as the other end.

Hatshepsut. In all lands no one stands against her, all foreign lands are in her feet, her borders are at the ends of the heaven.

Thutmose III. The fear of him is in every country, it supports the heaven. All his foes are in his feet. The limits of the earth are in his power, the circuit of the sea is in his feet.

Amenhotep II. He has captured all borders, there is no border, under him all countries are united, all lands are tied together, he rules all that the sun encircles.

Amenhotep III. He is the sole lord of all peoples.

And rather nearly he is.

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The predecessors of Amenhotep IV were warriors. Amenhotep IV is the first prophet. His predecessors had labored to bring all peoples under their sole lord. Amenhotep IV undertook to bring everything under its sole lord.

He undertook to bring everything under Aten.

Aten had been a god for some time. With the labors of Amenhotep IV Aten became god.

Gods being gods, god being god, the references of 'Aten', 'a god', 'gods', 'god' are difficult to fix.

Thus, from the first, Horus is the falcon. The prince is also Horus. Wadjet is the cobra, Nekhbet is the vulture. Wadjet is also upper Egypt, Nekhbet is lower Egypt. And the prince, Horus, is also Wadjet and Nekhbet.

Clearly, it is not clear, nor can it be clear, to how many gods these propositions refer, three gods, or six gods, or eight, or nine, or many more, or just one.

Whatever the number of those gods, the record attests ever more gods.

From the first Re is also a god. To the degree to which Horus is the falcon, Wadjet is the cobra, and Nekhbet is the vulture, Re is the sun. And clearly, as Horus is not just the falcon, Wadjet the cobra, Nekhbet the vulture, so Re is not just the sun.

Late in the old kingdom Re begins to predominate among the gods. And the princes begin going to Re in heaven. Or the other way around. The princes begin going to Re in heaven. And Re begins to predominate among the gods.

Re continues to predominate in the middle kingdom, and in the new kingdom.

In the new kingdom, however, the city of the princes is Thebes. The god of Thebes is Amun, and rather, Amun is Thebes, and Thebes is Amun. And with the rise of the princes of Thebes, Amun becomes Re, Re becomes Amun-Re.

Thus, on his Thebes stele, Amenhotep III enumerates the temples he built. Himself, he is: the son of Re, Amenhotep, lord of Thebes, be-

loved of Amun-Re;

the great god Amenhotep, vigilant for his maker Amun, lord of the gods (*id.*).

One temple:

he, the son of Re, built for his father Amun, lord of the thrones of the two lands, for his father Amun-Re, lord of the gods (*id.*),

another:

he, the son of Re, built for his father Amun, lord of the thrones of the two lands (*id.*),

another:

he, the son of Re, Amenhotep, built for his father Amun, lord of all eternity (*id.*),

another:

he, the son of Re, built for his father Amun-Re, lord of the thrones of the two lands (*id.*),

another:

he, the beloved son of Amun-Re, the son of Re, built for Amun-Re, lord of the thrones of the two lands (*id.*).

The father of the son of Re is Amun. Re is Amun is Amun-Re. He is the lord of the gods. He is the lord of all eternity. He is the lord of the thrones of the two lands. He is the father of the prince. The prince is himself a great god.

The prince, a great god, has also been steadily more explicitly the sole lord of all countries, all lands, all peoples.

The prophecy of Amenhotep IV is thus well prepared.

Aten has joined the gods early in the new kingdom. To the degree to which Re is the sun, or Amun is Thebes, Aten is the sun disk. Nor is Aten just the sun disk. On the same stele of Amenhotep III:

the statues of the lord rise to heaven; they shine on all, as Aten shines at dawn (*id.*).

And Amenhotep IV elevated Aten above Amun-Re, and above everything.

Amenhotep, Amun is pleased, renamed himself Akhenaten, servant of Aten. He abandoned the old temples of Amun, and built new temples of Aten. He abandoned Thebes, the city of Amun, and built a new city, Akhet-Aten, Aten is content, 270 km northwest of Thebes. The new city measured:

from its southern boundary to its northern boundary 6 iter, 1 $\frac{3}{4}$ rods, 4 cubits (boundary stela). Some 15 km. The remains of the city indicate a

population of more than 40 000.

Akhenaten remained the son of Re, but Amun was not his father any longer. More generally, he was:

the good god, lord of heaven, lord of earth, great living Aten, who shines on the two lands; my father is Re-Aten, the great living Aten who dwells in Akhet-Aten (*id.*).

Temples and tombs were inscribed with hymns to Aten. Among these is the great hymn to Aten, inscribed in the tomb of the vizier Ay. And the great hymn to Aten is all by itself a prodigy, anticipating in some detail psalm 104.

Akhenaten sings:

splendid in heaven you rise, living Aten, creator
of life,
you dawn in the east and all is filled with beauty,
you are the beautiful, the great, the splendid;
high above, you embrace all that you made,
you are Re, you reach the limits,
and you bend the limits for your son whom you
love;

you are far and yet your rays are here,
one sees you and yet your paths are unseen;
how many are your hidden deeds?
you alone are god, there is no one beside you;
you made the earth, you alone,
you made all peoples, herds, and flocks,
all that walks on legs, all that flies on wings,
you made the lands of Khor and of Kush,
and the land of Egypt;
you set every man in his place,
you give him food, you count his years;
you made the tongues of men different,
you made their ways different,
you made their skins different,
you made the peoples different;
you made the seasons, you made the sky,
you alone, you living Aten,
you made the myriads of things,
you made the towns, the villages, the fields, and
the river;
you are in my heart,
no one knows you but your son, Neferkheprure,
whom you taught your ways and might (*id.*).

Khor is the north. Neferkheprure is another of the names of Akhenaten.

The last report: no one knows you but your son, whom you taught your ways and might,

indicates Akhenaten's also as the first revelation.

You alone are god, there is no one beside you.

The great ultimate success of Akhenaten's prophecy its more remote successors, Judaism, Christianity, Islam, attest.

Immediately, the prophecy was not successful. The new religion did not survive beyond the brief reigns of Akhenaten's immediate successors, Smenkhkare, Tutankhamun, and Ay.

Akhenaten, Smenkhkare, Tutankhamun, and Ay are ignored by the Abydos prince list and the Saqqara prince list. Their cartouches were erased from the temples. Attesting another new development. The first *damnatio memoriae*.

Under Smenkhkare the Amarna archive was collected, very probably. Few of the communications dare address the great prince by name. The communications are certainly addressed to the courts of Amenhotep III and Amenhotep IV, and very probably the successor of Amenhotep IV.

Under Tutankhamun already – as his name as well attests – the restoration of the old religion began. Tutankhamun reports:

when his majesty appeared in the land, the temples of the gods had been abandoned from the south to the north, their shrines were in ruin, heaps of rubble, overgrown with weeds;
the gods had abandoned the land; the army was not victorious; when a god was implored, he did not come, when a goddess was implored, she did not come;

his majesty took council in his heart;
he fashioned an image of his father Amun from electrum, lapis lazuli, turquoise, and every other precious stone;
and his majesty built monuments to the gods, he restored their shrines, he installed priests and priestesses, he made great offerings to the gods (restoration stele).

Tutankhamun's tomb was unearthed in 1922. It is the single princely tomb, out of more than one hundred, to succeed, and for thirty-two and a half centuries, in defying the robbers of the princely tombs.

Tutankhamun succeeded and died a minor.

Ay, vizier of Akhenaten, succeeded.

Horemheb, commander of troops, succeeded.

And Horemheb undertook to restore the impaired authority of the state.

With Horemheb the restoration of the old religion is complete:

all gods rejoiced;
 behold, Amun has returned, his son stands before him, in the palace, the crown on his head;
 he restored the temples of the gods; he fashioned more of their images than ever before; Re rejoiced when he saw them;
 he restored the districts of the gods as they had been since the first beginning; he installed priests and priestesses; he gave servants to the temples; he gave them land and cattle (coronation ins.).

Akhenaten's prophecy was not successful, not immediately. With his attempt to establish a new religion and then the restoration of the old religion, however, religion, always very prominent in the state in the valley of the Nile, becomes very much the main concern of the state. The successors of Horemheb will install ever more priests and priestesses, give ever more servants to the temples, give them ever more land and cattle.

Horemheb restored also the administration of the state.

He issued this edict:
 his majesty took council in his heart; . . . to expel evil from the land; . . . and wrote down everything that his majesty said;
 when a poor man made himself a boat to serve his majesty . . . ; they took his tribute . . . ; if he takes the boat, they shall cut off his nose;
 when a poor man had no boat . . . ; . . . to send him for wood to serve . . . ;
 when his cargo was robbed . . . ; his majesty commands . . . ;
 when they brought . . . to the harem, or offerings to the gods, or their dues to the officers . . . ; . . . they shall cut off his nose;
 when the officers of his majesty collected the tribute in the towns . . . ; if it is said, they took for themselves, or it is said, my slave was taken from me . . . ;
 when the two divisions of the troops, in the south, and in the north, stole hides, in the whole land, every year, when they went from house to house, beating . . . ; . . . and the hides were not found . . . ; and the overseer of the cattle of his majesty went through the entire land and did not bring the hides . . . ; if it is said of any

soldier, he steals hides, they shall punish him with one hundred blows, and take from him what he took;

I sailed the entire land; I appointed two judges for the two lands, in the two great cities of the south and of the north, to judge everything without exception; I ordered everything; and I told them, take nothing . . . ;

when it is said of an official or a priest, he transgresses against justice . . . ;

his majesty brought prosperity to the country; he appointed officials in the entire land; every man had a portion of every good thing, bread, meat, . . . ; they rejoiced; they took from the granary; there was no one who did not receive something;

hear these commands of my majesty, which I issued when I took over the entire land, and remembered those misdeeds (Karnak stele).

The edict of Horemheb is as close as the state in the valley of the Nile comes to discovery of the law. And it is still not too close. The edict lacks generality. It expels evil from the administration. It remembers the misdeeds of officials. Its provisions are not additions to natural law and subtractions from it. Nor are they very definite. The edict also lacks particularity. The two judges appointed in the two great cities are to judge everything without exception. The edict of Horemheb is not an advance over the instructions of Thutmose III to Rekhmire.

The brief reign of Ramesses followed.

Seti then undertook to restore the military prowess of the state.

The state had been neglecting smiting, and hence its control over the north and the south, since Amenhotep III. As Tutankhamun reports: the army was not victorious. Seti undertook to reassert the authority of the state in the north and in the south.

The Karnak reliefs are a series of magnificent depictions of Seti's victories with inscriptions illuminating the depictions.

The inscriptions report victories in Seti's 1st year in Shasu, in Asia just beyond Sinai, and without ascribing them to particular years, victories further north in Asia, at Kadesh, victories over the Hittites, and victories over the Libyans, in the west (*id.*).

Several stelae corroborate Seti's campaigns in the north and in the west, and report campaigns also in the south.

Like his predecessors, Seti also generalizes. Amun addresses his son Seti:

you have taken all countries; your renown has reached the heaven;

I have given you the south; the north bows to you; your rule encompasses the earth; the peoples of the sea bring you tribute; I have opened the path to Punt to you (*id.*).

And the depictions are more magnificent than those of his predecessors. They attest very high art. But the descriptions are not nearly as explicit as those of his predecessors. Nor are Seti's stelae as many or set up as far as those of his predecessors, in the north or in the south. A formidable foe has also appeared in the west, the Libyans.

The authority of the state is not restored as far or as firmly as it has been at its greatest.

Seti once again built massively, once again first and foremost temples.

The Abydos prince list is inscribed in the temple he built at Abydos.

With Seti also the series of unearthened mummies of the princes resumes.

The long reign of Ramesses II followed.

Ramesses II built more and more magnificent temples than any of his predecessors. The most magnificent is at Abu Simbel, close to the second cataract, adorned by four colossal sitting statues of the prince, 18 m high, the entrance of the temple aligned perfectly to admit the first ray of the rising sun at equinox upon the statues of the gods 60 m inside.

Ramesses II built also a new city in the delta, Piramesse, the house of Ramesses.

The largest inscription of Ramesses II, attested in more than one dozen copies, inscribed on the walls of the temples of Karnak, Abydos, Luxor, and Abu Simbel, reports his victory over the Hittites at Kadesh in his 5th year.

These are the main events of the campaign.

His majesty leads his army north, foot and chariots, in four divisions, the division of Amun, the division of Re, the division of Ptah, and the division of Seth. At the head of the division of Amun, his majesty approaches Kadesh, the other three divisions far behind. Two Hittite spies,

feigning to be deserters, tell his majesty that the Hittite army is far away. His majesty continues his march. He captures two Hittites soldiers who tell him that the Hittite army is right before him. His majesty dispatches messengers to hasten the arrival of the main body of the army. The Hittites attack. His majesty's men flee. Alone, his majesty is surrounded. He charges his foe, and destroys him.

This is, more particularly, the concluding event:

my might made all my foes the Hittites fall in the Orontes, one upon the other, as crocodiles fall in the water;

I defeated them all, all by myself; for all my foot and chariots had left me; not one of them had remained;

and as I live, as Re loves me, as my father Amun favors me, everything I say I did, in truth I did, as all my foot and chariots were there to see it (*id.*).

There are a few numbers in the inscription:

2 500 chariots surrounded his majesty (*id.*), when he is abandoned by his men, Amun tells his majesty:

I am your father, I am with you, I will prevail over 100 000 (*id.*),

and indeed:

by my mighty arm my majesty slaughtered 100 000 (*id.*).

The inscription notes:

the Hittite is destroyed forever (*id.*).

It lists several times the countries subdued:

Hatti, Nahrin, Arzawa, Pidasas, Dardany, Masa, Karkisha, Luka, Carchemish, Kedy, Kadesh, Ugarit, Mushanet (*id.*).

And it generalizes:

his majesty crushed all lands; all foreign lands extol him (*id.*).

The battle of Kadesh is the first battle recorded by both combatants. The Hittite prince Hattusili III reports: my brother Muwatili defeated the prince of Egypt (testament). His successor Tudhaliya IV adds: Muwatili defeated the prince of Egypt and subdued the land of Amurru (treaty).

The Hittite was not destroyed forever. And if Muwatili subdued the land of Amurru, he subdued the lands Ramesses II subdued. The other way around, if Ramesses II subdued the lands he

lists, he subdued the land Muwatali subdued.

The prominence of this one battle in the inscriptions of the prince, the prominence in the inscriptions of the thought and the sense over the reference and the true, the reports of the Hittite princes, all indicate that the authority of Egypt in the north is impaired.

In his 21st year Ramesses II concluded a treaty with the Hittite prince.

The treaty is also recorded by both sides. It is also the first treaty so recorded. There is in this case no disagreement in the reports.

The treaty is inscribed in the temple at Karnak: the treaty of the great prince of Hatti Hattusili, son of Mursili, son of Suppiluliuma, with the great prince of Egypt Ramesses, son of Seti, son of Ramesses, for peace and friendship forever, recorded on a silver tablet (*id.*).

The principal clauses are four:

if a foe rises against Ramesses, the great prince of Egypt, and he sends a messenger to the great prince of Hatti saying, come with your men to me against him, the great prince of Hatti shall come and slay him; if the great prince of Hatti will not himself come, he shall send his men and chariots;

if a foe rises against the great prince of Hatti, and he sends a messenger to the great prince Ramesses saying, come with your men to me against him, he shall come and slay him; if the great prince of Egypt will not himself come, he shall send his men and chariots;

if a great man of Egypt flees to the great prince of Hatti, the great prince of Hatti shall not receive him but send him back to the great prince Ramesses;

if a great man of Hatti flees to the great prince Ramesses, he shall not receive him but send him back to the great prince of Hatti (*id.*).

Other clauses provide for the return of lesser men.

The treaty notes nothing about the domains of the two princes, or their border.

The treaty also indicates that the authority of Egypt in the north is impaired.

The reigns of Seti and Ramesses II are the time of the second rise of the Hittite state, still powerful under Muwatali. This is the time also of the first rise of Ashur under Adad-nirari, Shalma-

neser, and Tukulti-Ninurta. The rise of Ashur is not noted in the Egyptian record.

Egypt was retreating in the north.

The reports of victories of Ramesses II in the south are also few and dominated by the thought and the sense:

his majesty destroyed the wretched chiefs of Kush, he made Kush bring its treasures to his father Amun-Re (Abu Simbel ins.).

The authority of the state beyond the second cataract in the south is impaired as well.

In his 34th year Ramesses II received the eldest daughter of the Hittite prince to be his wife (*id.*). Not less than two dozen wives of the prince are attested.

Inscribed in the tomb of the overseer of works Tenry, the Saqqara prince list is from the reign of Ramesses II.

In the one century-odd from Amenhotep IV through Ramesses II the state remained great and powerful, but not as great and powerful as it had been.

There was little smiting, and the state retreated in both the north and the south.

Religion was very much the main concern of the state.

And in the following one half century-odd the state began to decline rapidly.

The decline of the state is indicated unambiguously by the decline of writing.

The three and a half centuries from Ahmose through Ramesses II are a time of massive writing. The bulk of the Egyptian record is from this time. In particular, the inscriptions of the princes are at their most abundant and most explicit. And the prince lists are all from this time, the Karnak prince list from the reign of Thutmose III, the Abydos prince list from that of Seti, the Saqqara prince list from that of Ramesses II.

Then both the quantity and the quality of writing decline. In particular, the inscriptions of the princes are few. And there are no prince lists.

The series of the princes is established by Manetho, the inscriptions, and other monuments.

Merneptah defeated the Libyans.

An inscription in the temple of Amun at Karnak reports:

the son of Re, Merneptah;

the wretched chief of the Libyans came from the

west with his bowmen;
 they plundered the borders, they invaded the land,
 they came every day, they destroyed the fields
 all the way to the river (*id.*).
 Merneptah rises like a lion, destroys the Libyans,
 and concludes his report with a list of his booty:
 Libyans slain whose uncircumcised phalli were
 carried off 6 359;
 total carried off 9 376;
 weapons 9 111;
 horses 12; cattle 1 308; goats . . . (*id.*).

Two more stelae commemorate the victory. On
 the Athribis stele the Libyans slain are 6 200, the
 total carried off 9 300 (*id.*). On the Thebes stele
 Merneptah concludes with another list:

Tjehenu is vanquished, Hatti is at peace, Canaan
 is captured, Gezer is seized, Yanoam is
 destroyed, Israel is ruined, barren of seed,
 Khor is a widow, all who rose are subdued;
 the son of Re, Merneptah (*id.*).

This is how the name Israel enters the record.

The destruction of the fields all the way to the
 river, as well as the number of Libyans slain,
 indicates a formidable foe in the northwest. In the
 northeast, all who rose have had to be subdued
 once again.

In the following reigns of Seti II, Siptah, the
 widow of Seti II Twosret, and Sethakhte turmoil
 prevails. Their succession, attested by Manetho
 and the monuments – and the mummies of Seti II
 and Siptah, too, have been unearthed – indicates
 that the central authority still holds.

With Ramesses III, however, the new kingdom
 comes to an end. After Ramesses III the state
 declines catastrophically. Disorder prevails for
 the following five centuries, until the conquest of
 Egypt by Esarhaddon.

The deeds of Ramesses III are recorded on the
 largest papyrus, 40.5 m long, 117 columns of
 12-3 lines each.

The papyrus concludes:
 I have now joined the great gods in heaven;
 Amun has set up my son to be the lord of the two
 lands; he is the firstborn of Re; he is Ramesses
 (*id.*).

Ramesses III has joined the great gods in heaven,
 his deeds are written down under the firstborn of
 Re Ramesses IV.

In somewhat more than nine tenths of its bulk,

the papyrus inventories in great detail the gifts of
 Ramesses III to the main temples of Amun, Re,
 and Ptah, then in less detail his gifts to all other
 temples in the land. In the concluding less than
 one tenth, in less detail still, the papyrus de-
 scribes the campaigns of Ramesses III.

This last part of the papyrus begins:
 the land of Egypt was in turmoil; every man was
 his own lord; they had no lord; and when
 empty years came, the Asiatic became their
 lord; they defiled the gods;

but when the gods inclined to peace, and resolved
 to bring order to the land, they established
 their son Sethakhte; he brought order to the
 land; he became the lord of the two lands;
 Sethakhte made me rather than Keb his heir; he
 made me the lord of the land; I became the
 lord of the entire land (*id.*).

When empty years came, the Asiatic became
 their lord. And the Asiatic kept coming. And not
 just the Asiatic kept coming.

There is little detail in the description of the
 campaigns of Ramesses III in the papyrus:

I extended all the borders of Egypt, I overthrew
 all who invaded the country;

I slew them in their islands, I destroyed the peo-
 ples of the sea, I took them captive;

I destroyed the people of Shasu;

I destroyed the Libyans who had reached the river
 on both its banks; I stopped them from trans-
 gressing against the borders;

I sent ships to Punt;

I sent messengers to the country of the copper
 mines;

I sent officials to the country of malachite (*id.*).

Ramesses III overthrew all who invaded the
 country. He destroyed the peoples of the sea, he
 destroyed the people of Shasu, and he destroyed
 the Libyans who had reached the river on both its
 banks.

But all who invaded the country kept coming.
 The peoples of the sea kept coming, the people of
 Shasu kept coming, and the Libyans kept coming.

As the inscriptions in the temple which Ram-
 esses III built at Medinet Habu, near Thebes,
 report in greater detail. On all the following
 occasions the prince was victorious:

every hostile chief entered the country from
 Libya;

the peoples of the sea entered the mouth of the river like wild fowl;
 the Asiatics came from the north;
 they came from their islands;
 they came upon Egypt from Amurru;
 they assembled in the sea, set fire to the harbors;
 rebels from all sides invaded the borders;
 they came from their islands, infested the harbors,
 entered the mouth of the river;
 they came from their islands in the middle of the sea,
 advanced upon Egypt, all in arms;
 the Asiatics crossed the border;
 they came to Egypt and said, we will settle in Egypt,
 they plundered the borders of Egypt every day;
 the foe entered the land as if the fields and the hills
 were his own;
 every foe transgressed against the borders (*id.*).

On all these occasions the prince was victorious. But all these occasions overwhelmed the state. The Libyans from the northwest, the peoples of the sea from the north, the Asiatics from the northeast.

Once again, a great state is built, with peace and prosperity it neglects smiting, and hordes of wild men come to prey on it, and keep coming.

The hordes are a cause of the fall of the state. But not the main cause. The main cause is religion. This is indicated in this case clearly and distinctly.

The papyrus recording the deeds of Ramesses III needs more than nine tenths of its bulk to describe the prince's gifts to temples, less than one tenth to describe his campaigns. If this indicates how much the state concerned itself with each, the state concerned itself with religion more than ten times more than it concerned itself with smiting.

And as the quantity so the quality.

The papyrus inventories the prince's gifts temple by temple, then totals the gifts. The following are only some of the gifts and their totals. These were gifted outright:

heads 113 433;
 large and small cattle 490 386;
 land 1 071 780 setat;
 towns 169;
 gold 7 205 deben;
 silver 11 047 deben;

copper 97 148 deben (*id.*).

These were gifted annually:
 annual due of gold 2 289 deben;
 of silver 14 050 deben;
 of grain 460 900 heqat (*id.*).

1 heqat $\approx$ 4.8 liters, 1 deben $\approx$ 91 g, 1 setat $\approx$ 2 750 m². The annual gift of grain is 2 212 m³, the annual gift of gold is 208 kg. The outright gift of gold is 656 kg, the outright gift of land is 2 950 km².

In a population of some four million 113 433 heads are some 3 %.

169 towns cannot be less than another 3 %.

These are the gifts of Ramesses III. All his predecessors made gifts to the temples. Thutmose III, three centuries before Ramesses III, gifted on one occasion 1 578 Asiatics to the temple of Amun at Luxor (Karnak obelisk). Counting back to Amenhotep IV, the princes had been installing ever more priests and priestesses, gifting the temples with ever more heads, cattle, land, towns, and gold, for two centuries. It can be concluded that by the time of Ramesses III, rather without a qualification, the entire population of the state was serving the temples.

The Libyans, the peoples of the sea, and the Asiatics, for their part, kept coming.

cdlix

The four-odd centuries from Ramesses III to Piyi.

The important princes are 5. The more important among the not important are listed as well.

Ramesses IV	prince c. 1159-3,
Ramesses V	prince c. 1153-49,
Ramesses VI	prince c. 1149-1,
Ramesses VII	prince c. 1141-33,
Ramesses VIII	prince c. 1133-2,
Ramesses IX	prince c. 1132-14,
Ramesses X	prince c. 1114-1,
Ramesses XI	prince c. 1111-083,
Herihor	prince c. 1080,
Smendes	prince c. 1060,
Amenemnisu	prince c. 1040,
Psusennes	prince c. 1020,
Amenemope	prince c. 1000,
Osorkon	prince c. 980,
Siamun	prince c. 960,
Psusennes II	prince c. 940,

Sheshonq	prince c. 928-07,
Osorkon II	prince c. 907-871,
Takelot	prince c. 871-64,
Osorkon III	prince c. 864-35,
Takelot II	prince c. 835-16,
Sheshonq II	prince c. 816-777,

Piyi prince c. 729-08.

Ramesses IV sent an expedition to Wadi Hammamat to quarry stone for monuments to the gods. An inscription on the rocks records the feat. The high priest of Amun led the expedition (*id.*). The high priest led 5 000 foot, 50 chariots, overseers, butlers, scribes, priests, quarrymen, and stonecutters, for a total of 8 368 men (*id.*). 900 men perished (*id.*).

Wadi Hammamat is right outside Thebes. Nothing indicates that the authority of Ramesses IV extended beyond Wadi Hammamat. Or that Ramesses IV had uses for the 5 000 foot and 50 chariots other than quarrying stone for monuments to the gods.

Ramesses V through Ramesses XI presided over Thebes. Nothing indicates that their authority extended beyond the city. Under Ramesses IX an inspection of the tombs of the princes and their mummies was conducted, and robbers of the princely tombs were prosecuted. Nothing indicates that these princes fought foes more formidable than the robbers of the princely tombs.

At the time of the last Ramesses the high priest of Amun-Re Herihor assumed the royal authority.

Herihor reports:
the high priest of Amun-Re, lord of the gods,
Herihor, triumphant:
the lord of the two lands, the high priest of
Amun-Re, lord of the gods, commander of the
army of the north and of the south, the prince,
Herihor, triumphant (Karnak inscription).

Beginning with Herihor, a succession of high priests of Amun-Re, lords of the two lands, commanders of the army of the north and of the south, presided over Thebes. The exercise of the royal authority by these lords of the two lands, commanders of the army of the north and of the south, is attested by the continuing inspections of the princely tombs.

At the time of Herihor Smendes installed himself at Tanis, in the delta by the sea.

This indicates that the raids of the hordes of wild men have abated. The raids have begun under Merneptah, one and a half centuries earlier. Clearly, everything that has been there to plunder has been plundered.

From this time is the masterpiece, *The story of Wenamun*. Wenamun is the priest of the door of the temple of Amun. He is sent by Herihor to Byblos to purchase timber for the boat of Amun-Re. The journey is fraught with adventures. Most important, the silver for the purchase is stolen from Wenamun, and Wenamun then himself has to steal silver for the purchase. The expedition is successful, timber is purchased from the ruler of Byblos for the ruler of Thebes.

At an earlier time the ruler of Byblos had prostrated himself seven times and seven times again before the ruler of Thebes. Both on his belly and on his back, too.

Amenemnisu through Psusennes II are the successors of Smendes at Tanis. They have left behind golden funeral masks. Nothing indicates that their authority extended beyond either Tanis or the fashioning of funeral masks.

With Sheshonq then, at long last, there is a prince whose authority extended beyond both his city and concern with tombs.

Sheshonq is the successor of Libyan chiefs. Several generations after him, on a stele at Saqqara, the priest Harpeson listed his ancestors. Among them:

prince Sheshonq,
son of the great chief Namlot,
son of the great chief Sheshonq,
son of the great chief Pethut,
son of the great chief Nebneshi,
son of the great chief Musen,
son of Buyuwawa the Libyan (*id.*).

If Buyuwawa the Libyan first came to Egypt, six generations before Sheshonq, he will have come with the hordes of wild men at about the time of Ramesses XI.

Sheshonq succeeded Psusennes II. On his Abydos stele, Sheshonq asks Osiris:
will you let the great prince of princes Sheshonq
join the feasts of his majesty Psusennes?
the great god agreed;
and his majesty said, Sheshonq, you are the great
prince of princes (*id.*).

Sheshonq established his court at Bubastis, further south in the delta.

As his Abydos stele attests Sheshonq asserted his authority over Abydos, and further south over Thebes. He built at Karnak, the first prince to do so since Ramesses III, two and a half centuries earlier.

And he ventured into Asia beyond Sinai, the first prince to do so since Ramesses II, three-odd centuries earlier.

Sheshonq reports:

I smote the Asiatics in the north; I raged over them like a fire (Karnak ins.).

Kings adds some detail:

in the 5th year of Rehoboam, Sheshonq, prince of Egypt, seized Jerusalem, and took the treasures from the house of the lord and from the palace of the king (I, 14).

Sheshonq also generalizes, copying the generalizations from the inscriptions of his more remote predecessors.

Osorkon II through Sheshonq II are his successors at Bubastis. Some of them asserted their authority over Thebes. One of them sent troops to Asia. Shalmaneser III reports his victory in 853 at Qarqar over a force gathered by the principalities on the Mediterranean littoral. In the list of the contingents which he destroyed the Assyrian prince has also: 1 000 Egyptians (ins. 2).

The feebleness of the authority of these princes is attested by the fact that their succession cannot be fixed certainly, only probably. Thus, the priest Harpeson listed his ancestors: in the 37th year of Sheshonq (*id.*). In the list above this Sheshonq is Sheshonq II. In their scantiness and confusion the monuments can suggest two or three still more ephemeral Sheshonqs. Counting these, that Sheshonq will be Sheshonq III or Sheshonq IV.

Whatever the number of that Sheshonq, after him authority is impaired further. The delta alone not fewer than four rulers divided.

Then Piye conquered Memphis.

Seven centuries earlier, Amenhotep II and Amenhotep III built a temple of Amun at Napata, at the fourth cataract. This was the base of the Nubian Piye. From this base Piye extended his authority north to Thebes, and then, in his 20th year, conquered Memphis, 1 200 km north of

Napata along the meridian.

Piye has left behind the Napata stele.

His campaign culminating in the conquest of Memphis is the most important event in the valley of the Nile in all these centuries. The Napata stele commemorates this campaign, and it is, like the event, the most important document of all these centuries. And in this document, too, there is much more of the thought and the sense than the reference and the true.

This is the culminating event, the conquest of Memphis:

the ships of his majesty moored at Memphis;
his majesty saw that the city was strong, its walls high, the battlements manned in strength; there was no way to capture it; some in his majesty's army said, let us besiege it; others said, let us build a siege tower;

but his majesty raged like a panther, I swear, as Re loves me, as my father Amun favors me, I will capture it like a sandstorm;

and he sent his ships against the harbor; and they captured all the ships in the harbor; and his majesty told his men, mount the walls, let no one stop you, we have taken upper Egypt, we will vanquish lower Egypt;

and they took Memphis like a sandstorm; many were slain, the rest were brought to his majesty captive (*id.*).

The stele concludes:

the two rulers of upper Egypt and the two rulers of lower Egypt came to kiss the ground before the might of his majesty;

then the ships were loaded with silver, gold, copper, everything from lower Egypt, everything from Asia, and everything from the foreign lands;

and his majesty sailed south rejoicing in his heart, all around extolling him, west and east, proclaiming his majesty;

this was their song of jubilation;

oh mighty lord, oh mighty lord, Piye,
you have taken lower Egypt,
you have made the bulls into women;
the mother who bore you rejoices,
the father who begot you rejoices;
upper Egypt, the cow that bore the bull, worships
you;

you are forever, your might abides,

you are the lord, beloved of Thebes (*id.*).

Piyi established his authority over the entire valley.

And his successor Shabaka maintained his authority over the entire valley.

In the next generation, however, Esarhaddon conquered Egypt. Egypt was brought under the greatest state, built in the meantime by the Assyrian princes.

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And the following conclusions can be drawn from the development of the state in the valley of the Nile in the thirteen-odd centuries from Mentuhotep to Piyi.

In these centuries the state is restored, rises, becoming greater than it has been, declines, and disappears. It is restored again, again rises, again becoming greater than it has been, again declines, again disappears.

These are the major facts. The state is restored. The state rises, becoming greater than it has been. The state declines. The state disappears.

The state is restored.

Twice. And in each case it is restored as it begins. By smiting. And hence unification.

The state begins with Narmer. Narmer smites his kneeling foe. And wears the crowns of upper Egypt and lower Egypt.

Nine and a half centuries later, and after two centuries in which there has been no state, the state is restored by Mentuhotep. Mentuhotep smites the chiefs of the two lands, the Nubians, the easterners, and the Libyans. And captures the upper land and the lower land.

Five centuries later, and after two-odd centuries in which there has been no state, the state is restored by Ahmose. His predecessor Kamose smites the Asiatic, razes his walls, slays his people. Ahmose then destroys the Asiatics, destroys the Nubians, conquers the southerners and the northerners, crushes a revolt in the south, crushes another revolt in the south. And is the lord of the two lands.

Smiting is the foundation of the state.

The state rises, becoming greater than it has been.

The state begins with smiting, but there is then little smiting in the old kingdom. The state is very

stable from the first, and remains very stable. It has no internal foes, it has no external foes. And for seven and a half centuries, from Narmer through Pepi II, the domain of the state is the valley from the first cataract to the Mediterranean, 800 km south to north.

There is much smiting in the middle kingdom. The state is restored by the smiting of the chiefs of the two lands. The state now has internal foes. In the two centuries in which there has been no state in the valley, local chieftains, and petty local chieftains, have had the valley to themselves. The state is thus restored by smiting them. And the state has thus affirmed its borders. Amenemhet first affirms: I went to the first cataract, I returned to the delta, I stood at the borders of the country, I looked at all of it inside. The state now has borders. And it thus has external foes, too. The state is thus restored by smiting also the Nubians, the easterners, and the Libyans, too.

And the state continues to smite its external foes. For, as Senwosret III reports: attack the Nubian, and he will retreat, retreat, and he will attack. And the state thus expands. Senwosret reaches the second cataract, Senwosret III campaigns beyond the second cataract and ventures into Asia beyond Sinai. The domain of the state is now the valley from the second cataract to the Mediterranean, 1 100 km south to north.

The state rises under the 8 princes from Mentuhotep to Amenemhet III. 4 of the 8 are warriors, Mentuhotep, who restores the state, Amenemhet, who establishes the state firmly, and the conquerors, Senwosret and Senwosret III. Counting 269 reign years for the 8 princes, the reign years of the 4 warriors are 158 out of the 269.

And there is much more smiting in the new kingdom. The state is again restored by the smiting of its internal foes. But these are now more, and more firmly established, and much more vigorous smiting has to restore the state.

The state thus also continues to smite its external foes, and much more vigorously now. Amenhotep begins expansion in the south. Thutmose reaches the third cataract in the south and the Euphrates in the north. Thutmose III continues expansion in the north. Amenhotep II reaches the fourth cataract in the south. Amenhotep III reaches the fifth cataract. The domain of the state

is now the valley from the fifth cataract to the Mediterranean and the littoral in Asia to the Euphrates, 2 100 km south to north.

The state rises under the 9 princes from Ahmose to Amenhotep III. 6 of the 9 are great warriors. Counting 206 reign years for the 9 princes, the reign years of the 6 warriors are 158 out of the 206.

Smiting is the foundation of the state, and the foundation of the rise of the state. The state begins, and becomes greater, and greater, by smiting.

The state declines.

Three times.

The old kingdom does not expand. But for five and a half centuries it builds larger and larger edifices. In the following two centuries it builds smaller edifices. Then it stops.

The middle kingdom expands, and builds, for two and a half centuries. Then it declines very rapidly, in less than two decades it is reduced to nothing.

The new kingdom expands greatly, and builds, for two centuries. It declines slowly in the following one century-odd, continuing to build, but retreating now, then it declines catastrophically in the following one half century-odd.

On the last occasion neglect of smiting is indicated unambiguously as a cause, if not the cause, of the decline. The entire population of the state serves the temples. And the hordes of wild men, the Libyans, the peoples of the sea, and the Asiatics, overwhelm the state.

The state disappears.

And the state does disappear completely. Three times.

The state which has continued powerfully for seven and a half centuries from Narmer through Pepi II just stops. For two centuries there is no state in the valley of the Nile. Petty local chieftains have the valley to themselves.

Again, the state which has continued powerfully, and more powerfully now, for two and a half centuries from Mentuhotep through Amenemhet III is reduced in less than two decades to nothing. Petty local chieftains again have the valley to themselves. Then hordes of wild men also descend on the valley. There is no state for two-odd centuries.

And again, the state which has continued powerfully, and much more powerfully now, for three and a half centuries from Ahmose through Ramesses II is reduced in one half century-odd to nothing. Hordes of wild men and petty local chieftains again have the valley to themselves. There is no state for four-odd centuries. Two and a half centuries separate Ramesses III and Sheshonq, the disappearance of the state and the first subsequent attempt to restore it. Two centuries then separate Sheshonq and Piye, the next and more successful attempt to restore the state.

All in all, it is twenty-two and a half-odd centuries from Narmer to Piye. Fourteen-odd are centuries of state, eight and a half are centuries of not state.

In the thirteen-odd centuries from Mentuhotep to Piye, six and a half-odd are centuries of state, six and a half are centuries of not state.

The state is a great power, but a fragile great power.

All in all, a natural process is indicated clearly and distinctly.

The not state takes the cattle, sheep, asses, and people.

The state also takes the cattle, sheep, asses, and people.

Wherever the people have become increasingly many, accumulated cattle, sheep, and asses, and *ipso facto* become increasingly capable of taking the cattle, sheep, asses, and people, the state has to be increasingly likely to begin.

The state thus also begins with smiting.

The state is a power reducing the wills of men unto one will.

The old kingdom has no internal foes, and no external foes. It continues for seven and a half centuries from the first cataract to the Mediterranean. I stood at the borders, I looked at all of it inside. These are the natural limits of the state, and the natural limits of the power which the state is. As the state, and the power which the state is, is delimited by the desert in the west and in the east, so it is for seven and a half centuries delimited by the first cataract in the south, and by the sea in the north.

The old kingdom does not expand, it counts, and builds. It builds larger and larger edifices. Until it has built the edifices which will remain

the largest on earth for the following forty-four centuries. Then it builds smaller edifices. Building has also reached a natural limit.

The middle kingdom expands. To the second cataract and Sinai. These are the natural limits now.

The new kingdom expands greatly. To the fifth cataract and the Euphrates. These are the new natural limits.

Those are all, excepting the pyramids, indicated clearly and distinctly as natural limits by the features on the surface of the earth which they are, cataracts, the sea, the desert, the river which goes downstream by going upstream. And they are all, including the pyramids, indicated more clearly and distinctly as natural limits by the labors expanded to reach them.

The state is fundamentally one, fundamentally large, and fundamentally made one and large.

Fundamentally also made larger.

It all indicates that it is of the essence of the state to expand. It is of the essence of the power which the state is to increase.

The state is restored by smiting. Smiting continues and the state rises. The rise continues and the state reaches its natural limits. Having reached its natural limits the state declines. The decline continues and the state disappears.

It all indicates that it is of the essence of the state to exercise the power which it is. As it is exercised the power increases, and the state expands. Until it reaches its natural limits. As the expansion stops, and the power stops increasing, the state is essentially not any more.

Thus, essential is first and foremost that the expansion of the state, and the increase of the power which the state is, is cumulative. The development of the state is determined by its continuity, not discontinuity. The middle kingdom is more powerful than the old, because it continues the old. The new kingdom is more powerful than the middle, because it continues the middle. The middle kingdom continues the old, in particular, by expanding over the limits reached by the old. The new kingdom continues the middle, in particular, by expanding over the limits reached by the middle. The increasing power which the state is and its expanding natural limits determine one another, how great the

power has become and how far the limits it has reached are.

It is a natural process. Essentially, too, of learning. Like all learning cumulative, difficult because cumulative, fragile because difficult.

And all the more particular facts indicate this.

There is little smiting in the old kingdom. There is much smiting in the middle kingdom, but smiting does not become the main concern of the state. In the new kingdom it becomes the main concern of the state.

Thus, in the middle kingdom there are the first inklings of the development of an army. There are but a few numbers. Still, large numbers of men are led on expeditions, 10 000 men, 3 000 men, even if the expeditions are to procure stones for the lids of the princes' sarcophagi. 734 men are led to quarry stone in Sinai. 400 men, and 600 men, are led to collect the gold of the south. To smite the Nubians, the wretched, Senwosret III builds a canal, 150 cubits long, 20 cubits wide, 15 cubits deep.

In the new kingdom chariots are recorded from the first. Assaults by ships are recorded. A battle is described in some detail. And there are many numbers indicating steps toward the development of an army. One soldier takes 1 hand and 1 man under Ahmose, 3 hands and 1 man under Amenhotep, 21 hands, 5 men, 1 chariot, and 1 horse under Thutmose, so many men he does not count them under Thutmose II. On one occasion Thutmose III captures 892 chariots and 200 coats of mail. On one occasion Amenhotep III captures 150 men, 110 archers, and 312 hands. Thutmose III leads several thousand annually. Amenhotep III leads more than one thousand. Ramesses II leads four divisions, the division of Amun, the division of Re, the division of Ptah, and the division of Seth.

The administration of the middle kingdom is more sophisticated than that of the old, that of the new more sophisticated than that of the middle.

Rekhmire collects the reports of the overseers, oversees the treasurer, oversees the messengers, keeps and provides records, collects reports from the district officials, oversees the districts. There are thus a treasurer, district officials, messengers, reports are delivered, records are kept.

Rekhmire garrisons cities, oversees the com-

mander of the army, oversees the fortresses, oversees the ships. The cities are thus garrisoned, the army, fortresses, and ships are all overseen.

Rekhmire oversees the felling of trees for timber, oversees the water supply, oversees the ploughing, oversees the temples, oversees the canals. Trees are thus felled, water is supplied, both are overseen, ploughing is also overseen, temples are built, and overseen, canals are built, and overseen.

Rekhmire collects the tribute. Under Amenhotep III the tribute is collected from the fifth cataract in the south to Ugarit in the north, 2 100 km apart.

And the state has not discovered the law. But from the old kingdom to the middle to the new it has advanced substantially toward its discovery. Rekhmire hears petitions, deals with disputes over land, oversees the boundaries between towns, settles boundary disputes. He judges cases. And he is to see that all is done according to right, that everyone is given his due.

The most dramatic is the development of religion.

Religion is much older than the state.

As soon as it begins, however, the state takes over religion. The state is inseparable from the prince, the prince is inseparable from the state. And the prince celebrates the gods, the prince builds the temples and ministers to them, the priests are the officials of the prince, the prince is great god. The main concern of the state is the building of the tomb of the prince.

Narmer is Horus, Wadjet and Nekhbet.

Sneferu is great god.

Khufu is great god.

Sahure is great god.

Niuserre is great god.

Then, in the last century-odd of the old kingdom there is a development.

Unas discovers that he is an indestructible spirit, and goes to Re in heaven, to do what he is told, and to eat the gods and shed his seed.

Re begins to predominate among the gods. The prince is not Re, he is the son of Re.

From this time is the composition inscribed on the Shabaka stone. Ptah gave birth to the gods, and from him everything came, food, livelihood, offerings to the gods, all good things, he made the

towns, he divided the country, he put the gods in their temples, into him were all the gods and their spirits gathered.

Religion has begun separating itself from the state.

This is indicated by the elevation of Re above the prince. It is indicated by the elevation of one god above the gods, and above everything, and rather explicitly above the state, in particular. This is the first inkling of creation. And it is indicated by the first inkling of the soul. So that spells will take the prince to heaven rather than building the largest tomb.

The two steps in the development of religion in the old kingdom – religion is inseparable from the state, religion begins to separate itself from the state – coincide with the rise of the state and its decline, respectively.

In the middle kingdom the development continues. As the state rises, and expands, religion is ever more prominent in the state. And on the one hand, the prince builds more temples, there are more priests, officials of the prince, the prince is a great god. The main concern of the state is again the building of the tomb of the prince. On the other hand, the separation of religion from the prince, and the state, continues. The elevation of one god above the gods, and above everything, and above the state, in particular, continues. And every lesser official is now an indestructible spirit going to Re in heaven.

In the new kingdom the development continues, and reaches its end. When it rises, and when it declines, the state builds more temples than ever, and more, there are more priests than ever, and more, ever more tombs, and more, ever more spells, and more, and there are now mummies, too, and more mummies. On the one hand, Amenhotep III is the culmination of two centuries of expansion of the state, and a culmination of the development of religion in these centuries. The prince, a great god, the son of Amun-Re, has been steadily more explicitly the sole lord of all countries, all lands, all peoples. On the other hand, the separation of religion from the state as well continues. Amun-Re is the lord of the gods, the lord of all eternity. The prophecy of Akhenaten follows. And everyone is now an indestructible spirit going to Re in heaven.

The elevation of one god above everything reaches its end in Aten.

You alone are god, there is no one beside you, you made the earth, you alone, you made all peoples, herds, and flocks, you made the lands of Khor and of Kush, and the land of Egypt, you set every man in his place, you give him food, you count his years, you made the seasons, you made the sky, you alone, you living Aten, you made the myriads of things, you made the towns, the villages, the fields, and the river, you are in my heart, no one knows you but your son, whom you taught your ways and might.

And the old religion is restored. But you alone are god, there is no one beside you. And you are in my heart.

The journey to heaven reaches its end as well. Everyone is now an indestructible spirit going to Re in heaven.

From the old kingdom are the spells which will take the prince to heaven. The pyramid texts. From the middle kingdom are the spells which will take lesser officials to heaven. The coffin texts. From the new kingdom are the spells which will take everyone to heaven. These go by the name *The book of the dead*.

The following is of the second kind, attested on many coffins:

Re speaks,

hail, I repeat to you the good deeds that I did; I did four good deeds;

I made the four winds, for every man to breathe; I made the great water, for the humble as well as for the great;

I made every man to be the friend of his fellow; I did not command them to do evil; they disobey me;

and I made them not to forget the offerings to the gods;

the gods I made from my sweat, the men I made from my tears;

now the dead speaks,

I will shine before my lord;

I will sail aright in my bark;

I am not afraid in my limbs;

I see the light of the land in which I will dwell;

I have spent a million years with the god;

I am the lord of the flame who lives in truth;

I am he who is in the shrine;

I am he who is in his name;

may I see Nun and Amun! I know him! I am ready for him!

everyone who says this spell will be like Re in heaven, like Osiris in the netherworld (*id.*).

The book of the dead, in 192 chapters, is preserved more ubiquitously than any other book.

The following is from chapter 125:

to be said on reaching the hall of truths so as to purge one from sins and let him see the face of the god;

hail to you, great god, lord of truths;

I have come to you, my lord;

I have come to see your beauty;

I know you, and I know the names of the forty-two gods (*id.*).

The greeting is elaborated some more, then the dead declares:

I have not done evil to anyone;

I have not done evil to cattle;

I have not sinned against truth;

I have not known what I should have not known;

I have not done anyone any harm;

I have not taken from the offerings of the gods;

I have not stolen from the dead;

I have not taken cattle belonging to the gods (*id.*).

The declaration continues at great length, to conclude:

I am pure, I am pure, I am pure, I am pure (*id.*).

The declaration is then made to each of the forty-two gods. The dead is then interrogated. He is pure. He is then interrogated one more time. He is pure. The spell concludes:

this is what one says on reaching the hall of truths;

he says it when he is pure, clean, dressed in new clothes, anointed with the finest oil, and brings with him beef, fowl, incense, bread, beer, and herbs;

it has worked a million times (*id.*).

The last is a gross undercount. Given a population of some four million at the beginning of the new kingdom, five million at its peak, and still close to five million at its end, it has worked very many more than a million times.

And the development of the state is the main cause, but not the only cause, of the development of religion.

The state is power. A power reducing the wills of men unto one will. Gods in common, their celebration, temples, priests, all indicate the reduction of the wills of men unto one will. At first, it is the will of the prince, Horus, Wadjet and Nekhbet. It is unquestionably the will of Khufu, great god. Then Unas goes to Re. And at last, at the end of the new kingdom, it is the will of god separated altogether from the prince.

At last, religion is itself a power reducing the wills of men unto one will. With or without the state.

And how great the increase of the power of religion is, with or without the state, is indicated not by Aten, who made the myriads of things. Not even by Re, who made the four winds, the great water, every man to be the friend of his fellow, and not to forget the offerings to the gods either. It is indicated by the many millions who do the same, namely, go to Re in heaven. All with the same spells, too.

And if Ramesses III – the last of the series of 23 princes of the new kingdom gifting the population of the state to the temples – alone gifted 6 % of the population of the state to the temples, it is many millions.

This spectacular feat has been achieved as the power of religion has increased when the power of the state has increased, and when the power of the state has decreased, both. The power of religion has increased when the state has risen, with the power of the prince. And the power of religion has increased when the state has declined, in place of the power of the prince.

As the prince becomes greater so does god. But not conversely.

And the cause of this now is not the state. It is the organism.

Unas is an indestructible spirit. But Re is more indestructible than Unas. Because the propensity of the organism to go to Re in heaven is more indestructible even than Re.

As to custom, many millions do the same.

And by the end of the new kingdom the generalization of the practice of the virtues which must be practiced to all those many millions is indicated explicitly.

Re made every man to be the friend of his fellow, he did not command them to do evil, they

disobey him. Not incidentally, three-odd millennia later they still disobey him.

And it should be doubted whether any one among those many millions is pure, pure, pure, pure, pure. But it cannot be doubted that every one among them professes to be pure, pure, pure, pure, pure.

Not less than one twelfth of humanity has been rather thoroughly tamed.

cdlxi

And these centuries, when the state in the valley of the Nile becomes greater, and greater, attest the greatest advance in the acquisition of knowledge in the valley of the Nile.

The building of the state is a theoretical problem, irrespective of its practical ends.

The state greater in the middle kingdom than in the old is built by Mentuhotep, Amenemhet, Senwosret, and Senwosret III. The state greater in the new kingdom than in the middle is built by Ahmose, Amenhotep, Thutmose, Hatshepsut, Thutmose III, Amenhotep II, and Amenhotep III.

And what the princes are building the princes are explicit. The princes have developed the theory of the state.

The first inklings of the theory are in the middle kingdom, still remote, yet definite.

The *Instruction of Amenemhet to his son Senwosret* has Amenemhet affirm: I stood at the borders of the country, I looked at all of it inside; I subdued Wawat, I captured Medjai, I made the easterners work like the dog.

Senwosret III affirms: I set my border further than my forefathers; he who retreats from this border is a coward; to attack is valor, to retreat is cowardice; attack the Nubian, and he will retreat, retreat, and he will attack.

The country has borders. At the borders is the Nubian. It follows, attack the Nubian, and he will retreat, retreat, and he will attack. It follows further upon attack, I set my border further than my forefathers. And it follows further upon setting the border there, he who retreats from this border is a coward.

The *Instruction* also rather explicitly assigns an end to the state: I subdued Wawat, I captured Medjai, I made the easterners work like the dog.

And when Senwosret III affirms: I set my

border further than my forefathers, this as well implies an end of the state, and a different end.

In the new kingdom, Ahmose already affirms: the Asiatics stand before his majesty in fear, his sword is in Khenthennefer, his wrath is in Fenkhu, fear of his majesty is in the land.

Ahmose thus corroborates Senwosret III. His majesty's sword is at the southern border, his majesty's wrath at the northern. Inside is fear of his majesty.

With his successor Amenhotep the sword and the wrath reach further, with his successor Thutmose very much further, and with Thutmose the theory is explicit.

Thutmose affirms: he extended the borders of Thebes so that the sand-dwellers and the troglodytes will work for her; the southerners come downriver and the northerners come upriver to bring their tribute to the great god Thutmose.

This is the more practical end of the state. The borders of the state are extended so that the sand-dwellers and the troglodytes work for it, the southerners come downriver and the northerners upriver to bring their tribute.

Also, however, Thutmose is: the lord of the two lands, who rules the circuit of the earth. Also: he has joined the ends, there is no one to stand against him. Also: he brought the ends of the earth under his rule. Also: I set the border of Egypt as far as the sun reaches. Also: in all lands the oath is taken in his name.

This is the more theoretical end of the state. To set the borders of the state as far as the sun reaches. So that the circuit of the earth is under one lord, the ends of the earth are under his rule, the ends are joined and no one stands against him, in all lands the oath is taken in the same name.

Nor are the two ends, the more practical and the more theoretical, incompatible. Even as the sand-dwellers and the troglodytes, the southerners and the northerners, will likely disapprove.

And the successors of Thutmose corroborate the theory, make it more explicit, and generalize it further.

His immediate successor Thutmose II affirms: the Asiatics come bearing tribute, the Nubian troglodytes come bearing tribute.

Also: his southern border is as far as the horns

of the earth, his northern border is as far as the other end.

His successor Hatshepsut made Punt as well bring its marvels.

And she affirms: in all lands no one stood against me, all foreign lands are in my feet, my borders are at the ends of the heaven.

Her successor Thutmose III campaigned beyond the third cataract and subdued Asia to the Euphrates.

And he affirms: the fear of you is in every country, it supports the heaven; all your foes are in your feet; the limits of the earth are in your power, the circuit of the sea is in your feet.

He affirms also: your arms are raised to crush evil. And this can be presumed to imply that the more practical end serves to the more theoretical.

His successor Amenhotep II reached the fourth cataract.

And he affirms: he is the prince of princes, he is the ruler of rulers; he has captured all borders, there is no border, under him all countries are united, all lands are tied together, he rules all that the sun encircles.

Amenhotep II had no equal in battle, no one knew horses better, no one could draw his bow, no one could approach him in running, his oar was 20 cubits long, he hit with 1 arrow 4 targets behind one another 20 cubits apart.

It is with him also that the theory is formulated at its most explicit and most general.

There is no border. All countries are united, all lands are tied together.

His successor's successor Amenhotep III reached the fifth cataract. Asia north to Ugarit prostrated itself before him seven times and seven times again. Arzawa, Mittani, and Babylon delivered their daughters to him.

And he affirms: all Kush brings you tribute, the ends of Asia bring you tribute, you have captured Tjehenu, Punt brings you gifts.

And: you are the sole lord of all peoples.

As, again, he rather nearly is.

The inkling of geography remains remote, but it is steadily less remote as the state becomes greater.

The old kingdom has continued in largely indefinite space. As far as spatial relations are concerned, the record of the old kingdom is

explicit that there are upper Egypt and lower Egypt, that these are the domain of the state, that outside are the sand-dwellers and the troglodytes, and that is that. Anything else excavation has to recover.

The middle kingdom is more explicit from the first. Mentuhotep smites his four foes, and three of them are: the Nubians, the easterners, the Libyans. Where they each are is not clear, but that they all are outside the state is rather clear. And as the state affirms its borders, and begins to expand, the space inside its old borders is never described definitely, but the space of its expanding borders and outside them begins to be described steadily more definitely.

I stood at the borders of the country, I subdued Wawat, I captured Medjai, I made the easterners work like the dog. Wawat and Medjai are at the southern border, the easterners working like the dog at the northern. Montu leads 10 bound captives to Senwosret: all countries of Nubia are in your feet. And where each of the 10 captives is is not clear, but that they all are in Nubia, between the first and the second cataracts, is clear. Senwosret III set up: the southern border, to stop any Nubian from crossing, by water or by land. He also: went north to smite the Asiatics, Sekmem fell, then Retenu fell, the wretched.

South to north, Nubia, the second cataract, the first cataract, upper Egypt, lower Egypt, the delta, the sea, Sinai east of the delta, the Asiatics further east and north, Sekmem, then Retenu.

And as the new kingdom begins to expand, the space inside the old domain of the state, from the first cataract to the sea, is never described definitely. At the peak of the expansion and prosperity of the state, the overseers of 30 districts bring their tribute to Rekhmire. All 30 are named. And nothing in the record indicates their spatial relations. Excavation has to recover them. As the state expands, however, the space of its expanding borders and outside them continues to be described steadily more definitely.

The advance continues with Thutmose.

There is no inkling of distance. But the inkling of orientation has reached from the third cataract to the Euphrates. Thutmose reports: the southerners come downriver and the northerners come upriver to bring their tribute to the great god

Thutmose. The great god Thutmose is at Thebes. And: his southern border is in this land, his northern border is at the river which goes downstream by going upstream. This land is at the third cataract.

The advance continues with Thutmose III.

His inscriptions imply, remotely, yet definitely, a map of a substantial portion of the surface of the earth:

I brought in your feet Asia, you smote the Asiatics of Retenu;

I brought in your feet the eastern lands, you crushed the dwellers of the land of the gods;

I brought in your feet the western lands; Keftiu and Isy are in awe of you;

I brought in your feet the lowlands, Mittani cringes in fear of you;

the border people, the Nubians as far as Shat are your captives.

Retenu is Asia. The land of the gods, Punt, is the eastern lands. Keftiu and Isy, Crete and Cyprus, are the western lands. Mittani, beyond the Euphrates, is the lowlands. The Nubians as far as Shat are the border people.

In the four lists of countries which he conquered only a small fraction of the names can be attached to a particular locality each. They are nevertheless a list of 360+ names, of which it is not clear where each is, but it is clear that all are in Asia, and a list of 510+ names, of which it is not clear where each is, but it is clear that all are in Nubia.

And his annals imply, again remotely, yet definitely, a map of the north, too. He conquered Megiddo, north of Sinai, then Kadesh, further north, on the Orontes, then crossed the Euphrates, further north. He received the tribute of Ashur, then the tribute also of Babylon, both further east, then the tribute also of Hatti, further north.

The advance culminates with Amenhotep III.

His inscriptions imply unambiguously a map of a substantial portion of the surface of the earth:

I nursed you to be the sole lord of all peoples; looking south, I made all Kush come to you to bring you tribute;

looking north, I made the ends of Asia come to you to bring you tribute;

looking west, I let you capture Tjehenu;

looking east, I made Punt come to you to bring

you gifts.

South is Kush. North is Asia. West is Tjehenu. East is Punt.

The beginning of exploration is indicated unambiguously as well. Senwosret III, in the middle kingdom: I set my border further than my forefathers. Thutmose, in the new kingdom: he reached lands his ancestors did not know.

The space of the expanding borders of the state and outside them has been described steadily more definitely. The dependence of the advance in the description of the surface of the earth on the rise of the state cannot have been indicated more clearly and distinctly.

And the inkling of geography, even if steadily less so, remains remote.

But the inkling of history is not remote.

In the middle kingdom, under Senwosret, it becomes the norm to date inscriptions with the reign year of the prince.

From this time as well is *The prophecy of Neferti*. The wise man Neferti tells the great prince Sneferu that there will be in the future a time of calamity and disorder, then the great prince Amenemhet will bring prosperity and order. Six-odd centuries separate the great prince Sneferu and the great prince Amenemhet. To tell Sneferu about the future the wise man Neferti has reached six-odd centuries into the past.

And in the new kingdom the description of the past advances very greatly. These are all from the new kingdom,

- 1510 **Karnak prince list,**
- 1387 **Amarna archive,**
- 1342 **Abydos prince list,**
- 1331 **Saqqara prince list,**
- 1281 **Turin papyrus.**

The Karnak prince list was completed under Thutmose III. The Amarna archive is dated from the reign of Smenkhkare. The Abydos prince list was completed under Seti. The Saqqara prince list was completed under Ramesses II. The Turin papyrus is dated from its language and subject matter to the century after c. 1291.

In the old kingdom the Palermo stone is a very great advance. It is the record of the labors of 11 princes, in their temporal series, year by year.

In the following two centuries, as the vigor of the old kingdom wanes, there is nothing. In the

following two centuries, as there is no state, there is also nothing. In the following two and a half centuries of the middle kingdom there is nothing closer to an advance than *The prophecy of Neferti*, and it is not too close. In the following two centuries, as there is no state again, there is again nothing.

Advance is rare. No advance is common.

Then the new kingdom rises greatly, and one century into its rise, nine and a half centuries after the Palermo stone, there is the Karnak prince list. One century-odd later, as the new kingdom is at its peak, under Amenhotep III, there is the Amarna archive. In the following century, as the state does not expand any longer but remains great and powerful, there are the Abydos prince list, the Saqqara prince list, and the Turin papyrus.

And there is again in the following centuries, five and a half through the conquest of Egypt by Esarhaddon, nothing.

The Karnak prince list is a list of 61 princes. The names of 48 are legible. All 48 are real.

The Amarna archive collects some 380 official documents from three reigns. Some 335 are internal communications. 44 are external.

The Abydos prince list is a list of 76 princes. The names of all 76 are legible. All 76 are real. And the princes are arranged in their chronological order. And the first prince in the list is the first prince, Meni.

The Saqqara prince list is a list of 58 princes. The names of 47 are legible. All 47 are real. The princes are arranged in chronological order. The first prince in the list is the sixth prince, Anedjib.

The Turin papyrus is also a prince list. It survives in some 50 fragments. The names or parts of the names of some 150 princes are legible. The advance is twofold. First, the papyrus not only arranges the princes in chronological order, it records their reign years. Even if not many of these are legible. Also, while the Karnak, the Abydos, and the Saqqara lists enumerate only the important princes, the papyrus enumerates all princes, important and not important. Even if this is always a dangerous advance. Also, it is not an advance that, while the Abydos and the Saqqara lists each begins with a prince, the first prince and the sixth prince, respectively, the

papyrus begins with gods and spirits, after whom the first prince follows. Even if the first prince in the papyrus is the first prince, Meni.

The Karnak prince list is a very great advance. The first collection, in this valley, of 61 princes. All real.

The Amarna archive is a very great advance. The first collection, implicit though it is, of all contemporary states.

The Abydos prince list is a very great advance. The first arrangement of the 76 princes from the first through Seti, all real, in their temporal series and order. The importance of the Abydos prince list for this valley is comparable to that of the Sumerian prince list for the other valley.

The Saqqara prince list is an advance, if not a great advance. The first corroboration of the Abydos prince list.

And the Turin papyrus is a very great advance, too. Not with the gods and spirits, and in spite of the danger of not importance.

The description of the past has advanced by the steadily better arrangement of the princes in their series and order. The dependence of this advance on the rise of the state cannot have been indicated more clearly and distinctly either.

Also, this is the time of the first observations. The first observation of Sirius was recorded under Senwosret III in 1871 ± 5 . The second observation of Sirius was recorded under Amenhotep in 1536 ± 10 .

And these are all observations in this valley.

Among the duties of the vizier, Rekhmire reports, is to observe the rising of Sirius and the level of the Nile.

Not a very important duty, however, to judge by the absence of its performance among the depictions in Rekhmire's tomb, next to, say, the collection of the tribute of the 30 districts. It can be concluded that the observation of Sirius was 30+ times less important than the collection of the tribute of any one of the districts. In any case, taking it for granted that the vizier, Rekhmire as any of his predecessors or successors, did everything perfectly, and observed Sirius, too, yet nothing indicates that more than those two observations were recorded.

Also, the middle kingdom is the time of the great flourishing of mathematics in this valley.

Under Amenemhet III the book of 87 problems was composed, and the Moscow papyrus and the Berlin papyrus are immediate successors of the book of 87 problems. After that there is nothing.

It can be concluded that the book of 87 problems reached a limit. Like the first cataract, or the second cataract, or the fifth cataract, or the Euphrates, or the pyramid of Khufu.

Also, finally, from the first century of the new kingdom – when mummification becomes a major concern of the state – is the papyrus recording 48 treatments of injuries, the peak in the development of medicine in this valley or in any other valley before the philosophers. Then again there is nothing.

All in all, then, the steps of advance in the acquisition of knowledge, which the development of the state and of history, including geography, indicates, are these.

Mentuhotep, who restored the state, and smote the Nubians, the easterners, and the Libyans, in particular.

Amenemhet, who went to the first cataract, returned to the delta, stood at the borders of the country, and looked at all of it inside, and began the expansion of the state.

Senwosret, who reached the second cataract.

Senwosret III, who campaigned beyond the second cataract and beyond Sinai, and affirmed, I set my border further than my predecessors.

Ahmose, who restored the state again.

Amenhotep, with whom expansion resumed.

Thutmose, who reached the third cataract and the Euphrates, affirmed, I set the border of Egypt as far as the sun reaches, discovered independently the river which goes downstream by going upstream, and affirmed, he reached lands his ancestors did not know.

Hatshepsut, who made Punt bring its marvels.

Thutmose III, who discovered independently the annual campaign, listed the countries he conquered, and his inscriptions have begun implying maps.

The Karnak prince list.

Amenhotep II, who reached the fourth cataract, and affirmed, all countries are united.

Amenhotep III, who reached the fifth cataract, affirmed, you are the sole lord of all peoples, his inscriptions imply a map, and began the collec-

tion of the Amarna archive.

The Amarna archive.

The Abydos prince list.

The Saqqara prince list.

The Turin papyrus.

Counting centuries here as above, with respect to 3040, the year of birth assigned to Narmer, the distribution is,

2140-2041	2,
2040-1941	1,
1940-1841	1,
1840-1741	—,
1740-1641	—,
1640-1541	3,
1540-1441	4,
1440-1341	3,
1340-1241	2,
1240-1141	—,
1140-1041	—,
1040- 941	—,
940- 841	—,
840- 741	—.

The development of the state and the acquisition of knowledge advance with the middle kingdom, then they do not, then they advance with the new kingdom, then they do not.

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In the nine and a half centuries from Narmer to Mentuhotep the development of the state in the valley of the Nile and the development of the state in the valley of the two rivers remain altogether independent of one another.

And in the thirteen-odd centuries from Mentuhotep to Piyi the two developments remain independent of one another.

In the first two of these thirteen-odd centuries they remain as they have been, altogether independent of one another.

In the following eleven-odd centuries they begin to converge, slowly, gradually, haltingly. Yet they remain substantially independent of one another.

They remain substantially independent of one another until the conquest of the valley of the Nile by Esarhaddon, twenty-three-odd centuries after the beginning of the state in the valley of the Nile, twenty centuries after its beginning in the valley of the two rivers.

This is how the two developments begin to converge, and converge for eleven-odd centuries, yet remain substantially independent of one another.

The state in the valley of the Nile first ventures into the other valley. Senwosret III first ventures beyond Sinai.

His majesty went north to smite the Asiatics, he came to Sekmem, and Sekmem fell, then Retenu fell, the wretched.

Retenu is the Asian Mediterranean littoral.

This is the first substantial contact of the state in the valley of the Nile with the Asian Mediterranean littoral.

And it is not a contact of the state in the valley of the Nile with the state in the valley of the two rivers. It is not a contact of the state in the valley of the two rivers with the state in the valley of the Nile either. It is not a contact of the state with another state.

In the valley of the two rivers, at the time of Senwosret III, the great state of Ur has long fallen, the great state of Babylon is not yet built by Hammurabi. Several small states contest the valley. Hordes of wild men have descended on the valley, too, this time the Amorites. And all of this far to the east of the Asian Mediterranean littoral.

When Senwosret III smites the Asiatics, and Retenu falls, the wretched, the prince encounters no state in Retenu, and no state in Retenu encounters the prince. When it ventures in Retenu in the north the state encounters there what it encounters beyond the first cataract in the south when it ventures there. So the state takes the cattle, sheep, asses, and people in the north as it takes them in the south. And there is no evidence, nor can there be, that this first contact of the state with the Asian Mediterranean littoral is more substantial than that.

This first contact is also brief. After Senwosret III the middle kingdom does not venture again beyond Sinai. Then the middle kingdom falls.

Next, some two-odd centuries after this first contact, there is a contact between the two valleys again, more sustained, and more substantial than the first.

It is achieved the other way around this time, from that valley into this. In the time of disorder

after the fall of the middle kingdom the Hyksos descend on the valley of the Nile.

A horde of wild men from the east descended on the country, they burned the cities, razed the temples of the gods, killed many, led others captive, took the women and the children.

This contact is important twofold. First, on this occasion as on all earlier and later occasions of this kind, the wild men eventually settle, and having learned from the state, propose to continue the state. The one well attested Hyksos prince is: the son of Re, Apepi, prince of all Egypt.

Also, and it is in this that the contact is substantial, the Hyksos bring the chariot to the valley of the Nile.

The chariot is a major step in the development of warfare. It becomes a weapon with the rise of the Hittite state, in Asia Minor. The Hittite state first rises with Hattusili, and Hattusili first attests fighting with chariots. The Hyksos are the chieftains of the mountains in the valley of the two rivers west of the Euphrates, south of Asia Minor, north of Egypt. The Hyksos bring the chariot to Egypt. Ahmose then, on a chariot, smites the Hyksos, and the new kingdom rises greatly, on chariots.

Showing that some things, if not all, far from it, are learned quickly. Hattusili, in Hattusa, is prince *c.* 1630. Ahmose, in Thebes, 1 600 km away, is prince *c.* 1570-45.

The new kingdom rises greatly, and with Thutmose the next and by far the most substantial contact between the two valleys begins.

Thutmose conquers Asia north to the Euphrates. His successors continue campaigning there and subdue the country thoroughly. The country remains firmly under the state, prostrating itself seven times and seven times again, through Amenhotep IV. The hold of the state on the country then gradually weakens, but continues through Merneptah. The state of the valley of the Nile is thus forcefully present in the valley of the two rivers west of the Euphrates in the three centuries from Thutmose to Merneptah, in the first one and a half-odd of these centuries, from Thutmose to Amenhotep IV, very forcefully. The dates are,

Thutmose	prince <i>c.</i> 1521-09,
Amenhotep IV	prince <i>c.</i> 1364-47,

Merneptah	prince <i>c.</i> 1224-14.

And the following are all other states on earth in these centuries.

In Babylon the great state built by Hammurabi and maintained by his successors has fallen *c.* 1594. The hordes of wild men which have descended on the valley this time are the Kassites in the east and the Hurrians in the north. The Kassites have settled briefly in the generation before Thutmose, styling themselves princes of Babylon. Then there is no state in Babylon for one and a half centuries. Then the Kassites settle again, again styling themselves princes of Babylon. These are Kadashman-Enlil, prince *c.* 1400, and Burnaburiash, prince *c.* 1370, the princes attested by the Amarna archive. They deliver their daughters to the great prince, and are informed that no daughter of Egypt has ever been given to anyone. The appropriate gifts are exchanged. And there are no relations more substantial than these between the state of the valley of the Nile and the state of these Babylonian princes. The state of these Babylonian princes then also disappears.

The prince of Ashur attested by the Amarna archive is Ashur-uballit. This state is not yet important enough to deliver a daughter. Nor is there a relation between the state of the valley of the Nile and this state more substantial than: why have you not sent me more gold? It is with Ashur-uballit that Ashur begins to rise. It is at a peak under Adad-nirari, prince *c.* 1305-273, Shalmaneser, prince *c.* 1273-43, and Tukulti-Ninurta, prince *c.* 1243-06. It is with these princes, too, that the Assyrian record becomes massive. And these princes never note Egypt. Egypt never notes these princes either. Attesting also the retreat of Egypt from Asia.

The Hurrian hordes settle briefly in the state of Mittani. The Mittani prince, Tushratta, prince *c.* 1360, delivers a daughter to the great prince. And there is no relation more substantial than this in this case either. Mittani is small, continues for one half century, then disappears.

The Hittite state which has begun rising with Hattusili has continued for one and a half centuries, then disappeared in the generation before Thutmose. In the following one and a half centuries there is no Hittite state. There is the Hittite state again from Suppiluliuma, prince *c.* 1350-25,

through Tudhaliya IV, prince c. 1245-15. And the relation of the state of the valley of the Nile with this state is the most substantial.

Suppiluliuma is the Hittite prince attested by the Amarna archive. He does not deliver a daughter. There is rather the possibility that a son of Suppiluliuma would become a prince of Egypt.

Later on the two states fight the battle of Kadesh. The two states conclude a treaty for peace and friendship forever. And the two states both record both the battle and the treaty.

All these facts indicate strongly that the development of the two states is becoming one joint development. Even if the two states both win that battle. And their treaty notes nothing about the domains of the two states, or their border.

Yet the development of the two states fails to become one joint development, it fails to become any development at all. Ramesses II and Hattusili III conclude the treaty for peace and friendship forever. Two generations after Ramesses II the state of the valley of the Nile has disappeared. The Hittite state has disappeared one generation after Hattusili III.

In the centuries after Merneptah, five through Piyl, contacts between the two valleys are once again of the primordial kind. Earlier on, hordes of Asiatics, next to hordes of peoples of the sea and of Libyans, descend on the valley of the Nile. Later on, Sheshonq ventures into Asia to seize Jerusalem, and take the treasures from the house of the lord and from the palace of the king.

In the Asian Mediterranean littoral the state of the valley of the Nile is forcefully present for the three centuries through Merneptah, very forcefully for the first one and a half-odd of these centuries. The littoral is subdued, it prostrates itself, it delivers oxen, sheep, goats, excellent slaves, silver, chariots, excellent horses.

When after Merneptah the state of the valley of the Nile retreats from the Asian Mediterranean littoral, there is no state there for two centuries.

States first appear on the Asian Mediterranean littoral two centuries after the retreat of the state of the valley of the Nile from the littoral, one and a half centuries after the fall of the new kingdom.

One of those is the state of David. It splits into Israel and Judah, and these its two parts are gradually ruined by the Assyrian princes. As the

state of the Hebrews is gradually ruined, its writings become more important than the state. And in these writings Egypt is prominent. It is out of Egypt that god leads the Hebrews to the promised land.

The beginning of the Hebrew writings with the Yahwistic document postdates the fall of the new kingdom by three and a half centuries.

And how much the Hebrew writings have learned from Egypt can be judged by this fact. Nothing is more prominent in Egypt than the development of religion, nothing is more prominent in the development of religion in Egypt, and ever more prominent, than the indestructible spirit going to Re in heaven. And there is no hint in the Hebrew writings of that indestructible spirit before the last of them, *Daniel*, many centuries after the philosophers, including Plato. The Hebrew writings have not heard of that indestructible spirit, never mind learned from it.

In general, there is no hint in the Mesopotamian record that this record has heard of that indestructible spirit, never mind learned from it.

Conversely, among the most prominent, and most important, developments in Mesopotamia is the law. There is no hint in the Egyptian record that this record has heard of the development of the law, never mind learned from it.

Even as it has learned, and quickly, the chariot.

In the thirteen-odd centuries from Mentuhotep to Piyl, then, the development of the state in the valley of the Nile and the development of the state in the valley of the two rivers begin to converge. Slowly, gradually, haltingly.

The two remain substantially independent of one another.

And the next task is to collect the development of the state in these centuries in the valley of the two rivers, as well as in the domain bordering the valley, where in these centuries the development of the state begins to spread.

The thirteen centuries from Ibbl-Sin to Tiglath-pileser III

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The dates are,

Ibbi-Sin prince *c.* 2037-13,
Tiglath-pileser III prince 745-27.
The great state of Ur falls with Ibbi-Sin.

Not quite two and a half centuries later the great state of Babylon is built by Hammurabi. It continues for two centuries, and falls with Samsudutana.

Two and a half centuries later the rise of Ashur begins with Ashur-uballit. In the following seven centuries the Assyrian princes try to bring all states under one state, and again, and again, and again, and succeed. In the one century-odd beginning with Tiglath-pileser III Assyria is the greatest state ever built. The decisive rise begins one century-odd before Tiglath-pileser III with Ashurnasirpal II.

Thus, the thirteen centuries from Ibbi-Sin to Tiglath-pileser III can be divided into five parts. The not quite two and a half centuries from Ibbi-Sin to Hammurabi. The two centuries from Hammurabi to Samsudutana. The two and a half centuries from Samsudutana to Ashur-uballit. The five centuries from Ashur-uballit to Ashurnasirpal II. And the one century-odd from Ashurnasirpal II to Tiglath-pileser III.

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The not quite two and a half centuries from Ibbi-Sin to Hammurabi.

The great state of Ur falls with Ibbi-Sin. In the previous century Ur has brought the entire valley under one and only one state. It is the first state under a code of laws, the code of Ur-Nammu. The first state of massive writing. History begins.

Not quite two and a half centuries later the great state of Babylon is built by Hammurabi. Babylon again brings the entire valley under one and only one state. The state is under the greatest code of laws, the code of Hammurabi. It is the state also of very massive writing. Mathematics flourishes very greatly.

And in the not quite two and a half centuries in between the particulars indicate 8 states.

In the first of these centuries Isin is the predominant state in the lower valley. In the following one century-odd Larsa is the predominant state in the lower valley. Amorite hordes have begun descending on the valley from the north before these centuries already, they continue

raiding the valley in these centuries, and when they begin to settle, they install themselves the princes of Larsa. A major development is the appearance of states outside the lower valley. Ashur on the upper Tigris, in the north. Eshnunna on the middle Tigris. Mari on the Euphrates, in the west. Yamhad close to the Mediterranean, in the far northwest. And in the last of these centuries there are the first princes of Babylon.

Isin.

The important princes are 6. The Isin prince list is the third prince list, and all princes in it are included in the enumeration,

Ishbi-Erra	prince <i>c.</i> 2027-1994,
Shu-Ilishu	prince <i>c.</i> 1994-74,
Idin-Dagan	prince <i>c.</i> 1974-53,
Ishme-Dagan	prince <i>c.</i> 1953-33,
Lipit-Ishtar	prince <i>c.</i> 1933-22,
Ur-Ninurta	prince <i>c.</i> 1922-894,
Bur-Sin	prince <i>c.</i> 1894-73,
Lipit-Enlil	prince <i>c.</i> 1873-68,
Erra-Imiti	prince <i>c.</i> 1868-0,
Enlil-Bani	prince <i>c.</i> 1860-36,
Zambia	prince <i>c.</i> 1836-3,
Iter-Pisha	prince <i>c.</i> 1833-29,
Ur-Dukuga	prince <i>c.</i> 1829-5,
Sinmagir	prince <i>c.</i> 1825-14,
Damaqilishu	prince <i>c.</i> 1814-791.

The city of Isin is 130 km northwest of the city of Ur.

In the last years of Ur Amorites hordes begin descending on the valley. And Ishbi-Erra brings Ur down.

The Ur archive documents the fall of Ur with Ibbi-Sin and rise of Isin with Ishbi-Erra.

Ishbi-Erra is at first an official of Ibbi-Sin. He writes to Ibbi-Sin:

you sent me to Isin to buy grain; but the Amorites have seized the cities.

Ibbi-Sin writes back:

why did you let the Amorites enter my land?

Then another official of Ibbi-Sin writes to him:

Ishbi-Erra writes to me, Enlil has given me the princship;

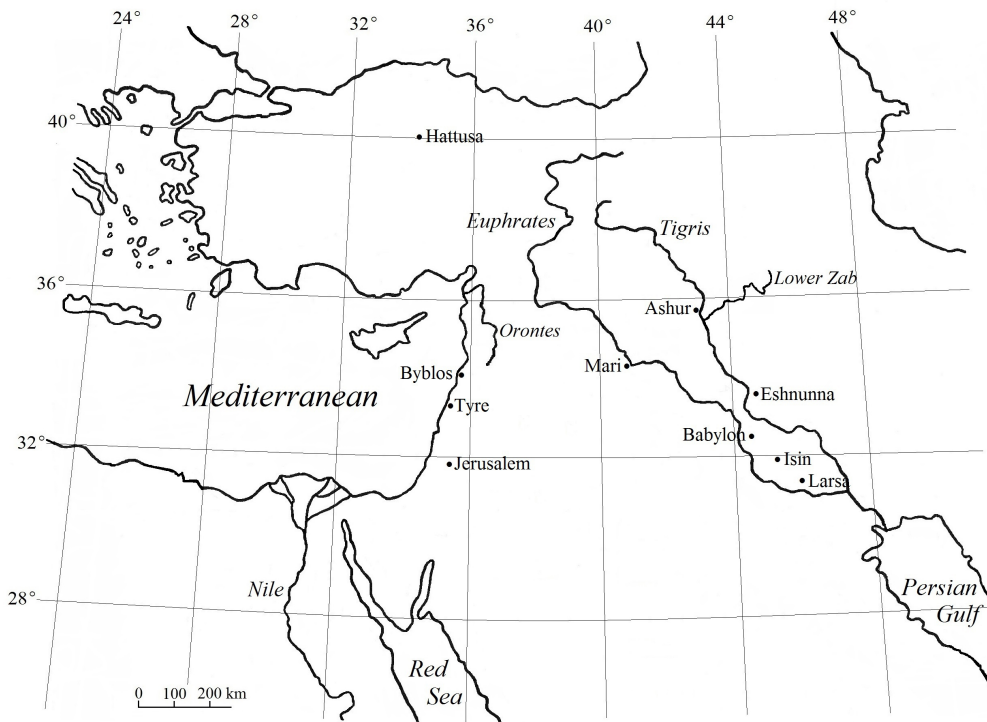
and it is as he says;

he has built a wall around Isin, he has seized

Nippur, he has seized the governor of Esh-

nunna, he has seized the governor of Kish, he

leads his own troops, he has seized the banks



Lambert conic equal area projection.

of the Tigris and the Euphrates.

Ibbi-Sin writes back:

Enlil has given the princship to me;
I am sending you troops; do not turn against me;
will Enlil give the princship to a worthless man
like Ishbi-Er-ra?

Enlil will. The Sumerian prince list ends with
the princes of Ur. And the Isin prince list continues
the Sumerian, beginning:

Ur was smitten, princship was taken to Isin.

Thus, Ishbi-Er-ra is:

Ishbi-Er-ra, mighty prince, lord of the land (ins.
1).

And his successors are now the princes of Sumer
and Akkad:

Shu-Ilishu, mighty prince, prince of Sumer and
Akkad (ins. 3);

Idin-Dagan, mighty prince, prince of Isin, prince
of Sumer and Akkad (ins. 1);

Ishme-Dagan, shepherd of Nippur, herdsman of
Uruk, prince of Isin, prince of Sumer and
Akkad (ins. 1);

Lipit-Ishtar, shepherd of Nippur, herdsman of

Uruk, prince of Isin, prince of Sumer and
Akkad (ins. 1).

The inscriptions of these princes are fewer, but
not too few, from a half dozen to a dozen-odd
each. All are votive inscriptions. The 4 successors
of Ishbi-Er-ra report no smiting. Although they do
report building the walls of the cities.

These princes, too, affirm forcefully that
princship is one and only one. Enlil has given
the princship to me. Enlil has given me the
princship. And it is the princship of Sumer and
Akkad, first established in Akkad by the princes
of Akkad, then taken to Ur by the princes of Ur,
that is now taken from Ur to Isin.

And the same one princship is diminished,
but it is not too small either. The authority of
these 5 princes of Isin does not extend beyond the
lower valley, and the lower valley outside the
walled cities they share with the Amorite hordes.
Still, these 5 princes of Isin control the cities
along the rivers, south to north, Ur, Uruk, Isin,
the city of temples Nippur, Kish, Eshnunna, the
cities in which the state has been established the

longest and the firmest, too.

The importance of the 5 princes of Isin from Ishbi-Erra to Lipit-Ishtar is in maintaining, and explicitly, the continuity of the state.

The continuity of the state is attested also by the third prince list, the Isin prince list, continuing the first prince list, the Sumerian prince list. The Isin prince list was compiled under Damaqilishu.

And the continuity of the state is asserted powerfully by the most important of the princes of Isin, Lipit-Ishtar, with the second code of laws, the code of Lipit-Ishtar, not quite two centuries after the first, the code of Ur-Nammu.

Lipit-Ishtar has left behind one dozen inscriptions. In 5 of them he reports:

Lipit-Ishtar, shepherd of Nippur, herdsman of Uruk, prince of Isin, prince of Sumer and Akkad;

I established justice in the land (ins. 3-6, 8).

The code is itself preserved in a dozen copies, indicating the promulgation of the law.

And this code, as the earlier, begins with a preamble:

when An and Enlil gave the princship to Lipit-Ishtar, the wise shepherd, he established justice in the land, to stop the cries for justice, to put an end to enmity and violence, to bring well-being to Sumer and Akkad (*id.*).

Cries for justice are then stopped, an end is put to enmity and violence, and well-being is brought to Sumer and Akkad, first of all with the general provision:

I ordered the household of a living father and the household of undivided brothers to work 70 days, the household of dependents to work 10 days every month (*id.*).

Households of living fathers and of undivided brothers are ordered to build walls and canals, and temples and palaces, and work their fields, for 70 days, households of dependents for 10 days every month. The remaining 295 days and 20 days every month, respectively, they can work more directly for themselves. Or for others.

The code of Ur-Nammu has about 40 laws. The code of Lipit-Ishtar has about 50. Among them:

if a man dies without a son, his unmarried daughter shall be his heir;

if a man gives fallow land to another to plant, and he does not plant it, they shall give the land to another to plant;

if a man steals from another's orchard, he shall pay 10 shekels;

if a man cuts down a tree in another's orchard, he shall pay 20 shekels;

if a slave says that he is not the slave of another, and proves that his master has been compensated twice, he shall be set free;

if a man accuses another of misdeed, and does not prove it, he shall bear the penalty for the misdeed;

if a man's wife does not bear him a child, but a woman from the street bears him a child, he shall provide the woman from the street with grain, oil, and clothes, and her child shall be his heir; but she shall not live in his house as long as his wife lives;

if a man hires an ox and breaks its horn, he shall pay its value;

if a man hires an ox and breaks its tail, he shall pay its value (*id.*).

The advance is great. The additions to natural law and subtractions from it are more. And even if somewhat less definitely than in the earlier code, the additions add and the subtractions subtract more radically. They protect the unmarried daughter. They protect the woman from the street and her child. They protect the slave who says that he is not a slave. They protect the man accused of misdeed, too, thus also protecting the process of the law.

In general, the authority of the state is diminished extensively substantially. The domain of the state is much smaller than it has been. But the authority of the state is increased intensively. The domain remaining under the state – and it is, again, the same state – is brought more firmly under civil law.

The successors of Lipit-Ishtar in Isin have not all left behind inscriptions, and these who have, have left behind fewer inscriptions. Reflecting the fact that Isin is no longer the predominant state. The predominant state is now Larsa. The successors of Lipit-Ishtar also continue to style themselves princes of Sumer and Akkad. But the princes of Larsa now style themselves princes of Sumer and Akkad as well, and the princes of

Larsa are now princes of Sumer and Akkad more than the princes of Isin.

Isin, shrinking, and Larsa, growing, share the lower valley for one century-odd. Then the 30th year of the prince of Larsa Rim-Sin is: conquered Isin (*id.*).

And Isin is no more.

Larsa.

The important princes are 7. The Larsa prince list is the second prince list, and again all princes in the list are included in the enumeration,

Naplanum	prince c. 2024-04,
Emisum	prince c. 2004-976,
Samium	prince c. 1976-41,
Zabaya	prince c. 1941-32,
Gungunum	prince c. 1932-05,
Abisare	prince c. 1905-894,
Sumuel	prince c. 1894-65,
Nur-Adad	prince c. 1865-49,
Sin-Iddinam	prince c. 1849-2,
Sin-Eribam	prince c. 1842-0,
Sin-Iqisham	prince c. 1840-34,
Silli-Adad	prince c. 1834-3,
Warad-Sin	prince c. 1833-21,
Rim-Sin	prince c. 1821-761.

Larsa is 90 km southeast of Isin.

And as the princes of Isin so the princes of Larsa. The important have left behind more inscriptions, the not important fewer or none.

The state of Larsa is important threefold. It is the predominant state in the lower valley for one century-odd. It is also the state of the Amorite hordes, who install themselves twice the princes of Larsa. And with Warad-Sin and Rim-Sin the state once again begins to expand decisively.

The series of princes above is from the Larsa prince list. The first in the series to leave inscriptions behind is Zabaya, and Zabaya is, in fact, not a prince, he is:

Zabaya, the mighty, chief of the Amorites (ins. 1).

His successors are princes:

Gungunum, prince of Larsa, prince of Sumer and Akkad (ins. 3);

Abisare, the mighty, prince of Ur, chief of the Amorites, prince of Larsa (ins. 1);

Sumuel, the mighty, prince of Ur, prince of Sumer and Akkad (ins. 1);

Nur-Adad, shepherd of Ur, prince of Larsa (ins.

2);

Sin-Iddinam, the mighty, shepherd of Nippur, shepherd of Ur, prince of Ur, prince of Sumer and Akkad (ins. 5).

The Amorites, then, install themselves the princes of Larsa with Gungunum. Abisare takes from Isin Ur, in the south. Sin-Iddinam takes from Isin the city of temples Nippur, north of Isin.

A decade of feebleness follows. Then Warad-Sin reports:

Kudur-Mabuk, father of the Amorites, opened the gates of Larsa, and gave Ur and Larsa to Warad-Sin, his son, prince of Larsa (ins. 6).

That Amorites install themselves the princes of Larsa once again indicates that one century after the first installation Amorite hordes continue to raid the entire valley. Also, if the father of the Amorites installs not himself but his son the prince of Larsa, this indicates that raiding the valley still has a higher authority than being the prince of Larsa.

So Warad-Sin and Rim-Sin, his brother, also the son of the father of the Amorites, joined the authority of raiding the valley to that of the principality of Larsa.

Kudur-Mabuk, Warad-Sin reports, conquered Kazallu (ins. 3), north of Nippur. Warad-Sin himself ruled Lagash (ins. 1). And he conquered Mashkan-shapir (ins. 10), northeast of Nippur.

Rim-Sin campaigned throughout the lower valley. He conquered Uruk:

I captured the prince of Uruk, I put my foot on his head like a snake (ins. 8).

He ruled Nippur (ins. 1). He smote Babylon (ins. 8). And he conquered Isin.

Rim-Sin has brought the entire lower valley under Larsa.

Under Rim-Sin also the second prince list was compiled, the Larsa prince list.

Rim-Sin in Larsa is contemporary with Shamshi-Adad in Ashur and Dadusha in Eshnunna. As Rim-Sin brings the lower valley under Larsa, so Dadusha brings the middle valley under Eshnunna, and Shamshi-Adad brings the upper valley under Ashur. And in the next generation Hammurabi brings them all, lower valley, middle valley, and upper valley, under Babylon.

Thus, the 31st year of Hammurabi is:

conquered Larsa (*id.*).

And Larsa is no more.

The Amorite horde.

The 1 important particular is the father,

Kudur-Mabuk prince *c.* 1845.

The Amorites enter the record like all other hordes, earlier and later, in this valley and in any other valley. In particular, the last princes of Ur describe them. Shu-Sin: the Amorites, whose ways are those of the beast, like the dog. Ibbi-Sin: the Amorites who have no cities.

Like all other hordes, they take the cattle, sheep, asses, and people.

Kudur-Mabuk is two centuries after Shu-Sin. The Amorites have continued to raid the valley for two centuries.

But like all other hordes, they also eventually settle. And they settle more consequentially than other hordes. They install themselves princes of Larsa twice. And they install themselves princes of two other very important states. The first princes of Ashur and the first princes of Babylon are Amorites.

Ashur.

The important princes are 5, listing also their successors,

Puzur-Ashur	prince <i>c.</i> 1980,
Shallim-ahhe	prince <i>c.</i> 1960,
Ilushuma	prince <i>c.</i> 1940,
Erishu	prince <i>c.</i> 1920,
Ikunu	prince <i>c.</i> 1900,
Sargon	prince <i>c.</i> 1880,
Puzur-Ashur II	prince <i>c.</i> 1860,
Naram-Sin	prince <i>c.</i> 1840,
Erishu II	prince <i>c.</i> 1820,
Shamshi-Adad	prince <i>c.</i> 1809-776,
Ishme-Dagan	prince <i>c.</i> 1776-59.

The city of Ashur is on the Tigris, 520 km northwest of the city of Larsa.

The state of Ashur is the first independent state in the upper valley.

Twelve and a half centuries after its beginning Ashur will be the greatest state on earth. And at that time the Assyrian prince list will be compiled, reaching twelve and a half centuries into its past.

The Assyrian prince list begins with:

17 princes who lived in tents (*id.*),
then it has:

10 princes who were ancestors (*id.*),

then it has:

6 princes whose names were written on bricks
(*id.*).

The last 3 of these princes are:

Puzur-Ashur,

Shallim-ahhe,

Ilushuma (*id.*).

The list then has:

Erishu, the son of Ilushuma, he reigned 40 years
(*id.*),

and then the names, fathers, and reign years of the princes in the following twelve centuries.

The 17 princes who lived in tents, the 10 princes who were ancestors, and the first 3 of the princes whose names were written on bricks, if they are real, attest the not state. Beginning with Puzur-Ashur, the princes are real, and attest the state.

Puzur-Ashur has left behind no inscriptions, but is attested by the inscriptions of his 3 successors. Shallim-ahhe has left behind 1 inscription, Ilushuma 2 inscriptions, Erishu one dozen inscriptions, Ikunu 4 inscriptions, Sargon 2 inscriptions, the next 3 princes none, Shamshi-Adad two dozen inscriptions, Ishme-Dagan none.

Shallim-ahhe reports:

Shallim-ahhe, prince of Ashur, son of Puzur-Ashur, prince of Ashur (ins. 1).

Ilushuma reports:

Ilushuma, prince of Ashur, son of Shallim-ahhe, prince of Ashur, son of Puzur-Ashur, prince of Ashur (ins. 2).

Erishu reports:

Erishu, prince of Ashur, son of Ilushuma, prince of Ashur, son of Shallim-ahhe, prince of Ashur, son of Puzur-Ashur, prince of Ashur (ins. 1).

Attesting the beginning of the state of Ashur. Showing also how the series of the princes of Ashur was established, and maintained over twelve and a half centuries.

The inscriptions of these princes are all votive. The beginning of the state is small.

One century after Erishu, however, Ashur rises with Shamshi-Adad.

Shamshi-Adad reports:

Shamshi-Adad, the mighty, prince of Ashur, conqueror of all his foes (ins. 6);

I installed my governor in Arrapha; I crossed the Lower Zab, I destroyed the land of Qattara, I captured the cities of Arbela (ins. 1001); Shamshi-Adad, the servant of Enlil, prince of Ashur;

I conquered the land of Mari on the banks of the Euphrates (ins. 4);

Shamshi-Adad, lord of the earth, whom Anu and Enlil called to the princship after the princes who went before him;

I received the tribute of the princes of Tukrish in my city of Ashur;

I set up my stele on the shore of the great sea (*id.*).

Shamshi-Adad has brought under Ashur the upper valley from the Lower Zab, east of the Tigris, to the Mediterranean.

He was succeeded by a feeblor ruler.

The name of Hammurabi's 31st year is: conquered Larsa. The name of his 32nd year: conquered Eshnunna. The name of his 33rd year: conquered Mari, and conquered Ekallatum. Ekallatum is Ashur. And that Hammurabi subdued Ashur, and his successors continued to dominate it, is attested also by the fact that not a single successor of Shamshi-Adad in the following one and a half-odd centuries has left an inscription behind. The Assyrian prince list does have a series of princes for these centuries, too. Many of them are: the sons of nobodies (*id.*). And rather, they are all themselves nobodies.

Eshnunna.

The important princes are 2, listing also 3 not important,

Ibal-pi-El	prince c. 1845,
Ipiq-Adad	prince c. 1825,
Naram-Sin	prince c. 1805,
Dadusha	prince c. 1785,
Ibal-pi-El II	prince c. 1765.

The city of Eshnunna is halfway between the cities of Ashur and Larsa, 260 km southeast of Ashur, 270 km northwest of Larsa.

There are inscriptions at Eshnunna earlier than the first prince in the enumeration above, on which those who have left them style themselves prince of Eshnunna. As there are inscriptions at other cities, on which those who have left them style themselves prince. It is a time of divided authority, and a literate time now, and every local

chieftain is liable to style himself prince. The quantity of such princes is indicated in one of the letters in the Mari archive. Itur-Azdu, an official of Zimri-Lim, the prince of Mari, writes to his master:

no prince is truly powerful, Hammurabi of Babylon, Rim-Sin of Larsa, Ibal-pi-El of Eshnunna, and Amut-pi-El of Qatna are each followed by 10 to 15 princes, Yarim-Lim of Yamhad is followed by 20 princes (A.482).

Without including Zimri-Lim, the total is 65 to 85 princes. As to their quality, with all due respect to Itur-Azdu, Hammurabi of Babylon is truly powerful, Rim-Sin of Larsa is also powerful, Yarim-Lim of Yamhad is powerful as well, just, Ibal-pi-El II of Eshnunna is not powerful, and the remaining 61 to 81 are not even princes, never mind powerful.

The beginning of the state in Eshnunna is attested as it is in Ashur. The real princes report: Ibal-pi-El, prince of Eshnunna (ins. 1);

Ipiq-Adad, prince of Eshnunna, son of Ibal-pi-El (ins. 1);

Naram-Sin, prince of Eshnunna, son of Ipiq-Adad (ins. 1);

Dadusha, son of Ipiq-Adad, prince of Eshnunna (ins. 2);

Ibal-pi-El, prince of Eshnunna, son of Dadusha (ins. 1).

Ipiq-Adad also reports:

Ipiq-Adad, the mighty;

he enlarged Eshnunna, he brought Nerebtum under her (ins. 3).

Nerebtum is the neighboring city.

Dadusha reports:

Dadusha, prince of princes, who destroys his foes;

when Anu and Enlil gave me the lordship over the earth and the rule over all peoples forever, I sent 10 000 men to besiege Qattara, which none of my predecessors in Eshnunna had ever besieged, nor had any other prince on earth;

I besieged the city, and I took it in ten days; I bound its prince, and I brought his head to Eshnunna; I took gold, silver, gems, and everything else that the country possessed; what remained I left to Shamshi-Adad, prince of Ekallatum;

and I crushed with my sword the land of Subartu

to the mountain of Lullubum (stele).

Dadusha has brought under Eshnunna the country north of the city to the Lower Zab.

And Dadusha promulgated, one and a half centuries after the code of Lipit-Ishtar, the third code of laws.

The preamble is fragmentary:

... Enlil ... the princship of Eshnunna ... who conquered the far bank of the Tigris ... (*id.*).

The laws are about 60. Among them:

the price for 300 sila of barley 1 shekel; for 12 sila of oil 1 shekel; for 600 sila of salt 1 shekel;

to hire for 1 day a wagon with its oxen and its driver 100 sila of grain; a boat that carries 300 sila with its boatman ... sila of grain;

to hire for 1 day a harvester 20 sila of grain; a winnower 10 sila of grain; a sickle 15 sila; an ass 10 sila; its driver 10 sila;

interest per 1 shekel of silver accrues at 36 sila of barley; per 300 sila of grain at 100 sila of grain;

if a man has no claim for a debt against another, and nevertheless distrains his slave woman, and she dies, he shall replace her with two slave women;

if a man has no claim for a debt against another, and nevertheless distrains his wife, and she dies, this is a capital case;

if a man says he bought a slave, or a slave woman, or an ox, or anything else, but cannot say who sold them to him, he is a thief;

if a man breaks the nose of another he shall pay 60 shekels; for an eye 60 shekels; for a tooth 30 shekels; for an ear 30 shekels; for a slap on the cheek 10 shekels; for a finger 10 shekels; for an arm 30 shekels; for a foot 30 shekels; for a collarbone 20 shekels;

if an overseer seizes a fugitive slave, or a slave woman, or an ox, or an ass, and does not return them, but keeps them for himself for a month, the palace shall bring a charge of theft against him;

if an ox gores another ox, and it dies, the two owners shall divide the value of the living ox;

if an ox gores a slave, and he dies, the owner of the ox shall pay 15 shekels;

if a wall is buckling, and the overseer tells the owner to fix it, and he does not fix it, and it

falls and kills someone, this is a capital case, it shall be decided by the palace (*id.*).

The advance is again great. The additions to natural law and subtractions from it are again more, and again more radical. Prices, rates of hire, wages, and rates of interest are protected. Debt servitude is brought under the law. The state itself is brought explicitly under the law. An overseer is liable to a charge of theft. And the palace shall bring the charge against him. The palace shall also decide capital cases.

Dadusha was also succeeded by a feeblar ruler.

The 32nd year of Hammurabi is:

conquered Eshnunna.

And Eshnunna is no more.

Mari.

The important princes are 2, listing also 3 not important,

Yagid-Lim	prince c. 1825,
Yahdun-Lim	prince c. 1805,
Sumu-Yamam	prince c. 1785,
Yasmah-Addu	prince c. 1779-4,
Zimri-Lim	prince c. 1774-59.

The city of Mari is in the west, on the Euphrates, 370 km northwest of the city of Eshnunna.

For six a half centuries, counting back to Eanatum, Mari has been vanquished by prince after prince. Yahdun-Lim is the first prince with whom Mari vanquishes.

Yahdun-Lim reports:

Yahdun-Lim, son of Yagid-Lim, prince of Mari, Tuttul, and the land of Hana, mighty prince, lord of the banks of the Euphrates; seven princes of Hana fought against me, I vanquished them, I captured their lands (ins. 1); no prince of Mari had ever reached the sea, or reached the mountain of cedar, or cut down the trees in the mountain;

Yahdun-Lim, son of Yagid-Lim, mighty prince, reached the sea, he made an offering to his princship at the sea, his men washed their weapons in the sea;

then he entered the mountain of cedar, and cut down the trees;

he made the country on the sea submit to him, and bring him tribute forever;

in the same year three princes of Hana rebelled against him; Sumu-Epuh of Yamhad also came with them; Yahdun-Lim vanquished them, he

made heaps of their corpses, he razed their walls, he destroyed the land of Hana, he is the lord of the banks of the Euphrates (ins. 2). Tuttul is upstream on the Euphrates. Hana is the land between Mari and Tuttul.

Yahdun-Lim subdued the country from Mari north and west to the Mediterranean.

But not forever.

The following is from a letter of Yasmah-Addu to Nergal, preserved in the Mari archive. Yasmah-Addu is a son of Shamshi-Adad, the prince of Ashur. Nergal is the lord of the nether-world. Ila-kabkaru is the father of Shamshi-Adad, a chieftain, not a prince of Ashur. Yasmah-Addu writes:

Yagid-Lim offended Ila-kabkaru;
Ila-kabkaru defeated him, and captured his son Yahdun-Lim;

the son of Yahdun-Lim Sumu-Yamam drove Yahdun-Lim from Mari;

Sumu-Yamam offended Shamshi-Adad;
Shamshi-Adad captured Mari and set me up, his son Yasmah-Addu, prince of Mari (931).

And Zimri-Lim reports:

Zimri-Lim, son of Yahdun-Lim, prince of Mari, Tuttul, and the land of Hana;
he defeated Ishme-Dagan, prince of Ashur (ins. 1).

The sequence of events is thus this.

Yagid-Lim is defeated, and his son Yahdun-Lim captured.

Yahdun-Lim nevertheless becomes prince of Mari and conquers the country to the sea.

His son Sumu-Yamam deposes him and becomes prince of Mari.

Shamshi-Adad conquers Mari and installs his son Yasmah-Addu prince of Mari.

Another son of Yahdun-Lim, Zimri-Lim, deposes Yasmah-Addu and becomes prince of Mari. He defeats Ishme-Dagan, Shamshi-Adad's successor in Ashur.

From Mari is the second oldest archive. It collects some hundreds of documents from the reigns of Yasmah-Addu and Zimri-Lim. The documents cover 20 reign years, about 5 of Yasmah-Addu, about 15 of Zimri-Lim.

The 33rd year of Hammurabi is: conquered Mari.

And Mari is also no more.

Yamhad.

The important prince is 1, listing also 1 not important,

Sumu-Epuh prince c. 1790,

Yarim-Lim prince c. 1770.

The country of Yamhad is between the Euphrates and the sea, on the Mediterranean littoral, some 400 km northwest of the city of Mari.

Sumu-Epuh has left behind no inscriptions. Yarim-Lim has left behind 1 inscription:

Yarim-Lim, son of Sumu-Epuh, prince of Yamhad (ins. 1).

These are the two princes of Yamhad attested by other princes. Yahdun-Lim, prince of Mari, vanquished Sumu-Epuh. Shamshi-Adad, prince of Ashur, writes to his son:

when you march against Sumu-Epuh, he will give me back my lands (Mari archive, 492).

And Zimri-Lim, prince of Mari, married a daughter of Yarim-Lim (ins. 8).

Also, as Hammurabi of Babylon, Rim-Sin of Larsa, Ibal-pi-El of Eshnunna, and Amut-pi-El of Qatna were each followed by 10 to 15 princes, Yarim-Lim of Yamhad was followed by 20 princes.

A half dozen rulers of Yamhad from the time of Hammurabi and his successors have also left behind an inscription of a line or two each, each styling himself prince. Hammurabi and his successors never notice these princes.

Yamhad is the beginning of the state in the far west, on the Mediterranean littoral. A small beginning.

Babylon.

Hammurabi reigned c. 1792-49.

The Babylonian prince list has 5 predecessors of Hammurabi, but 2 of them important,

Sumuabum prince c. 1894-80,

Sumulael prince c. 1880-44,

Sabium prince c. 1844-30,

Apil-Sin prince c. 1830-12,

Sinmuballit prince c. 1812-792.

The city of Babylon is in the center of the valley, 200 km northwest of Larsa, 110 km southwest of Eshnunna, 340 km southeast of Ashur.

And those 5 predecessors of Hammurabi have not left a very substantial trace in the record.

Their reigns span one century. The last 2 of the

5, Apil-Sin and Sinmuballit, have left no inscriptions behind. The first 2, Sumuabum and Sumulael, are attested by 4 seals reporting not more than that they are from: a servant of Sumuabum (ins. 1001), and: a servant of Sumulael (ins. 2001-3). And Sabium is attested by 5 seals, from: a servant of Sabium (ins. 2001-4), and: a son of Sabium, prince (ins. 1). Nor is this son Apil-Sin.

It is the century when Larsa is predominant in the lower valley, at its peak with Rim-Sin, at the time of the last 2 of those Babylonian princes. At this time Ashur rises in the upper valley with Shamshi-Adad. Eshnunna rises in the middle valley with Dadusha. Shamshi-Adad and Dadusha do not notice Babylon. Rim-Sin notices it: Rim-Sin smote Babylon.

The importance of Sumulael is established by his more remote, and more important, successors. When Babylon rises with Hammurabi, and its princes become great, among the titles they assume, is also this one:

Hammurabi, descendent of Sumulael (ins. 11);
Abieshuh, descendent of Sumulael (ins. 1);
Ammiditana, descendent of Sumulael (ins. 1).

Sumulael is also the last prince noted in the Esagil chronicle.

The importance of Sinmuballit is established by the same, and in this case his immediate, and more important, successors. They style themselves also:

Hammurabi, son of Sinmuballit (ins. 11);
Samsuiluna, grandson of Sinmuballit (ins. 2).

A letter has also been unearthed from the chieftain of Uruk, Anam, to Sinmuballit. The occasion is that troops of Sinmuballit have come to Uruk and not been allowed to enter the city. The chieftain explains: indeed Babylon and Uruk are one house (*id.*), and: troops of Babylon of 1 000 or 2 000 or 5 000 or 10 000 have stayed in Uruk for one year or two years or three years (*id.*), but: had they entered the city now, there may have been trouble (*id.*). It is at about this time that Rim-Sin reports: I captured the prince of Uruk, I put my foot on his head like a snake, and: Rim-Sin smote Babylon.

The beginning of Babylon is small, and in the century before Hammurabi Babylon remains small. The princes of Babylon are among the dozens of local chieftains styling themselves

prince.

The rise of Babylon with Hammurabi is meteoric.

In the not quite two and a half centuries from Ibbi-Sin to Hammurabi, then, the main developments are these.

Amorite hordes descend on the valley from the mountains in the north. They raid the valley for two centuries. Like all hordes earlier and later they eventually settle. But they settle more consequentially than most earlier and later hordes. The beginnings of 3 very important states are Amorite. Amorites install themselves princes of Larsa twice. The first princes of Ashur, as well as Shamshi-Adad later on, are Amorites. And the first princes of Babylon are Amorites. Another of Hammurabi's titles is: prince of all the Amorite lands (ins. 9-10).

The great state of Ur is destroyed, but the state continues. In spite of the raiding hordes. And not too feebly. The cities in the lower valley are not abandoned to local chieftains. Isin predominates in the first of these centuries, Larsa in the second. And continuity is indicated not only by the title prince of Sumer and Akkad. Isin is the one state of the same cities, of which earlier Ur is the one state, of which earlier still Akkad is the one state. Larsa then becomes the one state of the same cities. The cities of the lower valley are becoming steadily more firmly one state.

Continuity is indicated also by the resumption of vigorous smiting. Having retreated to the walled cities in the lower valley, and left the country outside to the raiding hordes, the state begins toward the end of this time to smite vigorously once again, and expansion as well resumes. Ashur expands with Shamshi-Adad. Eshnunna expands with Dadusha. Both are followed by feebler princes, thus failing to show unambiguously attempts to unify the entire valley. The expansion of Larsa with Rim-Sin, however, ends only with his defeat by Hammurabi, who does unify the entire valley. Mari as well expands with Yahdun-Lim, and if he is deposed and followed by feebler princes as well, Hammurabi does unify Mari as well into the same one state of the entire valley.

Continuity is indicated also by the law. 40 laws. 50 laws. 60 laws. The code of Ur. Further

north the code of Isin. Further north the code of Eshnunna. The state is brought steadily more firmly under the law.

Continuity is indicated also by the most important development in these centuries, the appearance of states outside the lower valley. The state begins in the lower valley. Three and a half centuries later Sargon brings the entire valley under the state. Akkad rises, falls, Ur rises, falls. And seven centuries after the beginning of the state, three and a half centuries after Sargon, the independent state of Ashur begins in the upper valley. One and a half centuries later, the independent state of Mari begins in the west. And the independent state of Yamhad begins in the far west, on the Mediterranean littoral. The state is beginning to establish itself firmly in the entire valley. Even if with the rise of Babylon Ashur disappears for one and a half-odd centuries, Mari disappears altogether, and Yamhad remains small, and ephemeral.

Continuity is indicated also by the prince lists. The Sumerian. The Larsa. The Isin. The Babylonian. The Assyrian. The Esagil chronicle as well is from this time. History continues.

From this time as well is the antediluvian prince list. As the other lists collect the princes after the last prince in the Sumerian, so this list collects princes before the first prince in the Sumerian. This list is thus not an investigation. This list nevertheless attests the broadening, if not the deepening, of the concern with the past.

From this time as well is the Mari archive. Under the last two princes of Mari, Yasmah-Addu and Zimri-Lim, many hundreds of documents were for the first time collected. The state of Mari is important, but not very important. The Mari archive – the second collection of documents, and the first massive collection of documents – is very important. The documents in the collection are a few of them important, the large majority, by very far, very not important. Their sheer number should suffice to show this. The fact that they were collected in the courts of one not important and one barely important princes, presiding over one not very important state, as this state is beleaguered by its neighbors, themselves not very important, should suffice to show it conclusively. As it is, in this, in that the large

majority of the documents in it, by very far, are very not important, the second archive is like all the many and ever more later archives. Leibniz writes: it is astonishing that so many useful things remain to be done, yet men always turn to what has already been done, or to the utterly useless, or in any case to the least important. The second archive is like all later archives in this as well that it has encouraged greatly the investigation of the utterly useless, and in any case the least important. And this is why, because it is like all the many and ever more later archives, and rather, all the many and ever more later archive are like it, the Mari archive is very important.

In these centuries, too, Senwosret III, prince c. 1878-45, first ventured into Asia beyond Sinai. The venture was brief and did not reach far on this first occasion. The state in the west and the state in the east remained unaware of one another.

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The two centuries from Hammurabi to Samsuditana.

The particulars indicate 2 states. In the valley of the two rivers the state is one, Babylon. And in these centuries the state begins further north and west, in Asia Minor, the Hittite state.

Babylon.

The princes are 6,

Hammurabi	prince c. 1792-49,
Samsuiluna	prince c. 1749-11,
Abieshuh	prince c. 1711-683,
Ammiditana	prince c. 1683-46,
Ammisaduqa	prince c. 1646-25,
Samsuditana	prince c. 1625-594.

Hammurabi reigned 43 years. 31 are years of building, of walls, canals, temples.

12 are years of smiting:

7th year, when Hammurabi, the prince, conquered Uruk and Isin;

8th year, when Hammurabi, the prince, conquered the Shumudar;

10th year, when Hammurabi, the prince, destroyed the city of Malgium and its country;

11th year, when Hammurabi, the prince, conquered Rapiqum;

30th year, when Hammurabi, the prince, the mighty, the beloved of Marduk, with the power of the great gods destroyed the army of

Elam from Marhashi to Subartu, Gutium, Eshnunna, and Malgium, and made Sumer and Akkad firm;

31st year, when Hammurabi, the prince, who is trusted by Anu and Enlil, who marches before his army, to whom the great gods have given magnificent power, conquered Larsa and its prince Rim-Sin, and brought Sumer and Akkad under his command;

32nd year, when Hammurabi, the prince, victorious for Marduk, with his mighty sword conquered Eshnunna, Subartu, Gutium, Mankisum, and the Tigris up to Subartu;

33rd year, when Hammurabi, the prince, built a canal and brought water forever to Nippur, Eridu, Ur, Larsa, Uruk, and Isin, and restored the scattered lands of Sumer and Akkad, and conquered Mari and Malgium, made Mari and its country and all cities of Subartu live in peace under his command, and conquered Subartu, Ekallatum, Burunda, and Zalmaqam from the Tigris to the Euphrates;

35th year, when Hammurabi, the prince, at the command of Anu and Enlil destroyed the walls of Mari and Malgium;

37th year, when Hammurabi, the prince, with the great power of Marduk destroyed the armies of Turukku, Kakmum, and Subartu;

38th year, when Hammurabi, the prince, at the command of Anu and Enlil, with the wisdom of Marduk destroyed . . . Eshnunna;

39th year, when Hammurabi, the prince, with the great power given him by Enlil destroyed all his foes in the land of Subartu.

Of most of the localities it is clear exactly where they are. And the development of the conquest makes it sufficiently clear where the rest of the localities as well are.

Thus, in his first six years Hammurabi built, walls, canals, temples, as well as, given the consequences, his military might. In the next five years, his 7th through his 11th, he conquered the valley from Uruk in the south to Rapiqum, north of Babylon. He thus challenged the expansion of Larsa under Rim-Sin. In the following eighteen years, his 12th through his 29th, he again built, walls, canals, temples, as well as, given the consequences, his military might. In the following four years, his 30th through his 33rd, he con-

quered the entire valley. Such military prowess had not been demonstrated since Naram-Sin, four and a half centuries earlier, and was not to be demonstrated again until Ashur-nasirpal II, nine centuries later. In his 30th year Hammurabi destroyed the army of all the countries in the mountain in the east, from Elam in the south, on the gulf, to Subartu in the north, north of Eshnunna. In his 31st year he defeated Rim-Sin. In his 32nd year he conquered Eshnunna. In his 33rd year he conquered Mari and Ashur. He became the sole lord of the valley. And in the remaining ten years, his 34th through his 43rd, he again built, walls, canals, temples, as well as, now, the unity of the state. He subdued what resistance remained in the valley, in the west and in the north.

Hammurabi is clear that he is restoring the one state of Sumer and Akkad, and that it is with the conquest of the entire valley that he is restoring it. His 30th year is: he made Sumer and Akkad firm. His 31st year: he brought Sumer and Akkad under his command. And his 33rd year: he restored the scattered lands of Sumer and Akkad.

Also, Marduk is the god of the city of Babylon. Accordingly, Hammurabi is the beloved of Marduk, he is victorious for Marduk, he destroys with the great power of Marduk, he destroys with the wisdom of Marduk. In Sumer and Akkad, however, Enlil has long been the lord of heaven and earth, and the lord of all lands. Anu has been the lord of the gods. Accordingly, Hammurabi is also trusted by Anu and Enlil, he destroys at the command of Anu and Enlil, Enlil has given him his great power.

Hammurabi brought the entire valley under Babylon. So he is:

Hammurabi, mighty prince, prince of Babylon, prince of all the Amorite lands, prince of Sumer and Akkad, who brings peace to the four quarters (ins. 9).

Hammurabi was succeeded by Samsuiluna.

Samsuiluna reigned 38 years. 9 are years of smiting:

9th year, when Samsuiluna, the prince, destroyed the Kassites forever;

10th year, when Samsuiluna, the prince, smote Uruk and Isin;

11th year, when Samsuiluna, the prince, smote Larsa;

12th year, when Samsuiluna, the prince, by the might given him by Marduk vanquished all his foes who had risen against him in Sumer and Akkad;

13th year, when Samsuiluna, the prince, destroyed Kisurra and Sabium;

14th year, when Samsuiluna, the prince, smote with his sword all his foes who had rebelled again him in Sumer and Akkad;

20th year, when Samsuiluna, the prince, subdued the countries disobedient to him and smote Eshnunna;

23rd year, when Samsuiluna, the prince, by his terrible strength smote Susa;

28th year, when Samsuiluna, the prince, at the command of Enlil, by the wisdom of Marduk, smote with his sword and his mace the princes of Yadihabum and Mutihurzan.

Thus, between his 10th and his 14th year, and conclusively in his 20th year, Samsuiluna vanquished all his foes who had risen against him in Sumer and Akkad. All internal foes of the state. Those were the last revolts of the cities of the lower valley which had recently been its own state each, Isin, smitten in his 10th year, Larsa, smitten in his 11th year, and Eshnunna, smitten in his 20th year. The lower valley was pacified. There are no reports of revolts under Samsuiluna's successors. In his 9th year and again in his 23rd year Samsuiluna smote the external foes of the state, the Kassites – and this is how the Kassite hordes enter the record – and Susa. The approaches to the valley were secured. There is only one report of incursions from the mountains in the east under Samsuiluna's successors in the following century. And in his 28th year Samsuiluna smote the princes of Yadihabum and Mutihurzan. Where these princes came from is not clear. From the mountains as well, presumably, in the north or more probably in the east.

The other 29 years of Samsuiluna are years of building.

Hammurabi brought the entire valley under Babylon. Samsuiluna established firmly the entire valley under Babylon. So he is:

Samsuiluna, mighty prince, prince of Babylon, prince of Kish, the prince who subdued the four corners, the prince who by the order of Anu and Enlil slew all who stood against him,

the shepherd to whom Inanna gave good omens and help, who bound the hands of all who disobeyed him, who chased from the land all evil, who brought daylight to his numerous people, the foremost heir of Hammurabi, the lord who conquered the land (ins. 8).

In the following century peace and prosperity prevailed.

Samsuiluna was succeeded by Abieshuh.

Abieshuh reigned 28 years. 1 year, not clear which exactly, but early in his reign, is of smiting:

the year, when Abieshuh, the prince, at the command of Anu and Enlil, with the great power of Marduk smote the Kassite hordes.

The other 27 are years of building. He is:

Abieshuh, descendent of Sumulael, son of Samsuiluna, eternal seed of princship, mighty prince, prince of Babylon, prince of Sumer and Akkad, who brings peace to the four quarters (ins. 1).

Abieshuh was succeeded by Ammiditana.

Ammiditana reigned 37 years. All 37 are years of building. He is:

Ammiditana, mighty prince, prince of Babylon, prince of Kish, prince of Sumer and Akkad, prince of all the Amorite lands, descendant of Sumulael, son of mighty Abieshuh (ins. 1).

Ammiditana was succeeded by Ammisaduqa.

Ammisaduqa reigned 21 years. All 21 are years of building. He is:

Ammisaduqa, mighty prince, prince of Babylon, firstborn of Ammiditana, . . . (ins. 1).

Ammisaduqa was succeeded by Samsuditana.

Samsuditana reigned 31 years. And not all the names of his years are recorded. Those that are, some 27 of them, are all years of building. Nevertheless, the decline of the state, after one and a half-odd centuries of great power and prosperity, is indicated by the fact that Samsuditana has left behind but a half dozen votive inscriptions of a line or two each.

Under the princes of Babylon the valley is unified for the third time.

It is unified under Sargon and his 4 successors for one and a half centuries. After two-odd generations of disorder, it is unified again under Ur-Nammu and his 4 successors for one century. And after two and a half centuries of divided

authority, it is unified again under Hammurabi and his 5 successors for two centuries, counting from the beginning of the reign of Hammurabi to the end of that of Samsuditana.

The first time, unity is the result of major smiting. Unity is also long maintained by major smiting. Sargon and his successors campaign over the valley annually for one century. The development of administration follows.

The second time, unity is again the result of major smiting. But after that there is less smiting. Only 2 of Ur-Nammu's successors report much smiting. Peace and prosperity prevail. Administration develops. Ur is the first state under a code of laws, and it is under a code of laws from the first.

The third time, unity is again the result of smiting. And it is again major smiting. Hammurabi conquers the valley in 4 years. But after that there is very little smiting. For 5 years Samsuiluna has to crush revolts, and for 4 more years to fight the external foes of the state. After that there is no smiting at all. All in all, of the 194 recorded years of the 6 princes, 22 are years of smiting, 172 are years of building.

That peace and prosperity prevail in the entire valley is indicated by the fact that there are no revolts. It is indicated by the fact also that there are no local chieftains. There are a few inscriptions from the Mediterranean littoral, at Yamhad, on which those who have left them style themselves prince. There are a few inscriptions also from the mountains in the east on which those who have left them style themselves prince. In the domain in between, from the upper reaches of the Euphrates and the Tigris to the Persian Gulf, nothing in these centuries indicates commotion.

These are the first princes who style themselves with peace:

Hammurabi, who brings peace to the four quarters;

Samsuiluna, who brings peace to the four quarters;

Abieshuh, who brings peace to the four quarters;

Ammiditana, who settled all the peoples of Sumer and Akkad in peace, made the entire land content (ins. 2);

Ammisaduqa, who settled all his numerous people in peaceful pastures (ins. 2).

They are the first princes who inaugurate their reigns with justice. Hammurabi's 2nd year is: he established justice in the land.

Samsuiluna's 2nd year is:

he brought justice to the land of Sumer and Akkad.

Abieshuh's enthronement year is:

at the command of Marduk he established justice for his people.

Ammiditana's enthronement year is:

at the command of Shamash and Marduk he established justice in the land.

Ammisaduqa's enthronement year is:

when Enlil raised him to the princeship, and he rose like the sun over his country, he established justice for his people.

Samsuditana's enthronement year is:

at the command of Marduk, who raised him to the princeship, he established justice for the people.

The first time the valley is unified, one century of smiting leads to the development of administration, and peace. The second time, the state is under a code of laws from the first, and peace and prosperity prevail. The third time, peace and prosperity prevail from the first, and prevail decisively throughout. The state is from the first under the fourth and the greatest code of laws, the code of Hammurabi.

From Sargon and his 4 successors through Ur-Nammu and his 4 successors through Hammurabi and his 5 successors – across the times of disorder and disunity in between – the pacification of the valley is cumulative. And the taming of the part of humanity inhabiting the valley is cumulative.

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The code of Hammurabi is attested in numerous copies. The law was promulgated. And it was copied, and again, and again, and again, for the following twelve-odd centuries.

The code begins with a preamble:

when Anu, lord of the great gods, and Enlil, the lord of heaven and earth who determines the destiny of the land, when Anu and Enlil allotted the supreme command to Marduk, the firstborn of Ea, and exalted him above the gods to govern all peoples for Enlil, when they

gave Babylon its great name, made it preeminent over the four quarters, and established in it princesship forever with foundations firm as the heaven and the earth;
 at that time Anu and Enlil, to bring well-being to the people, commanded Hammurabi, the prince who fears the gods, to make justice prevail in the land, to destroy wickedness and evil, to stop the strong from taking the weak, to rise like Shamash over mankind, to throw light on the land;
 I am Hammurabi, the shepherd, who heaps abundance and plenty;
 who gives to the city of Nippur everything it wants;
 who restores the city of Eridu;
 who raises the city of Babylon over the four quarters;
 who brings prosperity to the city of Ur;
 who makes the foundations of the city of Sippar firm;
 who shows mercy to the city of Larsa;
 who brings abundant waters to the city of Uruk;
 who gathers its scattered people in the city of Isin;
 who dwells in the city of Kish;
 who enlarges the city of Kutha;
 who makes the city of Borsippa rejoice;
 who enlarges the fields of the city of Dilbat;
 who completes the building of the city of Kesh;
 who allots pastures and water to the cities of Lagash and Girsu;
 who perfects the oracles of the city of Zabalam;
 who appeases Adad in the city of Karkar;
 who brings life to the city of Adab;
 who gives life to the city of Mashkan-shapir;
 who gives shelter to the people of the city of Malgium;
 who shows mercy to the cities of Mari and Tuttul;
 who builds for Ishtar in the city of Akkad;
 who protects the city of Ashur;
 who performs the rites of Ishtar in the city of Nineveh;
 I am Hammurabi, the pious, who prays ceaselessly to the gods, scion of Sumulael, heir of Sinmuballit, eternal seed of princesship, mighty prince, the sun of Babylon, who throws light on Sumer and Akkad, lord of the four quarters, favored by Ishtar;

when Marduk commanded me to bring justice to the land, I established truth and justice in the land, I increased the well-being of the people (*id.*).

Hammurabi established truth and justice and increased the well-being of the people in Nippur, Eridu, Babylon, Ur, Sippar, Larsa, Uruk, Isin, Kish, Kutha, Borsippa, Dilbat, Kesh, Lagash, Girsu, Zabalam, Karkar, Adab, Mashkan-shapir, Malgium, Mari, Tuttul, Akkad, Ashur, and Nineveh. The code is an important step of advance in the description of the surface of the earth, too.

Some 280 laws follow.

Their arrangement indicates clearly and distinctly, if only implicitly, division into kinds, according to the matters with which the law is concerned. And in some of the later copies of the code the laws are brought explicitly under several heads, indicating the beginning of the investigation of the law as well.

The first 5 laws protect procedure:

- if a man accuses another of murder, and fails to prove it, he shall be killed (1);
- if a man accuses another of witchcraft, and fails to prove it, the accused shall submit to the river ordeal; if the river ordeal overtakes him, his accuser shall take his estate; if the river ordeal clears him, the man who accused him shall be killed, and the accused shall take his estate (2);
- if a man bears false witness in a capital case, he shall be killed (3);
- if a man bears false witness in a case for grain or silver, he shall pay whatever is at issue in the case (4);
- if a judge gives a verdict, and seals it, and later changes the verdict, and it is proved that he changed the verdict, he shall pay 12 times whatever is at issue in the case, he shall be removed from the assembly, and he shall never be a judge again (5).

The next 20 laws protect property. Among these:

- if a man steals from a god or from the palace, he shall be killed, and the one who received the stolen goods shall be killed (6);
- if a man buys anything from someone's son or slave without a witness or a contract, or if he only takes the goods for safekeeping, he is a

thief, and he shall be killed (7);
 if a man steals an ox, sheep, ass, pig, or boat, if it belongs to a god or the palace, he shall pay 30 times its value, if it belongs to a man, he shall pay 10 times its value; if he cannot pay, he shall be killed (8);
 if a man says he lost something and then saw it in another's possession, and produces witnesses, but the other says he bought it, and produces witnesses, the judges shall examine the case; and if the seller is the thief, he shall be killed (9); if the buyer cannot produce the seller or witnesses to the purchase, he is the thief, he shall be killed, and the owner shall have back his property (10); if the owner cannot produce witnesses, he is a liar, and he shall be killed (11);
 if a man steals the child of another, he shall be killed (14);
 if a man helps a slave escape, he shall be killed (15);
 if a man harbors a fugitive slave, and does not produce the slave at the public proclamation, he shall be killed (16);
 if a man seizes a fugitive slave, and returns the slave to the owner, the owner shall pay him 2 shekels (17);
 if a fugitive slave is caught, and refuses to say who the owner is, the palace shall investigate the matter and return the slave to the owner (18);
 if a man breaks into a house, he shall be killed and hanged before the house (21);
 if the robber is not seized, the man who was robbed shall declare before the god what was stolen, and the city governor shall restore to him the value of the lost property (23); if someone was murdered in the robbery, the governor shall pay to his kinsmen 60 shekels (24).

The next 16 laws protect military service. Among these:

if a soldier ordered to go on a campaign hires another to go in his place, he shall be killed; the one he hired shall have his field (26);
 if a soldier on a campaign does not return, and his field is given to another, and this one performs the service, but the soldier then returns, his field shall be given back to him, and he shall

perform the service (27);
 if a soldier does not return, his field shall be given to his son to perform the service (28); if the son is too young, one third of the field shall be given to his wife to raise his son (29);
 if a soldier is lazy and neglects his field, and another takes it over, and performs the service for 3 years, and the soldier then wants the field back, it shall not be given to him; the one who performed the service shall continue to perform it (30);
 if a soldier is taken captive, and a creditor pays his ransom, the soldier shall redeem the creditor; if he does not have enough, the temple in his city shall redeem the creditor; if there is not enough in the temple, the palace shall redeem him; but the field given to the soldier for service shall not be used for the ransom (32);
 if a captain takes on a campaign someone hired in place of another, he shall be killed (33);
 if a captain takes the property of a soldier, or molests a soldier, or hires out a soldier, or takes from a soldier a gift given to the soldier by the prince, he shall be killed (35);
 a soldier shall not leave the field given to him for service to his wife or daughter or use it to discharge a debt (38); he shall leave to his wife or daughter or use to discharge a debt only a field he has himself bought (39).

The next 11 laws regulate tenancy. Among these:

if a tenant does not cultivate his field, he shall be charged with negligence, and he shall pay the owner according to his neighbor's yield (42);
 if Adad brings a storm, or a flood sweeps away the crop, the loss shall be the tenant's (45);
 if a tenant has incurred a debt, and Adad devastates his field, or a flood sweeps away the crop, or there is no grain because of drought, he shall suspend payment of his debt and not pay interest for that year (48);
 if a tenant has used as a security on a loan a field already sown, the crop shall belong to the owner of the field, and he shall pay the creditor silver and interest (50); if he does not have silver, he shall pay grain (51).

The next 7 laws regulate liability. Among these:

if a man opens his branch of the canal, and negligently allows the water to carry away his neighbor's field, he shall pay grain to his neighbor according to the neighbor's yield (55);

if a shepherd grazes sheep or goats in a field without permission, he shall pay the owner of the field 6 000 sila of grain per 18 iku of field grazed (57);

if a man cuts down a tree in another's orchard, he shall pay 30 shekels (59).

The next part of the code, some three dozen laws, is the only one in poor preservation. The laws in this part first regulate orchards, the division of their yield between owner and tenant. Then they regulate houses, their purchase and tenancy. Then they fix interest rates. Among these last:

if a creditor advances grain, he shall take as interest 100 sila of grain per kur; if he advances silver, he shall take as interest one fifth per shekel (t);

if a man has a loan, but has no silver to pay, he shall pay in grain at the annual rate fixed by the palace for silver;

if a creditor tries to increase the interest above the rate of 100 sila per kur for grain, or one fifth per shekel for silver, he shall forfeit all that he advanced (u).

For grain the annual rate is 33 %, for silver 20 %.

The next 9 laws regulate investment. Among these:

if a creditor advances silver to a trader, and the trader incurs a loss, the trader shall pay the creditor the capital sum (102);

if while the trader is abroad highwaymen take his goods, he shall swear before the god and he shall be released of his obligation (103);

the trader shall collect receipts for his payments to the creditor (104); if he is negligent, any silver for which he has no receipt shall be included in the final settlement (105);

if a creditor advances silver to a trader, but the trader denies it, and the creditor swears before the god and produces witnesses, the trader shall pay the creditor 3 times the advanced amount (106);

if the trader repays everything, but the creditor denies it, and the trader swears before the god and produces witnesses, the creditor shall pay

the trader 6 times the advanced amount (107);

The next 4 laws regulate inns. Among these:

if the woman keeping the inn does not take grain as payment for beer, or takes silver measured by light weights, thus making beer cheaper than grain, she shall be thrown in the water (108);

if villains gather in an inn, and the woman keeping it does not take them to the palace, she shall be killed (109);

if a priestess opens an inn, or goes to an inn, she shall be thrown in the water (110).

The next 15 laws regulate the service of debts and pledges. Among these:

if a man has no claim for a debt against another, but distrains someone from his household, he shall pay 20 shekels for every one he distrained (114);

if a man has a claim for a debt against another, and distrains someone from his household, and the distrained dies a natural death, this is not a ground for a claim against him (115);

if the distrained dies because of beating or of some other abuse, if the distrained is a son of the debtor, a son of the creditor shall be killed, if the distrained is a slave of the debtor, the creditor shall pay 20 shekels, and he shall forfeit all that he advanced (116);

if a man has a debt, and cannot pay, and to service the debt gives his wife, or son, or daughter, they shall serve the creditor for 3 years, and in the 4th year they shall go free (117);

if the debtor gives a slave, the creditor may extend the term of service, and may sell the slave, and this is not a ground for a claim against him (118);

if a man gives grain to another for safekeeping, and a loss occurs, or the one who keeps the grain takes from it, or denies receiving the grain, the owner shall swear before the god, and the keeper shall give him twice the amount stored (120);

if a man stores grain for another, the annual rate is 5 sila per kur (121);

if a man intends to give anything to another for safekeeping, he shall show it to witnesses, and draw a contract (122); if he gives anything for safekeeping without witnesses or a contract, and the other denies receiving it, there is no

ground for a claim against him (123).

The next 71 laws protect the family. Among these:

if a man accuses another's wife, but produces no proof, he shall be flogged before the judges and half of his head shall be shaved (127);

if a man takes a woman, but draws no contract, she is not his wife (128);

if a man's wife is caught with another, both shall be thrown in the water; but if her husband lets her live, the palace may also let live the one with whom she was caught (129);

if a man is caught violating a virgin, he shall be killed, but she shall be innocent (130);

if a man accuses his wife of adultery, but she was not caught with another, she shall swear her innocence before the god, and she shall return to her house (131);

if a man's wife is accused of adultery, but has not been caught with another, for the sake of her husband she shall submit to the river ordeal (132);

if a man is taken captive, and there is no food in the house, and his wife enters the house of another, and bears him children, and then her husband returns, she shall go back to him; the children shall be the heirs of their father (135);

if a man wants to divorce his wife who has born him no children, he shall restore her dowry, and then divorce her (138);

if a wife repudiates her husband, and says, you will not have me, the officials shall investigate; and if she is circumspect, and her husband is wayward and disparages her, she shall take her dowry and go to her father's house (142); but if she is not circumspect, and disparages her husband, she shall be thrown in the water (143);

if a man takes a wife, and she contracts a disease, and he wants to marry another, he shall not divorce his wife, he shall support her as long as she lives (148);

if a man leaves anything to his wife in writing, after his death his children shall bring no claim against her; but she shall leave her inheritance to her children, and not to anyone else (150);

if a wife has a contract with her husband that his creditors cannot seize her, if he contracted a debt before the marriage, his creditors shall

not seize her, and if she contracted a debt before the marriage, her creditors shall not seize him (151);

if a debt is incurred after the marriage, both shall be responsible to the creditor (152);

if a man chooses a bride for his son, and the son has lain with her, and then he himself lies with her, he shall be thrown in the water (155);

if after his father's death a man lies with his mother, they shall both be burned (162);

if a man leaves anything to his favored son, when after his death his estate is divided, that son shall first take his gift, then all brothers shall divide the rest of the estate (165);

if a man's wife bears him children, and then dies, and he marries another, and she bears him children, when he dies the children shall take the dowries of their mothers, and then shall divide the estate of the father equally (167);

if a man's wife bears him children, and a slave also bears him children, and the father declares these his children, and reckons them with the children of his wife, after his death the children of his wife and the children of the slave shall divide his estate equally; but the first son of his wife shall take his share first (170);

if a slave marries a woman and she bears him children, the owner of the slave shall have no claim of slavery against the children (175);

if a widow with small children wants to marry again, she shall not do so without the approval of the judges; the judges shall inventory the estate of her late husband, and then entrust it to her new husband to safeguard for the children (177);

if a man adopts a child and rears it, the child shall not be reclaimed (185);

if a craftsman adopts a child and teaches it a craft, the child shall not be reclaimed (188);

if a child says to the father who reared it, you are not my father, or to the mother who reared it, you are not my mother, its tongue shall be cut out (192);

if a child strikes his father, his hand shall be cut off (195).

The next 19 laws protect the individual. Even if the individuals are not all equal. Among these: if a highborn blinds the eye of a highborn, his eye shall be blinded (196); if he breaks the bone of

a highborn, his bone shall be broken (197);
 if he blinds the eye or breaks the bone of a lowborn, he shall pay 60 shekels (198);
 if he blinds the eye or breaks the bone of a slave, he shall pay one half of the slave's value (199);
 if a highborn knocks out the tooth of a highborn, his tooth shall be knocked out (200);
 if he knocks out the tooth of a lowborn, he shall pay 20 shekels (201);
 if a highborn strikes a highborn higher than himself, he shall be flogged in the assembly 60 times with an ox tail (202);
 if he strikes a highborn equal to himself, he shall pay 60 shekels (203);
 if a lowborn strikes a lowborn, he shall pay 10 shekels (204);
 if a slave strikes a highborn, his ear shall be cut off (205);
 if a highborn injures a highborn in a brawl, and swears, I did not injure him intentionally, he shall only pay for the doctor (206);
 if the injured dies, he shall swear in the same way, and he shall pay 30 shekels (207);
 if the injured is lowborn, he shall pay 20 shekels (208).

The next 63 laws regulate the trades. 13 laws regulate doctors and barbers. Among these:

if a doctor makes a cut with a knife and saves the life of a highborn, or makes a cut in his eye and saves his eye, he shall be paid 10 shekels (215); if it is a lowborn, he shall be paid 5 shekels (216); if it is a slave, 2 shekels (217);
 if a doctor makes a cut with a knife and kills a highborn, or makes a cut in his eye and blinds his eye, his hand shall be cut off (218); if it is a slave, he shall replace the slave (219);
 if a barber shaves the lock of a slave showing that it is a slave, his hand shall be cut off (226); if he swears, I did not know that it is a slave, he shall go free (227).

6 laws regulate building. Among these:

if a builder builds a house for a man, and completes it, he shall be paid 2 shekels per sar (228);
 if the house collapses, and causes the death of the owner, the builder shall be killed (229).

7 laws regulate boating. Among these:

if a man hires a boatman, and the boatman is

negligent, and the boat with its cargo sinks, the boatman shall replace the lost cargo (237);
 if a man hires a boatmen, he shall pay him 1 800 sila of grain per year (239).

37 laws regulate agriculture. Among these:

if a man rents oxen for a year, he shall pay 1 200 sila for a rear ox and 900 sila for a lead ox (242/3);

if a man rents an ox or ass, and a lion kills it, it shall be the owner's loss (244);

if an ox is a known gorer, and the officials warn the owner, and he does not control the ox, and it gores to death a highborn, the owner shall pay 30 shekels (251); if it is a slave, the owner shall pay 20 shekels (252);

if a man hires a laborer in the field, he shall pay him 2 400 sila per year (257); if he hires an ox driver, he shall pay him 1 800 sila (258); if he hires a herdsman, he shall pay him 2 400 sila (261);

if he rents an ox for threshing, he shall pay 20 sila (268); if an ass for threshing, 10 sila (269); if a goat for threshing, 1 sila (270);

if he rents a wagon with its oxen and driver, he shall pay 180 sila per day (271); if only the wagon, 40 sila (272).

The final 5 laws regulate slaves. Among these:

if a man buys a slave, and within a month the slave falls sick, he shall return the slave to the seller and receive back what he paid (278);

if a man buys a slave in a foreign country, and when he comes back someone tells him that he is the owner of the slave, if the slave is native to the country, the slave shall be released without any payment (280);

if the slave is native to another country, the buyer shall swear to the amount he paid, and the owner shall pay it to redeem the slave (281);

if a slave declared to his master, you are not my master, the master shall prove that it is his slave, and shall cut off the slave's ear (282).

The code concludes with an exhortation:

these are the laws of Hammurabi, the mighty prince, established to guide the land on the path of truth and justice;

I am Hammurabi, the mighty prince, I have not been heedless of the multitude of men whom Enlil entrusted to me and Marduk made my flock; I have not been lazy;

I have destroyed all foes, I have given the people peace, I have thrown light on them, I have made them stop fighting, I have made them live well, I have made them safe in their pastures, I have not let anyone molest them; the people of Sumer and Akkad are safely in my lap; I have given them prosperity, I have stopped the strong from taking the weak, I have protected the orphan and the widow; and I have carved these words of mine in stone, under this statue of mine, the prince of justice; and let anyone who is oppressed, let anyone who has a grievance, come before this statue, and listen to my words; and may my words redress his grievance, may he understand the law, and may he be content (*id.*).
May he.

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The advance is very great.

The most important steps in the development of the law are three. The first is the first code of laws, the code of Ur-Nammu. The third are the jurists, the development of jurisprudence in the two centuries of *pax Romana* established by Augustus. The code of Hammurabi is the second.

Again, the advance is not *ex nihilo*.

The entire valley is brought under one state by Hammurabi for the third time. And his is the fourth code of laws.

To bring the entire valley under one state, Sargon and his successors campaign over it annually for one century. One century of smiting leads to the development of administration, and peace. Then the one state falls apart. But when the entire valley is brought under one state again by Ur-Nammu, the state is under a code of laws from the first, there is less smiting, and peace prevails. Then the one state falls apart again. But in the following time of divided authority, there is the second code of laws, the code of Lipit-Ishtar in Isin, then the third code of laws, the code of Dadusha in Eshnunna. And when the entire valley is brought under one state again by Hammurabi, the state is again under a code of laws from the first, peace prevails from the first, and for one century peace prevails decisively.

When Samsuiluna subdues the last revolt in the lower valley in his 20th year, and Abiesuh

repulses the Kassite hordes early in his reign, one century follows, during which the state has to smite no one, neither its internal foes nor its external foes. Peace prevails decisively.

And in this way this one century is unusual.

All the fifty-odd centuries since the beginning of the state can be divided into four kinds. Centuries when several states smite one another. Centuries when one state succeeds in bringing all other states under itself, and smites continuously its internal and external foes. Centuries when hordes of wild men pillage the state. And centuries when the entire domain under the state is at peace, the state has no foes to smite, internal or external.

And of all the fifty-odd centuries since the beginning of the state of the last kind are but three. The one century under the later princes of Babylon. And the two centuries of *pax Romana* established by Augustus. Nor is it an accident that the earlier of these centuries is preceded immediately by the second most important step in the development of the law, the later two of these centuries coincide in time with the third most important step in the development of the law.

Two causes can be assigned to the one century of decisive peace under the later princes of Babylon.

One has to be that the entire valley is very well subdued. Its pacification has been cumulative. Counting back from Samsuiluna to Sargon, these are five and a half centuries, in which Sargon and his successors have campaigned over the valley for one century, Gutian hordes have pillaged the valley for two generations, Ur-Nammu and his successors have campaigned over the valley for one century, Amorite hordes have pillaged the valley for two centuries. In the generation before Hammurabi major smiting has resumed with the princes of Ashur, Eshnunna, and Larsa. Hammurabi has subdued the entire valley. And Samsuiluna has crushed all revolts. The entire valley is very well subdued.

But the other and decisive cause has to be that the population of the valley has been made to abide by the law. Hammurabi, the shepherd, has discovered how to make his flock abide by the law.

I am the shepherd. I have not been heedless of the multitude of men whom Marduk made my

flock. I have not been lazy. I have destroyed all foes, I have given the people peace, I have made them stop fighting, I have made them live well, I have made them safe in their pastures.

Hammurabi has made the people of Nippur, Eridu, Babylon, Ur, Sippar, Larsa, Uruk, Isin, Kish, Kutha, Borsippa, Dilbat, Kesh, Lagash, Girsu, Zabalam, Karkar, Adab, Mashkan-shapir, Malgium, Mari, Tuttul, Akkad, Ashur, and Nineveh abide by the law.

And that Hammurabi has made them all abide by the law can only be inferred from the fact of peace. But that Hammurabi has discovered how to make them all abide by the law, his code attests directly, clearly and distinctly.

Hammurabi has discovered all the following. That the formal ground of abidance by the law is the integrity of procedure. That the material ground of abidance by the law is the protection of property. That the protection of property entails the protection of the family. That the protection of the family entails the protection of the individual.

All of it rather explicitly.

And none of it has changed in the thirty-eight centuries since. The formal ground of abidance by the law is the integrity of procedure. The material ground of abidance by the law is the protection of property. The protection of property entails the protection of the family. The protection of the family entails the protection of the individual. Nor can any of it change, barring the evolution of the relevant organism into a not organism.

Ulpian writes: whenever we add something to natural law or subtract something from it, we thus make a law particular to ourselves, and this is civil law.

The difficulty is clear.

It is not that the law adds to me. This is not a difficulty. The difficulty is that the law subtracts from me. And worse, it adds to you.

Why the law will do that Hammurabi tells me: to make justice prevail. As Lipit-Ishtar has earlier told me: to stop the cries for justice. And earlier still Ur-Nammu has told me: so that justice and truth prevail.

How the law will do it Hammurabi also tells me: stop the strong from taking the weak. As

again Ur-Nammu has earlier told me: I did not let the man of 60 shekels take the man of 1 shekel. And Urukagina already, with the first inkling of the law, two-odd centuries before Ur-Nammu, has told me: the strong shall not strike the weak.

And how great the difficulty is indicated by the fact that six centuries separate Urukagina and Hammurabi, and the difficulty has persisted, and it is thirty-eight centuries since Hammurabi, and the difficulty persists.

When the law adds to me, this is clearly justice. But when the law subtracts from me, this may be justice to you, but it cannot be justice to me. And when it adds to you, this is clearly blatant injustice.

And the difficulty is not that Hammurabi cannot impose the law on me. Hammurabi is a mighty prince, he has smitten me, and he can impose anything on me. The difficulty is obtaining my consent. My consent to subtractions from me, and worse, to additions to you. So that I not just have the law imposed on me, so that I abide by the law.

This is what Hammurabi has discovered. How to obtain my consent.

Given the integrity of procedure, and given the protection of property, including the protection of the family, including the protection of the individual, I will abide by the law.

The integrity of procedure.

The first law of the first code, Ur-Nammu's, is: if a man kills a man, he shall be killed.

This is about a man killing a man.

The first law of Hammurabi's code is: if a man accuses another of murder, and fails to prove it, he shall be killed.

This is not about a man murdering another. It is about accusation, and proof.

The third law is: if a man bears false witness in a capital case, he shall be killed.

This is about witnesses, true and false, and showing the witnesses true or false.

The fifth law is: if a judge gives a verdict, and seals it, and later changes the verdict, and it is proved that he changed the verdict, he shall pay 12 times the amount at issue in the case, he shall be removed from the assembly, and he shall never be a judge again.

This is about the judge, and the verdict. And

not about the verdict being right. About the verdict being permanent. It is again about proof, too. And if it is proved that the judge changed the verdict, he shall not be killed. But he shall never be a judge again. And he shall be removed from the assembly.

The first 5 laws have involved in the law accusation, proof, witnesses, true and false, showing the witnesses true or false, the judge, the verdict, the permanence of the verdict. And the assembly, too. The first 5 laws have established the integrity of procedure.

And all the following laws, the majority explicitly, all of them explicitly or implicitly, involve accusation, proof, witnesses, true and false, showing the witnesses true or false, the judge, the verdict, the permanence of the verdict. And the assembly, too. Also investigation. Also contracts, receipts, and inventories. Also public proclamation, the city governor, the temple in the city, the officials, and the palace, too.

If a man buys without a witness or a contract. If the buyer cannot produce witnesses. If the owner cannot produce witnesses. If a man does not produce it at the public proclamation. The palace shall investigate the matter. The city governor shall restore the value of the lost property. The governor shall pay 60 shekels. The temple shall redeem the creditor. If there is not enough in the temple, the palace shall redeem him. The trader shall collect receipts. The creditor shall produce witnesses. The trader shall produce witnesses. She shall take the villains to the palace. He shall show it to witnesses and draw a contract. If a man takes a woman, but draws no contract, she is not his wife. If her husband lets her live, the palace may also let him live. The officials shall investigate. The judges shall inventory the estate. He shall be flogged in the assembly.

Accusation, proof, witnesses, true and false, showing the witnesses true or false, the judge, the verdict, the permanence of the verdict – investigation – contracts, receipts, inventories – public proclamation, the city governor, the temple in the city, the officials, the assembly, the palace. The laws have established the integrity of procedure by involving in every one case, and rather directly, everyone.

It need not be doubted that Hammurabi has made me abide by the law.

The ground of the abidance is the integrity of procedure.

The formal ground.

Under the law I am not myself, I am one of everyone. Uniformly.

The integrity of procedure has reduced everyone to being one of everyone. Uniformly.

So I may rob and I may be robbed, I may be a lazy soldier and I may take the field of the lazy soldier, I may be a tenant and I may be an owner, I may open my branch of the canal and I may have my field swept away by that branch of the canal, I may be a creditor and I may be a debtor, I may give a slave to service a debt and I may be that slave given to service a debt, I may be a husband accusing my wife of adultery and I may be a wife repudiating my husband, I may be a highborn striking a highborn higher than myself and I may be a slave striking a highborn, I may be a doctor making a cut with a knife and I may have a doctor make in me a cut with a knife, I may have an ox who is a known gorer and I may be gored to death by that ox, I may buy a slave in a foreign country and I may be that slave. Whatever I be, there will be uniformly the same. Accusation, proof, witnesses, true and false, showing the witnesses true or false, the judge, the verdict, the permanence of the verdict – investigation – contracts, receipts, inventories – public proclamation, the city governor, the temple in the city, the officials, the assembly, the palace.

Abiding by the law, I am like a soldier in an army. The 5 400 eating bread daily before Sargon. A legion in Rome. A division in world war two. In that also that as long as the army is an army desertion will be the exception, and the better the army, the rarer the exception. The rewards and the punishments are similar, too.

The protection of property.

The philosophers have appreciated property.

Locke writes: the great and chief end of men's uniting into commonwealths, and putting themselves under government, is the preservation of their property.

Rousseau writes: the first who, having enclosed a piece of land, thought to say, this is mine, and found people simple enough to believe

him, was the true founder of civil society.

Marx writes: the relations of production, or what is only the legal term for them, the property relations, constitute the economic structure of society, which determines the superstructure of legal, political, religious, artistic, philosophical, and in short ideological forms.

Machiavelli also, less generally, but not less to the point, writes: men will sooner forget the death of their fathers than the loss of their patrimony (*Prince*, 17).

And long before the philosophers Hammurabi appreciates property.

The code is first, foremost, beginning to end, through and through, about property, and most particularly about its protection.

Very vigorous protection.

If a man steals from a god or from the palace, he shall be killed, and the one who received the stolen goods shall be killed.

If a man steals an ox, sheep, ass, pig, or boat, if it belongs to a god or the palace, he shall pay 30 times its value, if it belongs to a man, he shall pay 10 times its value. If he cannot pay, he shall be killed.

If a man says he lost something and then saw it in another's possession, and produces witnesses, but the other says he bought it, and produces witnesses, the judges shall examine the case. And if the seller is the thief, he shall be killed. If the buyer cannot produce the seller or witnesses to the purchase, he is the thief, he shall be killed, and the owner shall have back his property. If the owner cannot produce witnesses, he is a liar, and he shall be killed.

If a man harbors a fugitive slave, and does not produce the slave at the public proclamation, he shall be killed.

If a fugitive slave is caught, and refuses to say who the owner is, the palace shall investigate the matter and return the slave to the owner.

If a man breaks into a house, he shall be killed and hanged before the house.

If the robber is not seized, the man who was robbed shall declare before the god what was stolen, and the city governor shall restore to him the value of the lost property.

20 laws protect nothing but property. The next 16 laws protect military service, including most

particularly the field of the soldier. The next 11 laws regulate tenancy, protecting property. The next 7 laws regulate liability, protecting property. The next three dozen laws regulate orchards and houses, protecting property, and fix interest rates, protecting property, and very vigorously, too, if the annual rate for silver is 20 %, for grain 33 %. The next 9 laws regulate investment, protecting property. The next 4 laws regulate inns, and these are not concerned with the protection of property explicitly. They are yet concerned with the price of beer and grain. The next 15 laws regulate the service of debts and pledges, protecting property. The next 71 laws protect the family, including most particularly inheritance. The next 19 laws protect the individual, including most particularly the highborn as highborn, the lowborn as lowborn, and the slave as slave. The next 63 laws regulate the trades, protecting property. And the last 5 laws regulate slaves, protecting property.

3 of the 5 laws establishing procedure are concerned with property explicitly as well. All in all, of the some 280 laws in the code not less than 200 are concerned with property explicitly.

Again, it need not be doubted that Hammurabi has made me abide by the law.

And why the protection of property will be the material ground of abidance by the law should not be too difficult to explain.

Whatever else the state has been – and it has been very much else – it has been also the vast accumulation of wealth.

How vast, in particular, the code, being very definite in its additions and subtractions, indicates clearly and distinctly.

If a shepherd grazes sheep or goats in a field without permission, he shall pay the owner of the field 6 000 sila of grain per 18 iku of field grazed. If a creditor advances grain, he shall take as interest 100 sila of grain per kur. If a man hires a boatman, he shall pay him 1 800 sila of grain per year. If a man rents oxen for a year, he shall pay 1 200 sila for a rear ox and 900 sila for a lead ox. If a man hires a laborer in the field, he shall pay him 2 400 sila per year. If he hires an ox driver, he shall pay him 1 800 sila. If he hires a herdsman, he shall pay him 2 400 sila.

And if I will have a stake in the state, the organism that I am, it will be my share of the

accumulated wealth. And if so, it will be by protecting my share of the accumulated wealth that civil law positively add to me. Even when it subtracts from me elsewhere. Even when it adds to you in this as well.

This, that if I have a stake in the state it is my share of the accumulated wealth, can explain the philosophers. Why it may be that the first who, having enclosed a piece of land, thought to say, this is mine, and found people simple enough to believe him, was the true founder of civil society. Why it may be that the property relations constitute the economic structure of society, which determines the superstructure of legal, political, religious, artistic, philosophical forms. Why it may be that the great and chief end of men's uniting into commonwealths, and putting themselves under government, is the preservation of their property. And why no political doctrine has found greater favor than this.

Men will forget the death of their fathers. But they will never forget the loss of their patrimony.

Thus, Hammurabi protects property. He has my eager consent.

The material ground of abidance by the law is the protection of property.

And again, abiding by the law, I am like a soldier.

If a soldier ordered to go on a campaign hires another to go in his place, he shall be killed. The one he hired shall have his field.

If a soldier is lazy and neglects his field, and another takes it over, and performs the service for 3 years, and the soldier then wants the field back, it shall not be given to him. The one who performed the service shall continue to perform it.

If a soldier is taken captive, and a creditor pays his ransom, the soldier shall redeem the creditor. If he does not have enough, the temple in his city shall redeem the creditor. If there is not enough in the temple, the palace shall redeem him. But the field given to the soldier for service shall not be used for the ransom.

And again, none of this has changed in the thirty-eight centuries since, nor can it change, barring the evolution of the relevant organism into a not organism.

The protection of the family.

If a man takes a woman, but draws no contract,

she is not his wife.

If a man's wife bears him children, and a slave also bears him children, and the father declares these his children, and reckons them with the children of his wife, after his death the children of his wife and the children of the slave shall divide his estate equally.

If a widow with small children wants to marry again, she shall not do so without the approval of the judges. The judges shall inventory the estate of her late husband, and then entrust it to her new husband to safeguard for the children.

The protection of the family is protection of inheritance.

If inheritance is not protected, property is not protected.

It is inheritance, too, and thus property, that adultery compromises.

If a man's wife is accused of adultery, but has not been caught with another, for the sake of her husband she shall submit to the river ordeal.

The protection of the individual.

Not an eye for an eye. An eye of a highborn for an eye of a highborn. An eye of a lowborn is 60 shekels. An eye of a slave is one half of its value.

Moreover, if a highborn strikes a highborn higher than himself, he shall be flogged in the assembly 60 times with an ox tail. But if he strikes a highborn equal to himself, he shall pay 60 shekels. And for 60 shekels a lowborn can strike a lowborn 6 times.

The code protects the individual as highborn, or lowborn, or slave. It protects the individual also as highborn higher than another highborn. And it protects the individual as slave very much more vigorously than it protects him as either highborn or lowborn. Not only in that there are many more laws concerned with slaves. In that the value of a slave is not that much lower than the value of a lowborn or even a highborn. Saved by a doctor, the life of a highborn is worth 10 shekels, the life of a lowborn 5 shekels, the life of a slave 2 shekels. The life of a highborn gored to death by an ox is worth 30 shekels, the life of a slave 20 shekels. How much the life of a lowborn gored to death by an ox is worth the law is silent. Perhaps a lowborn is never gored to death by an ox. Perhaps he shall know better than to be gored

to death by an ox.

Taking it for granted that the individual is highborn, and highborn higher than another highborn, or lowborn, or slave most probably by inheritance, and either way, whether it is by inheritance or not, being highborn, and highborn higher than another highborn, or being lowborn, or being slave is his inheritance, the protection of the individual is protection of inheritance.

If the individual is not protected, inheritance is not protected, and if inheritance is not protected, property is not protected.

Hammurabi concludes: let anyone who is oppressed, let anyone who has a grievance, come before this statue, and listen to my words; and may my words redress his grievance, may he understand the law, and may he be content.

There is no evidence that he understood the law. One century of peace, however, as decisive as there has been peace, indicates strongly that he was content.

As to Hammurabi, he understood the law better than any of his predecessors, and better than but a very few of his successors. On this ground he was, presumably, also content.

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The development of the state has been the whole of which the fundamental parts have been the development of the law, of religion, and of custom.

The state of Babylon under Hammurabi and his 5 successors is the fourth of the most important steps in the development of the state, after the beginning of the state, the state of Akkad under Sargon and his 4 successors, and the state of Ur under Ur-Nammu and his 4 successors.

There is the great advance in the development of the law.

And there is a major development in religion.

Hammurabi is the prince of Babylon, he conquers the entire valley, and he becomes the prince of Sumer and Akkad.

In Sumer and Akkad Enlil has long been the lord of heaven and earth, and the lord of all lands. Anu has been the lord of the gods. Accordingly, Hammurabi is trusted by Anu and Enlil, he destroys at the command of Anu and Enlil, Enlil has given him his great power.

But Marduk is the god of Babylon. Accordingly, Hammurabi is the beloved of Marduk, he is victorious for Marduk, he destroys with the great power of Marduk, he destroys with the wisdom of Marduk.

Also, however, Hammurabi has removed all uncertainty as to who is the one and only one prince of Sumer and Akkad. The prince of Babylon is the one and only one prince of Sumer and Akkad. And Hammurabi already has begun removing the uncertainty as to who is the one and only one lord of heaven and earth, lord of all lands, and lord of the gods.

The code begins: when Anu, lord of the great gods, and Enlil, the lord of heaven and earth who determines the destiny of the land, when Anu and Enlil allotted the supreme command to Marduk, the firstborn of Ea, and exalted him above the gods to govern all peoples for Enlil, when they gave Babylon its great name, made it preeminent over the four quarters, and established in it princeship forever with foundations firm as the heaven and the earth.

Anu and Enlil allotted the supreme command to Marduk, and exalted him above the gods to govern all peoples for Enlil.

Similarly, when two centuries later, in the other valley, the princes of Thebes become the princes of the entire valley, Amun, the god of Thebes, will become Amun-Re, the lord of the gods.

In this valley, Marduk becomes the lord of heaven and earth, lord of all lands, and lord of the gods. And he becomes much more, too.

Babylon is the second state, after Ur, of massive writing, and of much more massive writing now.

Among the longer compositions from this time are *When the gods were men* and, the most important, *When on high*.

When the gods were men is a three-tablet composition. Its importance is attested by the fact that it is preserved in several copies. One of the copies has a colophon, dating it precisely:

1 245 lines; 3 tablets; the hand of Nur-Aya, junior scribe; month of . . . , year when Ammisa-duqa, the prince, . . . (*id.*).

When on high is a seven-tablet composition. It is from the same time, dated to the century

around c. 1594. Its importance is attested by the fact that it is preserved in copies as numerous and widely disseminated as any Akkadian composition. The latest copies are from the time of Alexander's successors. Like the code of Hammurabi, *When on high* was copied, and again, and again, and again, for the following one and a half millennia.

When the gods were men is the first account of the making of men. It begins:

when the gods were men, they did all the work,
the work was very heavy, and the misery of the
gods was very great (1).

So Enki proposes:

let us slaughter one god, let us mix clay with his
flesh and blood, and make men to do the work
(*id.*).

And so the gods do, they slaughter one god, mix clay with his flesh and blood, and make men. The gods are relieved of their misery, the men do all the work. But the men procreate, and more, and more. Enlil is annoyed, and sends a flood to wipe them all out. Enki saves one man, Atrahasis. Though angry, Enlil allows men to continue. Yet to correct the earlier error, he decrees:

let there be death for all men (3).
When on high is the first account of creation. It incorporates the account of the creation of man. In *When on high*, however, very much more, and very much more important, is created.

It begins:

when on high the heaven had no name,
and down below the earth had no name,
Apsu was the begetter, Tiamat bore all.

So Apsu begets and Tiamat bears the gods. Within Apsu and Tiamat Lahmu and Lahumu are formed. Within Lahmu and Lahumu Anshar and Kishar are formed, greater than Lahmu and Lahumu. The firstborn of Anshar and Kishar is Anu, their equal. Anu begets Ea, great in wisdom, great in strength, greater than Anshar.

All this progeny of Apsu and Tiamat is very noisy and Apsu cannot sleep. Let us do away with them, Apsu decides. But the gods hear of the decision, Ea slaughters Apsu, and in the middle of the slaughtered Apsu Ea begets Marduk, the greatest of the gods, the wisest, the lord.

Tiamat, to avenge her husband, charges Qingu to lead an army of serpents, lions, scorpions, fish,

bulls against the gods. The gods acknowledge Marduk:

you are the greatest of the great gods,
your destiny is unrivaled,
your command is supreme,
your command cannot be changed,
your command shall be truth,
your word shall never be wrong,
no god shall ever go beyond the limits you set.

Marduk leads the army of the gods against Tiamat and Qingu. Marduk is victorious:

he split Tiamat in two, like a fish,
and set up one of her halves to be heaven.

Marduk then arranges his domain. First on high the heaven:

he set up the stations of the great gods, one star
for each;

he set up the year, and marked its limits,
twelve months of three stars each;
he made the days of the year,
fixed the paths of the stars, lest they go astray;
he allotted their domains to Enlil and to Ea;
in the belly of Tiamat he fixed the zenith;
he made the moon, to shine in the night,

down below on earth:

from the eyes of Tiamat he let the Euphrates and
the Tigris flow,

below the earth:

he set up one of her halves as a roof, and made
the netherworld,

on earth again:

he built Babylon, abode of the great gods,
and finally, to complete the arrangement of Marduk's domain, the gods bring Qingu before Ea, slaughter him, from his blood Ea makes men, and charges them with the work of the gods.

Creation complete, the exaltation of Marduk concludes with an enumeration of his 50 names.

Among them:

bestower of ploughing, who fixes the boundaries
of the fields,
creator of grain and of seed;
honored in council, whose counsel excels,
to whose counsel even the gods, who fear
nothing, pay heed;
who steers the decrees of Anu, Enlil, and Ea,
who allotted to them their domains (VII, 1-9);
who oversees justice, who uproots false
witnesses,

the state the relation of the princes and the gods continues to intensify.

And seven centuries after Eanatum, under the princes of Babylon, when the valley is unified for the third time, and made to abide by the law, too, the intensification of the relation culminates in the elevation of Marduk above all creation.

Princeship is one and only one. Nine centuries of strenuous labors – counting from Hammurabi back to Enmebaragesi – have established this steadily more firmly.

And, hence, that lordship of heaven and earth is one and only one is now established unshakably. Nor have the labors of Marduk been less strenuous, from leading the army of the gods against his progenitor, and splitting her in two, like a fish, through making the moon and the netherworld, and gathering all wisdom into himself. Nor have his labors been in vain, considering that he is the progenitor of god, when he later on talks to Moses, later on sends forth Jesus, later on sends an angel to Muhammad.

The population of the state of Hammurabi and his 5 successors is some four million. Some one eleventh of humanity.

The power of smiting has been transferred to the law. And if one eleventh of humanity abides by the law, the transfer has been very successful.

The power of smiting has been transferred as well to religion. Not only all the power of the prince has been transferred to Marduk, the power has been increased beyond all bounds in the transfer. And if one eleventh of humanity was made under Marduk, and charged with the work of the gods under him, this transfer has been very successful as well.

The development of the two parts, of the law and of religion, is within the whole, within the development of the state.

The development has now made explicit the dependance of the two parts on one another. Witnesses swear before the god. Marduk oversees justice, and uproots false witnesses.

And the effect of the development of the two parts, and both separately and jointly, on the whole, on the state, will be fundamentally the same. By the transfer of the power of smiting to the law and by its transfer to religion, both, the power of the state will increase greatly. There

will be a great danger, however, hiding in that great increase.

A state with a law-abiding population will be substantially less likely to have internal foes, and the longer the population remains law-abiding the more so. A law-abiding population, however, and the longer it remains law-abiding the more so, will be liable to enfeeble the state in the face of its external foes, when these appear. And appear these will.

Abiding by the law, I am like a soldier. I am a soldier with a field, however. And as peace and prosperity prevail, I will be liable to neglect valor in favor of the field. Worse, as peace and prosperity prevail, the state will be liable to neglect valor in favor of the field.

Also, Hammurabi is the shepherd, I am his flock. Marduk, however, has made me Hammurabi's flock. As the law has taught me, Hammurabi is the tenant, Marduk is the owner. And should the tenant be in danger of being evicted, I will be liable to suppose that this is the will of the owner, nay, the right of the owner. Very much worse, the tenant will be liable to suppose that this is the will of the owner, nay, the right of the owner.

When on high is, in fact, from the time when the state is being evicted.

In the meantime, with the advance in the development of the law, and the development of religion, the transformation of custom as well has continued. The taming of humanity has continued.

Hammurabi and his 5 successors are a very important step in the generalization of the practice of the virtues which must be practiced. One eleventh of humanity has remained under Hammurabi and his 5 successors for two centuries, abiding by the law, charged with the work of the gods under Marduk. The law is, Hammurabi affirms in the preamble: to make justice prevail in the land, to destroy wickedness and evil, to stop the strong from taking the weak. In the concluding exhortation, he affirms: the people of Sumer and Akkad are safely in my lap, I have given them prosperity, I have stopped the strong from taking the weak. And to the degree to which the strong has not just been made to stop taking the weak, to the degree to which the strong has

consented to stop taking the weak, the virtues which must be practiced have been practiced. By one eleventh of humanity, for two centuries.

Babylon under Hammurabi and his 5 successors is the third great state. After Akkad under Sargon and his 4 successors. And Ur under Ur-Nammu and his 4 successors.

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And in this great state, as in the earlier, the advance in the acquisition of knowledge is very great.

The rebuilding of the one and only one state is an advance in the acquisition of knowledge. The greatest code of laws is a great advance in the acquisition of knowledge. The first account of creation is an advance in the acquisition of knowledge.

The code also attests an advance in the description of the surface of the earth. The advance in history continues. There is a very great advance in mathematics. And the beginning of physics is a very great advance.

In the preamble to the code Hammurabi enumerates 25 cities. 22 of the 25 have been unearthed. It is thus clear where exactly each of these is. 3 of the 25, Kesh, Karkar, and Akkad, have not been unearthed. It is nevertheless clear where each of these is, too, and the place of each of these in Hammurabi's enumeration all by itself indicates where it is.

The 25 cities are enumerated in this order:

1. Nippur,
2. Eridu,
3. Babylon,
4. Ur,
5. Sippar,
6. Larsa,
7. Uruk,
8. Isin,
9. Kish,
10. Kutha,
11. Borsippa,
12. Dilbat,
13. Kesh,
14. Lagash,
15. Girsu,
16. Zabalam,
17. Karkar,

18. Adab,
19. Mashkan-shapir,
20. Malgium,
21. Mari,
22. Tuttul,
23. Akkad,
24. Ashur,
25. Nineveh.

Each city is noted with its tutelary god or goddess.

1 is thus Nippur. Nippur, the city of temples, is the city of Enlil.

3 is Babylon. Babylon is the city of Marduk. It is also the seat of princeship.

2 is Eridu. When princeship descended from heaven, it came to Eridu. Eridu thus precedes Babylon. Also, however, the latitude of Eridu is $30^{\circ} 50' N$. Eridu is the southernmost city in the enumeration. It is also the southernmost city in the valley.

25, the last city in the enumeration, is Nineveh. The latitude of Nineveh is $36^{\circ} 20' N$. Nineveh is the northernmost city in the enumeration. It is also the northernmost city in the valley.

4 is Ur. Ur is the southernmost major city, very close to Eridu, close to the sea, at the southern reaches of the lower valley.

5 is Sippar. Sippar is just north of Babylon, where the two rivers approach one another, at the northern reaches of the lower valley.

6 through # 20, Larsa through Malgium, are all in the lower valley, all north of Ur, south of Sippar. All the major cities among them, 6. Larsa, 7. Uruk, 8. Isin, and 9. Kish, are listed in the same order, south to north. Larsa is more northerly than Ur, Uruk is a bit more northerly than Larsa, Isin is more northerly than Uruk, Kish is more northerly than Isin.

The first twenty cities are the center of the state. They are also the lower valley. This is Sumer.

The center of the state, and the lower valley, described in some detail, the enumeration turns to the periphery of the state, and the upper valley.

The next two cities, # 21 and # 22, are in the upper valley, in the northwest, on the Euphrates, in this order south to north, Mari and Tuttul.

23 is Akkad. The city of Akkad has not been unearthed. Very well attested, it is clear where it

is, it is buried under Baghdad. It is north of Sippar, in the middle valley. Akkad is the city of Ishtar, the lady or war. It is the city also of Sargon.

The last two cities, # 24 and # 25, are also in the upper valley, in the north, on the Tigris, in this order south to north, Ashur and Nineveh.

Eridu to Nineveh, south to north along the meridian the distance is 610 km.

There is but one error in the enumeration. The major city of Eshnunna is omitted.

Hammurabi, the shepherd, has enumerated his flock. And while enumerating his flock, he has taken an important step toward the discovery of orientation. Across 610 km. The political description is becoming geographical.

The advance in history can be traced back to three documents, the Babylonian prince list, the Babylonian chronicle beginning with the descent of princeship from heaven, and the Babylonian chronicle reporting the Hittite raid on Babylon. These three are the more important among two dozen similar documents.

The dating of all three presents difficulties. In all three cases one of the causes is the advance in history.

The state begins with Kish, so the successors of the first princes style themselves princes of Kish, when they are the princes of Kish and when they are not. The state rises greatly with Akkad, so the successors of the princes of Akkad style themselves princes of Akkad, when they are the princes of Akkad and when they are not. The state rises greatly again with Babylon, and so the successors of the princes of Babylon style themselves princes of Babylon, when they are the princes of Babylon and when they are not.

There have thus been five discontinuous series of princes of Babylon.

First, the series at issue, the most important, by far, from Sumuabum, prince c. 1894-80, to Samsuditana, prince c. 1625-594.

Second, the series from Kashtiliashu, prince c. 1570, to Agum, prince c. 1530. After the fall of the great state of Babylon Kassite hordes overrun the valley, and these are Kassite princes. Kassite princes, princes of Babylon, they are also princes of the sea land. The sea land is the land adjoining the Persian Gulf.

Third, the series from Kadashman-Enlil, prince c. 1400, to Kurigalzu, prince c. 1340. These are also Kassite princes. These are the princes also attested by their letters, in the Amarna archive, to Amenhotep III and Amenhotep IV.

Fourth, the series of whom the one important prince is Nebuchadnezzar, prince c. 1125. Princes of Babylon, these are also princes of Isin.

Fifth, the second most important, the series from Nabopolassar, prince 626-05, to Nabonidus, prince 556-39. The most important of these princes is Nabopolassar's successor Nebuchadnezzar. These are the princes who bring down Assyria, rise strongly after its fall, if briefly, then are themselves brought down by the great kings.

All the successor Babylons are Babylons because of the importance of the first Babylon. For the same reason Augustine writes in *The city of god*: Babylon is the first Rome (XVIII, 2), and: Rome is the second Babylon (*id.*). For the same reason st John has a vision in the *Apocalypse* of: a fornicating woman, Babylon, the great whore (17), and whether she is the first Babylon or the second.

Thus, the Babylonian prince list, the Babylonian chronicle beginning with the descent of princeship from heaven, and the Babylonian chronicle reporting the Hittite raid on Babylon, like all other important documents, were copied and continued under the successor Babylons, and again, and again.

All three are preserved in late Babylonian copies, from the time through the fifth series of princes of Babylon and beyond.

In particular, some of the copies of the Babylonian prince list continue well beyond the fifth series, through Alexander's successors in Asia.

The Babylonian chronicle beginning with the descent of princeship from heaven records princes of Isin, princes of Elam, and princes of the sea land from the time between the second and the fourth series.

The Babylonian chronicle reporting the Hittite raid on Babylon ends with Agum, in the second series.

Nevertheless, the foundation of each of the three documents, indicated by language and subject matter, is from the first Babylon.

Thus, the Babylonian prince list divides sharply into two parts. It has the 11 princes of the first Babylon, with reign years and affiliations. And it has some dozens of later princes, with reign years and affiliations. The 11 princes of the first Babylon, with their reign years and affiliations, are corroborated amply by the inscriptions of the princes. Among the later princes are: 11 princes of Urukug, they reigned 368 years (*id.*), and: 36 princes of . . . , they reigned 576 years, 9 months (*id.*). The list has the names of all 11 princes of Urukug, and of the 36 princes of . . . it has the names of 12, the names of the other 24 having disappeared in a lacuna. Very fortunately. For none of the 11 princes of Urukug, they reigned 368 years, or of the 12 princes of . . . , they reigned some two centuries, is corroborated by inscriptions, his own or any other.

Ignoring the continuations, then, the Babylonian prince list – the list of the 11 princes of the first Babylon – can be dated to the reign of the last of them, Samsuditana.

And the Babylonian prince list is an advance. With its predecessors, the Sumerian prince list, the Isin prince list, and the Larsa prince list, it has established the continuous series of the princes from Sargon, prince *c.* 2337-281, through Samsuditana, prince *c.* 1625-594, the entire series corroborated by the inscriptions of the princes. Hence, the chronology of the seven and a half centuries from Samsuditana back to Sargon rests firmly on the prince lists. Chronology resting firmly on the prince lists resumes with the Assyrian prince list, the series of princes corroborated by the inscriptions of the princes resumes with Ashur-uballit, prince *c.* 1363-27. The two and a half centuries between Samsuditana and Ashur-uballit are one of the gravest chronological problems.

The Babylonian prince list is an advance.

One of the two chronicles is not an advance, but it yet attests the broadening, if not the deepening, of the concern with the past. And the other chronicle is an advance.

The chronicle beginning with the descent of princeship from heaven divides into two parts in the same way. It has the 11 princes of the first Babylon, dividing the events recorded in the chronicle into those before them and those after

them. Those after them involve the same kind of princes as the princes after them in the Babylonian prince list. Ignoring the continuation in the same way, then, the foundation of the chronicle can be dated also to the reign of Samsuditana.

The chronicle begins:

when Anu, Enlil, and Ea . . . princeship in the land . . . the prince to be the shepherd of the people; and they made the people bow before the prince, made the prince the lord of the four quarters, and princeship descended from heaven to . . . (*id.*).

Despite the lacuna, where on earth princeship descended from heaven is clear. For the chronicle next incorporates the antediluvian prince list in its entirety. Princeship descended from heaven to Eridu, it was then taken to Badtibira, then to Larsa, then to Sippar, then to Shuruppak, then the flood swept over.

About the flood the chronicle is more explicit. The cause of the flood was, as it is in *When on high*, that the men were very noisy and Enlil could not sleep. After the flood princeship again descended from heaven, this time to . . .

And despite this lacuna, too, it is clear that this time princeship descended to Kish. For after the lacuna the chronicle has four of the princes of Kish in the Sumerian prince list, in the order of the list:

Etana, Balih, Enmenuna, Melamkish (*id.*).

After another lacuna the 11 princes of Babylon with their reign years are listed (*id.*).

The chronicle attests synthesis of sources.

Even if it attests also synthesis of events in heaven and events on earth. And rather more of its successors will learn this kind of synthesis from it than that.

The Babylonian chronicle reporting the Hittite raid on Babylon ends with Agum. It also divides into two parts in the same way. It records events before the fall of Babylon. And it records events, beginning with the fall of Babylon, in the following two-odd generations. In this case, however, the later part – the continuation – is also important. The princes in the later part are also corroborated independently. This chronicle has to be dated to the reign of Agum.

The earlier part records the deeds of 13 princes beginning with:

Sargon, prince of Akkad, he rose under Ishtar, he had no rival, he had no equal (*id.*).

The following 12 princes are:

Naram-Sin, son of Sargon, he captured Resh-Adad, prince of Apishal, and Mannudannu, prince of Magan;

Shulgi, son of Ur-Nammu;

Erra-Imiti, the prince, he made Enlil-Bani, the gardener, prince in his place;

Ilushuma, prince of Ashur;

Hammurabi, prince of Babylon, he marched against Rim-Sin, prince of Ur;

Samsuiluna, son of Hammurabi;

Abieshuh, son of Samsuiluna (*id.*).

Marduk is involved in the deeds of the princes only once:

because of the evil Sargon did, the great lord Marduk sent a famine to wipe out his people, and afflicted him so he could not sleep (*id.*).

Not all the princes are important. Erra-Imiti and Enlil-Bani are among the not important princes of Isin. The prince of Apishal Resh-Adad and the prince of Magan Mannudannu cannot be burdened with the presumption of reality on grounds other than this chronicle. There are errors. Naram-Sin is not the son of Sargon. Rim-Sin is the prince of Larsa rather than of Ur. Nevertheless, Sargon predates the chronicle by some seven and a half centuries. And the sequence established by the chronicle – princes of Akkad – princes of Ur – princes of Isin – princes of Ashur and of Larsa – princes of Babylon – is not only, in fact, the sequence of these princes across some seven and a half centuries. It attests synthesis of sources, too. As well as a rather better judgment, for a historian, in the selection of the sources.

This is the chronicle also which records the fact:

in the time of Samsuditana the Hittites marched on Akkad (*id.*).

Akkad is Babylon, and the Hittite prince Mursili destroyed Babylon c. 1594.

The dependance of the labors of the 3 historians on the labors of the princes is explicit.

Including in the involvement of Marduk in the labors, those of the princes and hence those of the historians. And rather more of their successors will learn this from them, too, than synthesis of sources. Because of the evil the princes will do,

god will keep sending plagues on their peoples, and afflictions on themselves.

These centuries are also the first of the three brightest periods in the development of mathematics. The second, twelve centuries after the first, are the two and a half centuries from Hippocrates of Chios to Hipparchus. The third, seventeen-odd centuries after the second, are the two centuries from Viète to Laplace.

The very great advance in mathematics is attested by two dozen mathematicians *par excellence*. Their labors have been described in detail above and will be again below.

One of the mathematicians is the Venus tablet of Ammisaduqa. The Venus tablet of Ammisaduqa is *par excellence* the first physicist. His labors as well have been described in detail above and will be again below.

Thirty-two and a half centuries later, Bacon concludes: the times favorable to the advancement of knowledge were short.

And so they have been.

But that time was very favorable.

That time also shows clearly and distinctly the unity and uniformity of the advancement across all the kinds of the acquisition of knowledge.

The advance in the law and the advance in mathematics are the greatest. And the mathematical character of the code of Hammurabi is indicated unambiguously. In the sharp separation of procedure, in its first 5 laws, from the rest of the law. In the division of the laws into kinds, and the exhaustive treatment of one kind before turning to another. In the definiteness of all laws, and the explicit quantification of most of them. Nor is the quantification, including as it is the calculation of interest rates, elementary. Most of all, the mathematical character of the code is indicated in its consistency. It has some 280 laws, and none of them is inconsistent with any other. The magnitude of this feat can be judged by the fraction which those treatises have been, of all treatises written since, that are not inconsistent with themselves.

The account of creation of *When on high* is better than either of those of *Genesis* in being more physical. It is more explicitly concerned with the phenomena, the stars, their stations, the year, its limits, the twelve months of three stars

each, the days of the year, the paths of the stars, the zenith, the moon, and the Euphrates and the Tigris, too. Nine centuries later Hesiod first asks: how did gods and the earth first come to be, and rivers, and the sea, and the stars, and the heaven? *When on high* anticipates, and not too remotely, Hesiod's question.

The step toward the discovery of orientation is not too remote either, and orientation is a mathematical problem.

The historians' synthesis of sources does not attest an impeccable, for historians, judgment in the selection of the sources, but synthesis it is.

The times favorable to the advancement of knowledge have been short. With the advancement at that time, however, and not before, the advancement can be judged irreversible.

Babylon was a great state.

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In the two centuries from Hammurabi to Samsuditana the particulars indicate 2 states. Babylon. And the Hittite state.

Hattusa.

Through the time of the fall of Babylon, the princes are 3,

Labarna	prince c. 1650,
Hattusili	prince c. 1630,
Mursili	prince c. 1610.

The city of Hattusa is in central Asia Minor. The domain of the princes of Babylon reached in the northwest to Tuttul, on the Euphrates. Hattusa is 600 km northwest of Tuttul.

And the state which the princes of Hattusa built is very important. It is with this state that the domain brought under the state expanded beyond the two valleys, the valley of the Nile and the valley of the two rivers.

In the valley of the two rivers, the state begins in Kish, in the lower valley. Three and a half centuries later, Sargon and his successors bring the entire valley under the state, west to the Mediterranean, north to the sources of the Tigris and the Euphrates. Seven centuries after the beginning of the state, three and a half after Sargon, after the fall of Akkad and the rise and the fall of Ur, the independent state of Ashur begins in the upper valley, in the north. One and a half centuries later, the independent state of

Mari begins in the upper valley, in the west, and the independent state of Yamhad begins in the far west, on the Mediterranean littoral. With the rise of Babylon Ashur disappears for one and a half-odd centuries, and Mari disappears altogether. Yamhad remains small, and ephemeral. And ten-odd centuries after the beginning of the state, six and a half-odd after Sargon, three-odd after the beginning of Ashur, one-odd after the beginning of Yamhad, when Babylon continues to dominate the valley, the Hittite state begins beyond the mountains in the north, in Asia Minor.

The Hittite state continues for one and a half centuries. The princes above are the first 3 of a continuous series of 8 princes. Then the Hittite state disappears for one and a half centuries. Then there is again the Hittite state for one century-odd, another continuous series of 8 princes. These later Hittite princes are the princes attested by Amenhotep III and Ramesses II. Then the Hittite state disappears altogether.

Attesting the rise of the state, the inscriptions of the early Hittite princes are relatively abundant. Attesting also the beginning of the state, however, they are not too explicit.

The most important of the inscriptions of the 8 early Hittite princes are the annals and the testament of Hattusili, the second of the 8, and the edict of Telipinu, the last of the 8.

In his edict Telipinu begins by recording the deeds of his predecessors. And he thus establishes the series of the early Hittite princes. In particular, Telipinu reports:

once Labarna was the great prince;
then Hattusili was prince in Hattusa;
then Mursili was prince in Hattusa (*id.*).

In his testament Hattusili reports also:
my son Labarna is not my son anymore;
his son Mursili is my son (*id.*).

The first 3 princes of Hattusa are thus,
Labarna,
Hattusili,
Mursili, grandson of Hattusili.

But the inscriptions are not too explicit. They do not record the lengths of the reigns of the princes. The Hittite state continued in largely indefinite time. The dates of the early Hittite princes thus have to be fixed from the more explicit record of the Egyptian princes.

Thutmose campaigned in Asia north to the Euphrates, and his successors established firmly their control over that country. The early Hittite princes campaigned vigorously in the same country. The inscriptions of Thutmose and his successors are explicit as well as abundant, and they never note a Hittite prince in the north. The Hittite princes never note Thutmose or his successors.

Thutmose thus provides a *terminus ad quem* for the series of the 8 early Hittite princes. Thutmose was prince c. 1521-09. And presuming that Telipinu, the last of the 8, cannot postdate Thutmose, the dates of the 8 Hittite princes follow, and in particular, the dates assigned to the first 3 of them above.

And these are the deeds of these 3 princes recorded in the edict of Telipinu:

once Labarna was the great prince;
his sons, his brothers, and his relations, his kin
and his men were all united;
the country was small; but wherever Labarna
went, he vanquished his foes; he conquered
land after land; he reached the sea; and each of
his sons received a land; they ruled Hupisna,
Tuwanuwa, Nenassa, Landa, Zallara, Parsu-
hanta, and Lusna;
then Hattusili was prince in Hattusa;
his sons, his brothers, and his relations, his kin
and his men were all united;
wherever Hattusili went, he vanquished his foes;
he conquered land after land; he reached the
sea; and each of his sons received a land;
but then the servants of the prince became cor-
rupt, and they began conspiring against their
lord;
then Mursili was prince in Hattusa;
his sons, his brothers, and his relations, his kin
and his men were all united;
wherever Mursili went, he vanquished his foes;
he conquered land after land; he reached the
sea;
he went to Aleppo, he destroyed Aleppo, and he
brought the men and the booty he captured to
Hattusa;
he went to Babylon, he destroyed Babylon, he
fought also the Hurrians; and he brought the
men and the booty he captured to Hattusa;
Hantili was the cupbearer of Mursili; he was the

husband of the sister of Mursili; Hantili and
Zidanta killed Mursili; Hantili became prince
(*id.*).

And the annals and the testament of Hattusili
add detail to the events recorded in the edict. The
servants of Hattusili became corrupt, and began
conspiring against their lord. Hence, the testa-
ment reports, Hattusili denounced the designated
heir, his son Labarna, and installed Labarna's son
Mursili. Wherever Hattusili went, he vanquished
his foes, conquered land after land, reached the
sea. The annals describe in detail these deeds of
Hattusili. In particular:

the great prince, Hattusili, prince of Hattusa,
prince of Kussara;
I went to Sanahuitta, but I did not destroy it; I
destroyed its land, and I left two garrisons;
then I went to Zalpa, and I destroyed it; I took its
gods and brought them to the temple of
Arinna;
next year I went to Alalakh, and I destroyed it;
then I went to Ursu, then to Ikakali, then to
Tashiniya, and I destroyed them; I took the
booty to my palace;
next year I went to Arzawa and I took the cattle
and the sheep;
behind me, my foe the Hurrian entered my land;
all my lands rebelled, only the city of Hattusa
remained true;
but I am the great prince, I am the beloved of
Arinna, she has put me in her lap, she leads me
in battle by the hand;
and I went to Nenassa, and it opened its gates to
me; then I went to Ulma, it came against me,
and I destroyed it; I took its gods to the temple
of Arinna; then I went to Sallahsuwa, it deliv-
ered itself with fire, its men came to serve me;
next year I went to Sanahuitta and fought it for
five months; in the sixth month I destroyed it;
I am the great prince, I rejoiced; and I took the
booty to Arinna;
I vanquished the chariots of Appaya; I took the
cattle and the sheep of Takshanaya; I went to
Parmanna, and it opened its gates to me;
Alahha came against me, and I destroyed it;
next year I went to Zaruna, and I destroyed it;
then I went to Hassuwa, and it came against me;
the men from Aleppo also came against me; I
vanquished them, like a lion I scattered them,

I destroyed Hassuwa, I piled dirt on it, I filled Hattusa with the booty (*id.*).

Hattusili enumerates the booty, and continues:

I went to Zippasna, and I piled dirt on it; I came upon Hahha like a lion, I destroyed it, and I took the booty to Hattusa (*id.*).

He enumerates the booty, and continues:

the prince of Timana gave me, the great prince, a chariot of silver, and I brought it to Arinna; no one had crossed the Euphrates; but I, the great prince, crossed it, and my army crossed it; Sargon had crossed it; and he had fought Hahha; but he had not burned it;

I, the great prince, destroyed Hassuwa and Hahha, and I burned them, I showed the smoke to the storm god, I hitched the princes of Hassuwa and of Hahha to my chariot (*id.*). Thus, once Labarna was the great prince.

He conquered Hupisna, Tuwanuwa, Nenassa, Landa, Zallara, Parsuhanta, and Lusna. He reached the sea.

Where exactly these cities or lands are is not clear. The Hittite state continued in largely indefinite space as well as time. But it is clear where exactly the sea is. The sea is the Mediterranean. These cities or lands are around Hattusa and toward the Mediterranean. The distance from Hattusa to the Mediterranean is 360 km.

Then Hattusili was prince in Hattusa.

He conquered Sanahuitta, Zalpa, Alalakh, Ursu, Ikakali, Tashiniya, and Arzawa.

It is clear where exactly Alalakh is. Alalakh is a city, on the Orontes, and has been unearthed. The distance from Hattusa to Alalakh is 450 km.

Then the Hurrians entered Hattusili's land, and all his lands rebelled. To subdue the rebellion Hattusili vanquished Nenassa, Ulma, Sallahsuwa, Sanahuitta, Appaya, Takshanaya, Parmanna, and Alahha.

The Hurrians are the hordes dominating the upper valley of the Euphrates and the Tigris.

Hattusili then conquered Zaruna, defeated the men from Aleppo, and conquered Hassuwa, Zippasna, and Hahha. The prince of Timana gave him a chariot of silver. He crossed the Euphrates.

The distance from Hattusa to the Euphrates is the same, some 450 km.

And the princes of Hattusa continued in largely, but not altogether indefinite space and

time. As his campaigns reached steadily further, Hattusili encountered the river which no one had crossed. He encountered there also the memory of Sargon who had, indeed, crossed it.

Then Mursili was prince in Hattusa.

The campaigns of Mursili do not have the virtue of being recorded in detail. They have the virtues of being greater yet and of being corroborated.

Mursili destroyed Aleppo.

The city of Aleppo, halfway between the Mediterranean and the Euphrates, was the chief city of the Hurrians.

And Mursili destroyed Babylon.

The distance from Hattusa to Babylon is 1 200 km.

And the Babylonian chronicle reports: in the time of Samsuditana the Hittites marched on Akkad.

The Hittite state, then, also begins with smiting. Major smiting.

And hence expansion. Mursili destroys Babylon. After the fall of Babylon Kassite hordes overrun the lower valley. In the upper valley the Hurrians are under petty local chieftains. In the valley of the Nile Ahmose will restore the state one generation after Mursili. With the campaigns of Hattusili and Mursili the Hittite state has become, briefly, the most powerful state on earth.

Hattusili reports: I vanquished the chariots of Appaya, and: the prince of Timana gave me a chariot of silver, and: I hitched the princes of Hassuwa and of Hahha to my chariot.

This is how the chariot enters the record.

The chariot is a major step in the development of warfare.

Mastery of the chariot explains the victories of Hattusili and Mursili. The Hyksos will bring the chariot to Egypt, and the new kingdom will rise on chariots. Ashur will rise on chariots. The chariot will remain the most formidable weapon until the discovery of cavalry, by Ashur-nasirpal II, six centuries after the discovery of the chariot. And the horse will remain a formidable weapon, counting back to Hattusili, for thirty-five and a half centuries, until world war one.

Smiting, expansion, and the advance in warfare indicate both the uniformity and the continuity in the development of the state.

Writing also indicates the continuity. Hittite was committed to writing in cuneiform, borrowed from the state in the east. And the inscriptions of the Hittite princes are written in both Hittite and Akkadian, the language of the state in the east.

And the gradual – and both temporally and spatially – development of the state indicates both the uniformity and the continuity. As the state begins independently in the furthest reaches of the upper valley and beyond, gradually, and haltingly.

Ashur is the first independent state in the upper valley in the north. One and a half centuries later, Mari is the first independent state in the upper valley in the west. One generation later, Yamhad is the first independent state in the far west, on the Mediterranean littoral.

In each of the three cases the beginning of the state is indicated by a series of princes whose deeds are recorded, both, by their own inscriptions and by the inscriptions of princes of other states.

In Yamhad the beginning of the state is small, and Yamhad remains very small. It is at its peak, such as it is, under Yarim-Lim, prince *c.* 1770. In the following century, a half dozen rulers of Yamhad have left behind an inscription of a line or two each, each styling himself prince, none of these princes noted by any other prince. The Hurrian cities of Alalakh, which Hattusili conquered, and Aleppo, which Mursili conquered, are in the same area, successors of the state of Yamhad.

It is some 450 km from Yamhad to Hattusa. It is also one century-odd from Yarim-Lim to the rise of Hattusa. And the oldest Hittite inscription is from the area in between and the time in between. It is from:

Anitta, prince of Kussara (*id.*).

Anitta reports smiting. Of two kinds. The smiting of beasts:

in one day I brought to my city of Nisa 2 lions,
70 swine, 60 wild boars, and 120 other beasts,
leopards, lions, deer, gazelle, . . . (*id.*).

And the smiting of princes. Anitta, prince of Kussara, smote the prince of Nisa, became prince of Nisa himself, and smote the prince of Hattusa, the prince of Zalpa, the prince of Salatiwara, and the prince of Purushanda (*id.*). 6 princes. None of

these 6 princes is noted by any other prince. In particular, Anitta himself is not noted by any of the Hittite princes, even as Hattusili styles himself: prince of Kussara.

Anitta, the mighty hunter of lions and princes, is a step toward the beginning of the state. The state begins with Labarna.

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The two and a half centuries from Samsuditana to Ashur-uballit.

The particulars indicate 5 states.

In Asia Minor, Hattusa continues, then disappears. In the valley, Kassite hordes overrun the east, and they settle twice in the lower valley, both times briefly, each time styling themselves princes of Babylon. In the upper valley, in the north and west, the hordes are Hurrian, and they eventually settle, briefly, in the state of Mittani. And the series of princes of Ashur reappears, disappears, reappears.

In general, in the valley of the Nile, the first half of this time is a time of disorder. But the second half of this time is the time of the great rise of the new kingdom and its expansion into Asia. In the valley of the two rivers and Asia Minor, this time is in its entirety a time of disorder. The Hittite state falls apart, the other 4 states all remain small and ephemeral. Hordes of wild men dominate this time.

The record reflects this fact. The inscriptions of the princes are at the scantiest they have been since the princes of Lagash, nine and a half centuries earlier. All writing is at the scantiest it has been since the princes of Ur, five-odd centuries earlier.

This time is thus also a grave chronological problem. Samsuditana is the last prince of Babylon. Ashur-uballit is the prince with whom the rise of Ashur begins. The problem is to correlate the series of the Babylonian princes ending with Samsuditana with the series of the Assyrian princes beginning with Ashur-uballit. The solution is the correlation of the series of the Assyrian princes with the series of the Egyptian princes, the correlation of the series of the Egyptian princes with the series of the Hittite princes, and the correlation of the series of the Hittite princes with the series of the Babylonian princes. The

problem is solved explicitly above.

In general, in the valley of the two rivers this time is a dark age. An intense one, too. And a long one, it continues well beyond these two and a half centuries. Even if it does not continue quite as long as later dark ages will.

Hattusa.

2 of Mursili's successors are important, 3 are not important,

Hantili	prince c. 1590,
Zidanta	prince c. 1570,
Ammuna	prince c. 1550,
Huzziya	prince c. 1530,

Telipinu prince c. 1510.

In his edict Telipinu records the deeds of his predecessors. The earlier of his predecessors, Labarna, Hattusili, and Mursili, conquered. His more immediate predecessors did not. Telipinu reports:

Hantili was the cupbearer of Mursili; he was the husband of the sister of Mursili; Hantili and Zidanta killed Mursili; Hantili became prince; when Hantili was old and about to die, Zidanta killed the sons of Hantili; Zidanta became prince;

Ammuna was the son of Zidanta; he killed Zidanta; Ammuna became prince; when Ammuna died, Huzziya killed the sons of Ammuna; Huzziya became prince; then I, Telipinu, became prince; the cupbearers of Huzziya killed Huzziya (*id.*).

These are the main deeds of these princes. And these main deeds of these princes go a long way to explain why Telipinu has but a very few other deeds of these princes to report as well as the kind of these other deeds. Of Hantili: the Hurrian foe overran the land of Hatti; he pillaged the land; Hantili said, look, I have driven the Hurrian away (*id.*).

Of the next 3 princes Telipinu has but one deed to report, of Ammuna:

the country rose against him, all the cities of . . . , Galmyia, Adaniya, Arzawa, Sallapa, Parduwata, Ahula; wherever the men went, they were not victorious (*id.*).

And of himself, finally:

I, Telipinu, marched against Hassuwa, and I destroyed Hassuwa (*id.*).

Hassuwa is in the east, one of the cities whose

princes Hattusili had hitched to his chariot. The state had been in decline since Mursili. More victories could have restored its authority. But Telipinu has no more victories to report. His edict was to restore the authority of the state. In its first half the edict records the deeds of the prince's predecessors. In its second half it regulates the prince's council, the protection of cities, the collection and storage of food. Its main provisions are:

prince shall become the prince's son of the first rank; if there is no such son, his son of the second rank; if there is no such son, the husband of his daughter of the first rank;

whoever becomes prince after me, let his brothers, sons, and relations, his kin and his men be united (*id.*)!

Let them! That they were not, the fact that after Telipinu the Hittite state disappears indicates.

The Hittite state is very important. With it the domain under the state expanded beyond the two valleys, in Asia Minor.

Or rather, with it the state made the first attempt to expand beyond the two valleys, in Asia Minor. And the attempt was at first successful, but then not too successful.

And both the initial success and the subsequent lack of success show the uniformity and continuity in the development of the state.

The state begins with smiting, major smiting, and hence expansion. With the campaigns of Hattusili and Mursili the Hittite has become the most powerful state.

The state is a great power. But a fragile great power. After Mursili assassination becomes the means of succession of the Hittite princes. And wherever the men went, they were not victorious.

Reflecting the rise of the state, the inscriptions of the princes are relatively abundant. Reflecting the brevity of the rise, they never become too explicit.

And the uniformity and continuity in both the success of the state and the qualified character of its success are instanced dramatically by the law.

Telipinu promulgated laws.

His edict ends with these 2 provisions:

when someone murders someone, whatever the heir of the murdered says, it shall be; if he

says, let him die, he shall die, if he says, let him pay me, he shall pay him; the prince shall do nothing;

and when there is sorcery in Hattusa, keep cleansing; whoever in the prince's family practices sorcery, seize him and bring him to the prince; whoever does not bring him, woe on him (*id.*).

The Hittite laws, some 200 of them, are attested in a dozen copies. The oldest end with those 2 provisions of Telipinu's edict, thus dating the laws to the reign of Telipinu.

The Hittite laws are one of the descendants of the code of Hammurabi. The line of descent is indicated clearly. In general, by the fact that Hittite borrowed writing from the state in the east, and that the code is attested in as many and widely disseminated copies as any Babylonian writing. In particular, by many direct borrowings.

The Hittite laws are a descendant of the code, but not an advance over it. They rather indicate, negatively, how great an advance the code is.

The Hittite laws have not yet learned procedure. Not one of them, the some 200 of them, mentions judges, or proof, or witnesses.

They have not yet learned generality. The first of the 2 provisions of Telipinu's edict, when someone murders someone, is exceptional. The second of the 2 provisions is representative. It is concerned with sorcery, in Hattusa, in the prince's family. And the large majority lack generality altogether. The Hittite laws are a collection of precedents rather than laws.

They have not yet learned consistency. Next to the first of the 2 provisions of Telipinu's edict, for instance, 1 other law regulates murder. This one:

if someone murders a trader, he shall pay 4 000 shekels; if it is in the land of Luwiya or Pala, he shall also restore the goods; if it is in the land of Hatti, he shall also bring the body for burial (5).

The heir of a trader shall not say, let him die. Or a trader has no heir, perhaps.

Nor have the laws learned discrimination. A collection of precedents, the Hittite laws are not a collection of very momentous precedents. These, too, are representative:

if a slave runs away, and someone brings him back, the owner of the slave shall give shoes to

the one who brought him back (22a); if he seized the slave on this side of the river, he shall be paid 2 shekels; if on the other side of the river, 3 shekels (22b);

when someone relieved himself in a vessel, he used to have to pay 6 shekels, and 3 shekels went to the prince; now the prince waives his share (25a);

if someone crossed a river with his ox, and another seized the ox's tail to cross the river, and the river carried off the owner of the ox, the heirs of the dead man shall take the one who pushed him off (43);

when Hittites owing service come to the father of the prince and say, no one pays us our wages but we are still told that we owe service, the father of the prince shall declare in the assembly, you must continue to perform the service (55);

if someone steals a bull, if it is a weanling, it is not a bull, if it is a yearling, it is not a bull, if it is a two-year-old, it is a bull; he used to give 30 cattle; now he shall give 15 cattle, 5 two-year-olds, 5 yearlings, and 5 weanlings (57);

As the instances above attest, the laws protect property. All the laws protect property, and many protect it very vigorously against theft. There is thus the provision above in case someone steals a bull. And there are also all the following provisions, in case someone steals a stallion (58), in case someone steals a ram (59), in case someone steals an ox (63), a plow ox (63), a draft horse (64), a goat (65), a cow (67), a mare (68), an ewe (69), a fattened pig (81), a courtyard pig (82), a pregnant saw (83), a bee hive (92), a vine, a vine branch, or garlic (101), wood (102), plants (103), a duck (119), . . . (120), a plow (121), a wagon (122); a water trough (125), a copper pin (126), a door (127), bricks (128), a leather . . . (129), . . . of an ox (130), . . . wheels (142), copper nails (143).

The last dozen laws make it clear which intercourse is an offence and not permitted, and which intercourse is not an offense and permitted. An offence and not permitted is: with a cow (187), a sheep (188), one's mother, one's daughter, one's son (189), a pig, a dog (199). Not an offense and permitted is: with a dead man, a dead woman, one's stepmother (190), slave women daughters

of the same mother and their mother (194), a horse, a mule (200a).

To conclude on a brighter instance:
if a dog devours someone's lard, and the owner
of the lard finds the dog, he shall kill it and
retrieve his lard from its belly (90).

Learning is difficult.

Telipinu is very important because of the first half of the edict. Telipinu is not an important lawgiver, or warrior, but he is an important historian.

Not supported by victories, the second half of the edict was not effectual. Whoever became prince after Telipinu, the Hittite state fell apart. The domain which had been under the state was abandoned to local chieftains. When Thutmose conquered Asia north to the Euphrates, he collected the tribute of these Hittite chieftains, too.

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Thus in Asia Minor.

In the valley, Kassite hordes overran the east.

Disorder prevailed, great disorder, and for a long time. In the lower valley, where the center of the state had been since the beginning of the state, where the state had continued ever more powerfully for eleven centuries, where the law had developed, where history had begun, where mathematics had flourished, after the fall of Babylon there was in the lower valley no state of even small stability or authority for ten centuries. The destruction brought about by the Kassite hordes was more consequential than most.

Thus, Kassite princes attested by more than a single source are but a few, and but two brief series of such princes can be extracted from the record, one early in these centuries, the other late in these centuries.

The early Kassite princes of Babylon.

It is a series of 3 princes,

Kashtiliashu	prince c. 1570,
Ulamburiash	prince c. 1550,
Agum	prince c. 1530.

One of the sources is the Babylonian chronicle reporting the Hittite raid on Babylon. It ends:
in the time of Samsuditana the Hittites marched
on Akkad;

Eagamil, prince of the sea land, fled to Elam;
after he had fled, Ulamburiash, brother of Kashti-

liashu, the Kassite, mustered an army and
conquered the sea land;

Agum, son of Kashtiliashu, mustered an army
and marched on the sea land; he captured Dur-
Enlil, and destroyed the temple of Enlil (*id.*).
The sea land is the land adjoining the Persian
Gulf.

The other source is the synchronistic prince
list, completed under Ashurbanipal, prince 668-
27. It correlates the reigns of the princes of Ashur
with princes of Babylon. As it totals them: 82
princes of Ashur, 98 princes of Babylon (*id.*). It
has several lacunae. The princes of Ashur outside
the lacunae are all attested independently. The
princes of Babylon are not. Still, among these
princes are:

Kashtiliashu,
Ulamburiash,
... (*id.*).

The list correlates these princes of Babylon
with the princes of Ashur Ashur-nirari and Puzur-
Ashur III, who have both left inscriptions behind.
Hence, there is also the synchronistic chronicle,
compiled under Adad-nirari III, prince 811-783,
which correlates princes of Ashur with princes of
Babylon recording also their deeds, and it reports:
Puzur-Ashur, prince of Ashur, and Burnaburiash,
prince of Babylon, took an oath and deter-
mined their border (*id.*).

Puzur Ashur, prince of Ashur, is Puzur-Ashur III,
so it can be presumed that Burnaburiash, prince
of Babylon, is Ulamburiash.

Ulamburiash and Agum, then, Kassite princes,
princes of Babylon, who each mustered an army
and marched on the sea land, are important, just.

The later Kassite princes of Babylon.

It is again a series of 3 princes,

Kadashman-Enlil	prince c. 1400,
Burnaburiash	prince c. 1370,
Kurigalzu	prince c. 1340.

These are the princes attested by the Amarna
archive. Kadashman-Enlil writes to Amenhotep
III (1-5), and Burnaburiash writes to Amenhotep
III and Amenhotep IV (6-14).

The relations of the two states are simple. One
delivers daughters to the other. Kadashman-Enlil
delivers a daughter to be the wife of the great
prince, as his father before him has delivered a
daughter (1), and as his son Burnaburiash after

him delivers a daughter (11). Kadashman-Enlil asks: and why will my brother not send me at least one woman; my daughters are all available, I do not refuse them to you (4). His brother has informed him: no daughter of Egypt since time immemorial has ever been given to anyone (*id.*).

Like all other correspondents of the great prince, Burnaburiash urges: my brother, you have not sent me enough gifts (10); send me gold as soon as possible (11).

He writes also:

I did not send to you my Assyrian servants, they came to you of their own; and if you are my friend, send them away without gifts (9).

His Assyrian servants came from Ashur-uballit, Amenhotep IV did not send them away without gifts, and Ashur-uballit did not remain the servant of the Kassite princes.

In the synchronistic prince list this time has disappeared in a lacuna. The synchronistic chronicle, however, reports:

in the time of Ashur-uballit, prince of Ashur, the Kassites rebelled against Karahardash, son of the daughter of Ashur-uballit, and killed him; and they set up Nazi-Bugash, a Kassite, son of nobody, prince of Babylon;

Ashur-uballit marched on Babylon to avenge the son of his daughter, and he killed Nazi-Bugash, and he set up Kurigalzu, son of Burnaburiash, prince of Babylon;

Enlil-nirari, prince of Ashur, vanquished Kurigalzu, prince of Babylon, and destroyed him completely (*id.*).

Kadashman-Enlil and Burnaburiash, then, are important. They established relations with Egypt. The Assyrians were their servants. It was with these two princes that the Kassites came closest to building a state. That the building did not proceed far, not far at all, the events following upon Burnaburiash – a son of a daughter of the prince of Ashur – a son of nobody – the son of Burnaburiash – destroyed completely by the next prince of Ashur – show.

Thus in the lower valley.

In the upper valley the hordes were Hurrian.

The Hurrians as well borrowed cuneiform to commit their language to writing. Hurrian inscriptions, however, are few. When the Hurrians overran the upper valley, the land between the

Tigris and the Euphrates became Mittani. No city of any importance, however, appeared in all these Hurrian centuries in Mittani. When Thutmose conquered Asia north to the Euphrates, he collected the tribute of the Mittani chieftains, too. But a very few Mittani princes, however, are attested at all.

But one earlier prince is attested, Parrattarna. He is attested by Idrimi, the chieftain of the Hurrian city of Alalakh, who has left behind his statue, inscribed with his deeds. – Hattusili had conquered Alalakh, and Mursili had dominated it. Alalakh is also within the domain which Thutmose conquered. This dates Idrimi, and hence Parrattarna, to the century in between. – The deeds of Idrimi are these. The chief of a troop of warriors, he plundered Canaan for seven years, then he took Alalakh, then he plundered the Hittite country north of the city. Hence:

I made myself a throne like the throne of princes,
my brothers were like the brothers of princes,
my children were like the children of princes,
my men were like the men of princes;

I was prince for 30 years (*id.*).

Idrimi's most important deed is this:

I sent a messenger to Parrattarna, mighty prince,
the prince of the Hurrian warriors; he accepted
my gifts; and I swore an oath to be his true
servant (*id.*).

And that is that in the record about Parrattarna, mighty prince, the prince of the Hurrian warriors.

And but one series of princes, at the very end of this time, can be extracted from the record. It is with this series that the Hurrians came closest to building a state. And the building did not proceed far in this case either, not far at all.

Mittani.

It is a series of 4 princes,

Artatama	prince c. 1400,
Shuttarna	prince c. 1380,
Tushratta	prince c. 1360,
Shattiwaza	prince c. 1340.

Tushratta is the prince attested by the Amarna archive. Tushratta writes to Amenhotep III (17-25), to queen Tiy, wife of Amenhotep III (26), and to Amenhotep IV (27-9).

The relations of the two states are the same. Tushratta delivers a daughter, as his father Shutarna before him has delivered a daughter, and his

grandfather Artatama before him has delivered a daughter (29).

Tushratta also urges: my brother, gold is like dirt in your country, why have you not sent me more (26)?

And he also writes:

. . . from the land of the Hittites; and when my foes came against me, I defeated them; not one of them escaped;

I am sending you 1 chariot, 2 horses, 1 man, and 1 woman from the Hittite booty (17).

But the other source attesting Tushratta, is Hittite. It was at this time that the Hittite state was restored, rose with Suppiluliuma, and Suppiluliuma reports:

Tushratta, prince of Mittani, said to me, why are you plundering the far bank of the Euphrates? and he wanted to take the country for himself; but I, Suppiluliuma, the great prince, prince of Hattusa, crossed the Euphrates, and defeated them; Tushratta fled;

then his son killed Tushratta; the Hurrians were confused;

and I, Suppiluliuma, the great prince, prince of Hattusa, set up Shattiwaza, son of Tushratta, prince in Mittani, so that Mittani, the great country, will not perish (treaty).

Mittani yet perished, destroyed in the following half century by the princes of Ashur.

Ashur.

Ashur begins in the two centuries of divided authority after the fall of Ur, becoming also briefly powerful under Shamshi-Adad.

With the rise of Babylon the series of princes of Ashur disappears for one and a half-odd centuries.

After the fall of Babylon it reappears for a couple of generations. This is the first group of 4 princes below.

Then the series disappears for one century-odd.

Then it again reappears, to continue this time for eight centuries, a continuous series of 45 princes. The second group below are the first 5 of these 45 princes.

Shamshi-Adad III	prince c. 1590,
Ashur-nirari	prince c. 1570,
Puzur-Ashur III	prince c. 1550,
Enlil-nasir	prince c. 1530,

— — —

Ashur-bel-nisheshu	— prince c. 1417-08,
Ashur-rim-nisheshu	— prince c. 1408-0,
Ashur-nadin-ahhe II	— prince c. 1400-390,

Eriba-Adad	prince c. 1390-63,

Ashur-uballit	prince c. 1363-27.

The disappearance, reappearance, disappearance, and reappearance are indicated by the inscriptions of the princes.

After Shamshi-Adad, the Assyrian prince list has 19 princes, 8 of them: sons of nobodies. Sons of nobodies or otherwise, none of the 19 has left an inscription behind.

The list then has Shamshi-Adad III, Ashur-nirari, Puzur-Ashur III, and Enlil-nasir. Shamshi-Adad III has left behind 1 inscription, Ashur-nirari one dozen inscriptions, Puzur-Ashur III one half dozen, Enlil-nasir 1 inscription.

The list then has 6 princes who have left behind between them 1 inscription.

And the list then has the series of princes beginning with Ashur-bel-nisheshu, 45 of them, 38 of whom have left behind inscriptions, and steadily more and more inscriptions.

The state is the same. In spite of the hiatus dividing them, the two groups of princes are one series.

Ashur-uballit reports:

Ashur-uballit, prince of Ashur, son of Eriba-Adad, prince of Ashur, son of Ashur-bel-nisheshu, prince of Ashur, son of Ashur-nirari, prince of Ashur, son of Ashur-rabi, prince of Ashur, son of Enlil-nasir, prince of Ashur, son of Puzur-Ashur, prince of Ashur (ins. 1).

Ashur-uballit is the son of Eriba-Adad, the son of Ashur-bel-nisheshu, the son of Ashur-nirari II, the son of Ashur-rabi, the son of Enlil-nasir, the son of Puzur-Ashur III. Also:

Ashur-uballit, appointed by Enlil, prince of Ashur, . . . ;

Puzur-Ashur, my forefather, the prince, built . . . ; it had fallen into ruin; I rebuilt it (*id.*).

This inscription leaves it unclear what Puzur-Ashur III, his forefather, two centuries before him, built, and Ashur-uballit rebuilt. In another inscription, however, Ashur-uballit reports:

I built the great new palace (ins. 2).

Puzur-Ashur III, his forefather, two centuries

before him, reports:

Puzur-Ashur, prince of Ashur, son of Ashur-nirari, prince of Ashur;

for the life of the city, for its well-being, I built the wall of the step gate (ins. 1).

And the descendent of Puzur-Ashur III, and forefather of Ashur-uballit, Ashur-bel-nisheshu, the prince with whom the continuous series of 45 princes begins, reports:

Ashur-bel-nisheshu, prince of Ashur;

Puzur-Ashur, my forefather, the prince, built the wall of the city; it had fallen into ruin; for the life of the city, for its well-being, I rebuilt it, from the bottom to the top as far as the Tigris (ins. 1).

Thus, after the fall of Babylon, as hordes of wild men overran the valley, the state of Ashur was restored. Puzur-Ashur III built the wall of the city.

For one century-odd the state remained very small behind its wall.

Then Ashur-bel-nisheshu rebuilt the wall, from the bottom to the top as far as the Tigris.

Then Ashur-uballit built the great new palace. And with Ashur-uballit the state is not small any more.

Ashur-uballit is the prince attested by the Amarna archive (15-6). He writes to introduce himself to the prince of Egypt: my predecessors have not written to you, I am now writing to you (15). He also urges: gold is like dirt in your country, you just pick it up from the ground; why have you sent me so little? send me more (16). But he does not deliver a daughter.

Ashur-uballit also installed his grandson in Babylon, when the grandson was killed avenged him, and installed another prince in Babylon. His son and successor Enlil-nirari destroyed the prince of Babylon.

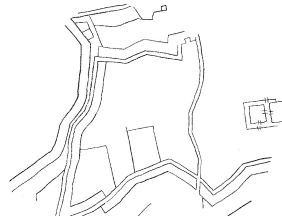
The rise of Ashur has begun.

Finally, these centuries are a dark age, yet there are one minor advance in the acquisition of knowledge and one very major.

The minor advance is the first half of the edict of Telipinu, the first inkling of history in Hattusa.

The major advance, and a very major advance, is the first map, the map of Nippur.

It is dated from stratigraphy and paleography to the century before c. 1400.



It shows the city of temples. On the left is drawn the Euphrates, running north to south. On the eastern bank of the river the temples of the city are drawn, its canals, moats, walls, and gates. Over the temples, canals, moats, walls, and gates their dimensions are recorded.

The problem of the determination of distance and orientation is solved across 2 km.

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The five centuries from Ashur-uballit to Ashur-nasirpal II.

In these centuries the princes of Ashur build the first enduring great state. By the time of Ashur-nasirpal II, Ashur has continued – counting back to Ashur-bel-nisheshu – for five and a half centuries, rising greatly, declining briefly, again rising, again declining, again rising greatly. Early in these centuries, in the west, the Hittite state is restored, and it is a more powerful state now, then the Hittite state disappears altogether. Toward the end of these centuries, on the Mediterranean littoral, several small states develop. The dark age, which has begun with the fall of Babylon, continues in the first three and a half of these centuries, before coming at long last to a close.

More particularly, in the first one and a half of these five centuries, Ashur rises greatly, and the Hittite state is restored.

In the following one and a half centuries, Ashur declines, then rises again. In the lower valley there is briefly the fourth Babylon. This is the time of the greatest disorder in this valley, as it is in the valley of the Nile as well. In this valley the hordes are Aramean.

In the following one century-odd, Ashur declines. Disorder abates, however, and several small states begin on the Mediterranean littoral. On the coast, in the middle, Byblos. On the coast, south of Byblos, Tyre. On the coast, south of

Tyre, the state of David, which then splits into the more northerly Israel and the more southerly Judah. Inland, east of Byblos, Damascus. Inland, east of Judah, Moab.

And in the last not quite one century, Ashur rises again, and its rise accelerates. The small states on the littoral are at their peak. In Tyre the state, and hence humanity, becomes seagoing.

The states are thus 9. Ashur. The Hittite state. The fourth Babylon. Byblos. Tyre. The state of David with its successor state of Judah. The successor state of Israel. Damascus. Moab.

Ashur.

After Ashur-uballit through Ashur-nasirpal II, it is a series of 28 princes,

Enlil-nirari	prince c. 1327-17,
Arik-den-ili	prince c. 1317-05,
Adad-nirari	prince c. 1305-273,
Shalmaneser	prince c. 1273-43,
Tukulti-Ninurta	prince c. 1243-06,
Ashur-nadin-apli	prince c. 1206-3,
Ashur-nirari III	prince c. 1203-197,
Enlil-kudurri-usur	prince c. 1197-2,
Ninurta-apil-Ekur	prince c. 1192-79,
Ashur-dan	prince 1179-33,
Ninurta-Tukulti-Ashur	prince 1133,
Mutakil-Nusku	prince 1133,
Ashur-resh-ishi	prince 1133-15,
Tiglath-pileser	prince 1115-076,
Ashared-apil-Ekur	prince 1076-4,
Ashur-bel-kala	prince 1074-56,
Eriba-Adad II	prince 1056-4,
Shamshi-Adad IV	prince 1054-0,
Ashur-nasirpal	prince 1050-31,
Shalmaneser II	prince 1031-19,
Ashur-nirari IV	prince 1019-3,
Ashur-rabi II	prince 1013-972,
Ashur-resh-ishi II	prince 972-67,
Tiglath-pileser II	prince 967-35,
Ashur-dan II	prince 935-12,
Adad-nirari II	prince 912-891,
Tukulti-Ninurta II	prince 891-84,
Ashur-nasirpal II	prince 884-59.

After Ashur-nasirpal II Ashur will continue for two and a half more centuries to become in the last of these centuries, the century from Tiglath-pileser III through Ashurbanipal, the greatest state on earth, and the decisive advance in the

development of the state.

The continuity of the advance in the development of the state of Ashur through all the eight centuries of which the five at issue are a part – the eight centuries from Ashur-bel-nisheshu through Ashurbanipal – is indicated clearly and distinctly. Four steps in the advance through all the eight centuries are indicated clearly and distinctly as well, as in each case the next step builds on the earlier, and continues the advance. The fourth and last step are the labors of the princes from Tiglath-pileser III, prince 745-27, through Ashurbanipal, prince 668-27, who will complete the building of the greatest state. The decisive advance in the development of the state. And the success of their labors will rest unconditionally on the success of the labors of their predecessors, the princes in the five centuries at issue.

The first step culminates in Tukulti-Ninurta, prince c. 1243-06.

The second step culminates in Tiglath-pileser, prince 1115-076.

The third step culminates in Ashur-nasirpal II, prince 884-59.

Once again, and once again clearly and distinctly, the inscriptions of the princes indicate all this. The advance, the steps in the advance, and in each case that the next step is an advance over the earlier.

Ashur-uballit has left behind 8 inscriptions.

Adad-nirari has left behind 50+ distinct inscriptions, Shalmaneser 35+ distinct inscriptions, Tukulti-Ninurta 40+ distinct inscriptions. Many of the inscriptions are long, most survive in several copies, many in numerous copies. The record of each of these 3 princes is more abundant than the record of any of his predecessors, in Ashur or anywhere else.

Tiglath-pileser has left behind 30+ distinct inscriptions, many of them long, and longer than the inscriptions of any of his predecessors, most in several copies, many in numerous copies. The longest inscription (ins. 1) reaches 809 lines. The inscriptions include annals, even if they do not yet distinguish explicitly the reign years of the prince. The record of Tiglath-pileser is more abundant than that of any of his predecessors.

Ashur-nasirpal II has left behind 140+ distinct

inscriptions, many of them long, and much longer than the inscriptions of any of his predecessors, most in several copies, many in very numerous copies. The longest inscription (ins. 1) reaches 389 very long lines. One inscription (ins. 23) – going for this reason by the name the standard inscription – is attested in 400+ copies. Many of the inscriptions are chronicles *par excellence*. The record of Ashur-nasirpal II is more abundant than the record of any of his predecessors by far.

And so the inscriptions of the princes because so the deeds of the princes.

Once again the foundation is smiting. Hence expansion. Administration and the law develop. The description of the surface of the earth advances. History advances.

Ashur-uballit built the great new palace. He established relations with the prince of Egypt. He installed his grandson in Babylon, when the grandson was killed avenged him, and installed another prince in Babylon.

The rise of Ashur has begun with the smiting of Babylon, 340 km southeast of Ashur.

One of Ashur-uballit's inscriptions is the oldest dated Assyrian inscription: month of Muhur-ilani, year of Enlil-mudammik (ins. 1).

The state of Ashur counted years not by counting the reign years of the prince, but by naming each year after a different official, the eponym. After Ashur-uballit dating the inscriptions of the prince is the norm. The compilation of eponym lists will also become the norm.

And when Ashur-uballit reports:

Ashur-uballit, prince of Ashur, son of Eriba-Adad, prince of Ashur, son of Ashur-bel-nisheshu, prince of Ashur, son of Ashur-nirari, prince of Ashur, son of Ashur-rabi, prince of Ashur, son of Enlil-nasir, prince of Ashur, son of Puzur-Ashur, prince of Ashur,

Ashur-uballit has reached 6 generations into the past. Nearly two centuries into the past. Even if the count of the generations, or centuries, is not explicit yet.

Enlil-nirari destroyed the prince of Babylon.

He also reports:

Enlil-nirari, prince of Ashur, son of Ashur-uballit, prince of Ashur, son of Eriba-Adad, prince of Ashur;

... for the well-being of the city, I built the outer wall (ins. 1).

The inscription is also dated.

Arik-din-ili reports:

Arik-din-ili, the mighty, prince of Ashur, the builder of the temple of Shamash, son of Enlil-nirari, prince of Ashur, son of Ashur-uballit, prince of Ashur (ins. 1).

Also:

... 100 sheep, 100 oxen ... Arik-din-ili ... to Ishtar;

Arik-din-ili, the mighty ... 33 chariots ... ;

... the city of Arnuna in the land of Nigimhu ... ; ... destroyed, Arik-din-ili scattered ... ;

... the cities of Habaruha, ... , Kutila, ... , Tarbisu, ... ;

... with 90 chariots ... 600 men ... (ins. 8).

Of 4 of the localities it is not clear where exactly they are. Of 1 it is clear, Tarbisu has been unearthed, it is 110 km north of Ashur. The other 4 localities are thus in the same area north of Ashur. And it is clear what Arik-din-ili, the mighty, did there. ... 33 chariots ... 90 chariots ... 600 men ... destroyed, scattered ...

Ashur was now the dominant state in the valley. And continued to rise.

Adad-nirari expanded greatly the domain under the state.

He campaigned most vigorously in the west.

Adad-nirari reports:

when Shutarna, prince of Hanigalbat, rebelled against me, I captured him and brought him to my city of Ashur; I made him swear an oath, and I let him go to his city; and as long as he lived every year he sent me his tribute;

when he died, his son Wasashatta rebelled against me; he asked the Hittites for help, and they took his money, but sent him no help;

I conquered the city of his princship Taidu and the cities of Amasaku, Kahat, Shuru, Nabula, Hurra, Shuduhu, and Washukanu; I brought to my city of Ashur all the treasures which his forefathers had amassed; I conquered, burned, and razed Irridu;

the gods made me the lord of the entire land to the Euphrates; I made its people work for Ashur; I brought his wife, sons, daughters, and people, and all his treasures to my city of Ashur (ins. 3).

Hanigalbat is Mittani. The gods made Adad-nirari the lord of the entire land to the Euphrates. This is the beginning of the end of Mittani, brought about conclusively by Adad-nirari's successor Shalmaneser.

Adad-nirari describes his campaigns in many inscriptions. And in one inscription he reviews the expansion of the state in the four consecutive reigns of Ashur-uballit, Enlil-nirari, Arik-din-ili, and his own. Adad-nirari reports:

Adad-nirari, the pious prince, honored by the gods, the lord, appointed by the gods, founder of temples, who conquered the Kassites, Qutu, Lullubum, and Subartu, who scattered all his foes in the upper land and in the lower land, who subdued the lands from Lubdu and Rapiqum to Eluhāt, who conquered the cities of Taidu, Shuru, Kahat, Amasaku, Hurra, Shuduhu, Nabula, Washukanu, and Irridu, the entire land from mt Kashiar to Eluhāt, the fortresses of Sudu, Harran, and Carchemish on the Euphrates, who subdued all peoples, who extended all borders, in whose feet Anu, Ashur, Shamash, Adad, and Ishtar brought all princes to bow down, the exalted priest of Enlil;

son of Arik-din-ili, appointed by Enlil, prince of Ashur, who conquered the lands of Turukku and Nigimhu in their entirety, who destroyed all princes of the mountains in the large lands of Qutu and Kutmuhu, who destroyed the hordes of Ahlamu, Sutu, and Iuru and conquered their lands, who extended the borders; grandson of Enlil-nirari, prince of Ashur, who defeated the Kassites, who destroyed all his foes, who extended the borders; offspring of Ashur-uballit, mighty prince, outstanding in piety, who conquered as far as the mountains, who subdued Musru and scattered the hordes from the large land of Subartu, who extended the borders (ins. 1).

The inscription is a chronicle. Adad-nirari, the conqueror, is a historian. And he is not quite a geographer yet, but the description of the campaigns of the 4 princes is explicit enough to indicate, given that it is clear where some of the localities are, where all the localities are.

Ashur-uballit conquered as far as the mountains, subdued Musru, and scattered the hordes of

the large land of Subartu. The mountains are east of Ashur, and the hordes of the large land of Subartu are in these mountains. So then is Musru.

Enlil-nirari defeated the Kassites. These are in the lower valley, southeast of Ashur.

Arik-din-ili conquered the lands of Turukku and Nigimhu in their entirety. Turukku is in the mountains north of Ashur. So then is Nigimhu. He destroyed all princes of the mountains in the large lands of Qutu and Kutmuhu. Qutu is in the mountains in the east. So then is Kutmuhu. He destroyed the hordes of Ahlamu, Sutu, and Iuru. Ahlamu is southwest of Ashur, beyond the Euphrates. So then are Sutu and Iuru.

Adad-nirari conquered the Kassites, Qutu, Lullubum, and Subartu. Lullubum is also in the mountains in the east. He conquered the cities of Taidu, Shuru, Kahat, Amasaku, Hurra, Shuduhu, Nabula, Washukanu, and Irridu, the entire land from mt Kashiar to Eluhāt. Taidu and Irridu are the main cities of Mittani, and in Mittani also are Shuru, Kahat, Amasaku, Hurra, Shuduhu, Nabula, and Washukanu. So is then the entire land from mt Kashiar to Eluhāt. He conquered the fortresses of Sudu, Harran, and Carchemish on the Euphrates. Harran and Carchemish are just beyond Mittani, further west. So then is Sudu. He subdued the lands from Lubdu and Rapiqum to Eluhāt. Rapiqum is north of Babylon. So then is Lubdu.

Adad-nirari has brought under the state the domain from the mountains in the east to the Euphrates in the west, and from the mountains in the north to the middle valley in the south.

And in the fourth generation of continuous expansion Adad-nirari has begun formulating the theory of the state, once again, once again the same theory.

Adad-nirari: scattered all his foes in the upper land and in the lower land, he subdued all peoples, he extended all borders, Anu, Ashur, Shamash, Adad, and Ishtar brought all princes to bow down in his feet.

Also: he made the people of the entire land to the Euphrates work for Ashur.

And it is the expansion of the state that has led to the formulation of the theory. Adad-nirari writes: Ashur-uballit extended the borders, Enlil-nirari extended the borders, Arik-din-ili extended

the borders, Adad-nirari extended all borders.

In yet another inscription Adad-nirari reports: my forefather Ilushuma, prince of Ashur, son of Shallim-ahhe, prince of Ashur, built the temple of Ishtar; the temple had fallen into ruin; I rebuilt it (ins. 15).

The Assyrian prince list begins with 17 princes who lived in tents, followed by 10 princes who were ancestors, followed by 6 princes whose names were written on bricks. The last 2 of the princes whose names were written on bricks are Shallim-ahhe and Ilushuma. The dates of Shallim-ahhe and Adad-nirari are,

Shallim-ahhe prince c. 1960,
Adad-nirari prince c. 1305-273.

Not explicitly, yet Adad-nirari has reached six and a half centuries into the past.

Shalmaneser campaigned in the east, in the land of Uruatri in the mighty mountains, then in the north, where he razed the city of Arinu, then in the west, where he destroyed Hanigalbat, or Mittani, for good, then again in the east, in the large country far away from Uruatri to Kutmuhu.

This is the inscription in which Shalmaneser reviews his labors:

Shalmaneser, chosen by Enlil, prince of Ashur, appointed by the gods, the lord, favorite of Ishtar, who keeps the worship pure, who makes the offerings to the gods abundant, who builds their temples, the great dragon, the shepherd of all peoples, whose deeds please Ashur, the valiant hero, victorious in battle, who destroys all foes, whose victories rage like a fire, whose weapons bring merciless death, the steadfast prince led by Ashur and the great gods, who has no rival, who scatters all his foes in the upper land and in the lower land, in whose feet Ashur and the great gods bring all princes to bow down;

in the first year of my princship the land of Uruatri rebelled against me; I mustered my troops and marched in the mighty mountains; I conquered Himme, Uatqun, Mashgun, Salua, Halila, Luhu, Nilipahri, and Zingun, 8 lands and their troops; I destroyed and burned 51 cities, and carried off their people and all that they had; I subdued the land of Uruatri in three days; I took some of their men into my service; and I imposed on the mountains a tribute

forever;

then the city of Arinu, founded in bedrock, rebelled against me; I captures it, and razed it; I gathered its dirt and made of it a heap at the gate of my city of Ashur for posterity to remember;

when Ashur commanded me to march on the land of Hanigalbat, I opened the most difficult passes; Shuttarna, prince of Hanigalbat, with the help of the Hittites and Ahlamu, captured the passes before me; I attacked them and defeated them; I slaughtered all their troops; I chased Shuttarna into the sunset; I carried off 14 400 alive; I conquered his 9 fortified cities, I razed his 180 cities, I made them all into heaps of dirt; I slaughtered his allies the Hittites and Ahlamu like sheep; I captured Taidu and Irridu, the entire land from mt Kashiar to Eluhath, the fortresses of Sudu, Harran, and Carchemish on the Euphrates; I became their lord;

then the Qutu, murderous and countless like the stars, rose against me; with only one third of my chariots I destroyed them from Uruatri to Kutmuhu, in the large country far away; I covered the country with their corpses; I brought to my city of Ashur their people, cattle, and all that they had;

I am the shepherd appointed by Anu and Enlil (ins. 1).

It is now clearer where all the localities are. It is also quite clear where the dirt of Arinu is.

In the same inscription Shalmaneser reports also:

my forefather Ushpia, prince of Ashur, built the temple of Ashur;

my forefather Erishu, prince of Ashur, rebuilt it; 159 years passed; the temple fell into ruin, and my forefather Shamshi-Adad, prince of Ashur, rebuilt it;

580 years passed; fire broke out in the temple; I rebuilt it (*id.*).

Ushpia is the first of the 10 princes who were ancestors. Erishu is the successor of Ilushuma. The dates of Erishu and Shalmaneser are,

Erishu prince c. 1920,
Shalmaneser prince c. 1273-43.

Shalmaneser has reached six and a half centuries into the past, and explicitly now, by counting.

And sixteen reigns from Erishu back to Ushpia, on the count of the Assyrian prince list, Shalmaneser has rather reached back to the beginning of the state of Ashur, too.

Tukulti-Ninurta campaigned further than his predecessors in the southeast, in the southwest, and in the west. This is his review:

Tukulti-Ninurta, lord of the earth, prince of Ashur, lord of the four quarters, the sun of all peoples, mighty prince, prince of Babylon, prince of Sumer and Akkad, prince of the upper sea and the lower sea, prince of the mountains and the valleys, prince of Subartu and Qutu, prince of all lands of Nairi, the prince whom the gods lead to victory, who shepherds the four quarters with his might, son of Shalmaneser, lord of the earth, prince of Ashur, son of Adad-nirari, lord of the earth, prince of Ashur;

in the first year of my principship I conquered the land of Qutu, the land of Uqumenu, the lands of Elhunina, Sharnida, and Mehru; and I received in my city of Ashur every year the tribute of their lands and the goods of their mountains;

I brought under my yoke the lands of Paphu, Kutmuhu, Bushu, Mummu, Alzu, Madanu, Nihanu, Alaia, Tepurzu, Purulumzu, the entire land of Subartu; I subdued their princes; I made them work for Ashur;

I traversed impassable mountains; I traversed mountains no prince had ever traversed;

40 princes of Nairi rose against me; I defeated them, I filled the valley with their blood; I became their lord; I imposed on them tribute forever;

I marched on Kashtiliashu, prince of Babylon; I slaughtered his army; I captured Kashtiliashu, I put my foot on his neck, I brought him bound to my lord Ashur; I became the lord of Sumer and Akkad; I set my border at the lower sea (ins. 5).

The review has omitted the conquest of the southwest:

I brought the lands of Mari, Hana, and Ahlamu under my command (ins. 23).

And in yet another inscription Tukulti-Ninurta styles himself:

prince of Dilmun and Meluhha (ins. 24).

Dilmun and Meluhha are on the further shores of the Persian Gulf.

Thus, the domain of Tukulti-Ninurta reached the mountains in the east along their entire length, the entire land of Subartu and the large country of Qutu. It included the country north of Ashur and the upper valley south to Babylon. It included Babylon and the lower valley south to the Persian Gulf. It included the valley in the southwest to the Euphrates and beyond, the lands of Mari and Ahlamu. It included all lands of Nairi, or Hanig-albat, or Mittani, in the west to the Euphrates. It included the country beyond the Euphrates to the Mediterranean.

1 300 km from the Mediterranean to the Persian Gulf. The expansion of the state is at its greatest since Naram-Sin, ten centuries earlier.

With Tukulti-Ninurta it is thus also yet clearer where all localities are. Tukulti-Ninurta is also clear that conquest has become exploration: I traversed impassable mountains, I traversed mountains no prince had ever traversed.

And Tukulti-Ninurta continues the labors of his predecessors on the problem of time reckoning. He reports:

my forefather Ilushuma, prince of Ashur, built the temple of Ishtar; 720 years passed; the temple fell into ruin; I rebuilt it (ins. 11).

The dates are,

Ilushuma prince c. 1940,

Tukulti-Ninurta prince c. 1243-06.

The problem is thus not solved quite yet. The 720 years Tukulti-Ninurta counts from Ilushuma to himself cannot quite agree with the 739 years his father Shalmaneser counts from Ilushuma's son Erishu to himself. But Tukulti-Ninurta's successors will continue laboring on the problem, and solve it completely they will.

Tukulti-Ninurta is the culmination of the first attempt of the princes of Ashur to bring all states under the one state of Ashur. The first of four.

He is also the culmination in the development of the theory of the state so far. Tukulti-Ninurta is: lord of the earth, lord of the four quarters, the sun of all peoples, prince of Sumer and Akkad, prince of the upper sea and the lower sea, prince of the mountains and the valleys. In yet another inscription he reports: I brought all my foes under my single command (ins. 1).

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The time of greatest disorder followed. In Asia Minor the Hittite state fell apart. In the valley of the Nile the new kingdom, having retreated from the Asian Mediterranean littoral, was destroyed by the hordes of Libyans, peoples of the sea, and Asiatics. On the valley of the two rivers Aramean hordes descended from the north.

Tukulti-Ninurta was succeeded by feebler princes. The state retreated to the country around the city of Ashur.

The decline of the state is indicated by the dearth of inscriptions. The 7 successors of Tukulti-Ninurta have left behind 9 inscriptions between them.

Still, they preserved the state, as well as the end of the state.

Ashur-nadin-apli styles himself:

Ashur-nadin-apli, lord of the earth, son of Tukulti-Ninurta, lord of the earth (ins. 2).

Ninurta-apil-Ekur styles himself:

Ninurta-apil-Ekur, lord of the earth (ins. 1).

And after 4 briefer reigns, the long reign of Ashur-dan attests the restored stability of the state. He has left behind 4 inscriptions. He is:

Ashur-dan, prince of Ashur, son of Ninurta-apil-Ekur, prince of Ashur (ins. 1).

With the decline of Ashur the princes of the fourth Babylon asserted themselves in the lower valley. Ashur-dan began campaigning against them. The synchronistic chronicle reports:

Ashur-dan, prince of Ashur, marched on Babylon; he carried off the booty to Ashur (*id.*).

Also, the date of the reign of Ashur-dan is the first date certain without qualification. All earlier dates are *circa*, fixed within certain limits. The dates of Ashur-dan's immediate predecessors still are certain within ± 3 years. Beginning with Ashur-dan's reign, the Assyrian prince list, the synchronistic prince list, the steadily more eponym lists, and the steadily more and more explicit inscriptions of the princes all agree with one another. Ashur-dan was thus prince 1179-33, not *circa*.

And with Ashur-resh-ishi the state begins rising again. Ashur-resh-ishi has left behind one dozen-odd inscriptions. He is once again: Ashur-resh-ishi, lord of the earth, who scattered

the troops of Ahlamu; who defeated Lullubum and Qutu, and brought the princes of the mountains in his feet; the avenger of Ashur; son of Mutakil-Nusku, prince of Ashur, son of Ashur-dan, prince of Ashur (ins. 1).

The one important prince of the fourth Babylon is Nebuchadnezzar. And the synchronistic chronicle reports:

Nebuchadnezzar marched on Zanqi; Ashur-resh-ishi, prince of Ashur, mustered his chariots and marched against him; Nebuchadnezzar returned to his country;

Nebuchadnezzar marched on Idi with his chariots and foot; Ashur-resh-ishi mustered his chariots and foot, defeated Nebuchadnezzar, slaughtered his men, and carried off his treasures and 40 of his chariots (*id.*).

And Tiglath-pileser brought under Ashur nearly the entire domain which Tukulti-Ninurta had brought under Ashur.

In the east, he campaigned in the mountains along their entire length. In the north, he campaigned further than his predecessors. In the south, he destroyed Babylon, even if he did not reach the lower sea. In the west, he reached the upper sea. He fought the Aramean hordes continuously.

One of his inscriptions is the longest yet, 809 lines.

This is the inscription which demonstrated that cuneiform has been deciphered. Just unearthed, in 1857 the Royal Asiatic Society sent it to Rawlinson, to Hincks, and to Oppert. Each translated it, and the three translations agreed.

It is the first annalistic Assyrian inscription. It records the campaigns of the prince in his first 5 reign years year by year, even if the reign years are not yet counted explicitly.

Tiglath-pileser reports:

Tiglath-pileser, the mighty, the prince without rival, lord of the earth, lord of the four quarters, prince of all princes, lord of all lords, chief herdsman, pure priest, to whom Shamash gave the authority over all peoples, appointed by Enlil, the shepherd, exalted above all princes, whose weapons Ashur made victorious over the four quarters, who conquered all borders in the upper land and in the lower land, the sun shining on all lands, whose fire

overwhelmed all foes, who at the command of Enlil destroyed all foes of Ashur; deluge in battle, I conquered lands, mountains, cities, and princes; I destroyed all foes of Ashur; I vanquished 60 princes; I have no rival; I enlarged the land of Ashur; I enlarged the people of Ashur; I enlarged the borders of the land; I rule all lands (ins. 1).

These are the main events of the campaigns in the east:

in the first year of my princeship I defeated 20 000 Mushku and their 5 princes, who had held the lands of Alzu and Purulumzu for 50 years; they came down the mountains and captured the land of Kutmuhu; with my chariots and foot I traversed the mountains; I defeated them; I filled the gorges with their blood; I took booty without number; and I took 6 000 of their troops to count among my men;

I crossed the Tigris and conquered Shereshu; I slaughtered like sheep the troops of Kutmuhu and Paphu; I filled the river with their corpses; I took booty without number; I burned, razed, and destroyed;

I crossed the Tigris again; the prince of Urratinash, which is in the land of Panaru, submitted to me; I took his sons hostage, I accepted his tribute, and I let him live; I imposed my yoke on the entire land of Kutmuhu;

I marched on the land of Ishdish; when the mountains became impassable for chariots, I left the chariots and continued with my foot; I destroyed the land of Ishdish like a flood; I carried off the sheep, the people, and all that they had; I imposed tribute on them;

I marched again on the land of Kutmuhu; I conquered all their cities, and carried off all that they had; I climbed the peaks of the mountains where no man can walk; I destroyed them; I took the booty; I added the land of Kutmuhu to my lands;

when Ashur commanded me to march on the land of Haria and the countless troops of Paphu, I marched into the high mountains where no prince had ever marched; when the mountains became impassable for chariots, I put the chariots on the shoulders of my men; and I destroyed Paphu and all their troops; I made

burial mounds for them; I conquered 25 cities in the land of Haria; I burned, razed, and destroyed;

I marched against the Adaush; they abandoned their land and flew like birds to the ledges of the mountain; when they came back, they submitted to me; I imposed tribute on them;

I conquered the lands of Saraush and Amaush, which had never been conquered before; I imposed tribute on them, I made them submit to Ashur;

I crossed the Lower Zab and conquered the lands of Muratash and Saradaush, which are close to mt Atuma; I took their gods and all that they had; I burned, razed, and destroyed;

I marched on the land of Habhu; I fought on foot 6 000 of the troops of the large country of Paphu, which is close to mt Hirihu; I took 25 of their gods and all that they had; to those who submitted I showed mercy; I counted them among the people of Ashur (*id.*).

I burned, razed, and destroyed. I imposed tribute on them. Also, however: I counted them among the people of Ashur.

Also: Urratinash is in the land of Panaru, Muratash and Saradaush are close to mt Atuma, Paphu is close to mt Hirihu. And in this one inscription, in the mountains in the east alone, Tiglath-pileser names 39 localities.

The main events of the campaigns in the north are these:

when Ashur commanded me to conquer the land of Musri, I destroyed them; I burned, razed, and destroyed; the Qumanu came to help them; I defeated them; they fled to the city of Arinu, which is at the foot of mt Aisa; I besieged them, and they submitted to me; I spared the city, and imposed tribute on them; when the Qumanu came to do battle again, I fought 20 000 of them; I destroyed them; I burned, razed, and destroyed;

I besieged Kipshuna, the city of their princeship; and the prince of the land of Qumanu submitted to me; I destroyed the walls, but spared his city; I took 300 families hostage; I imposed tribute on him; I conquered the entire land of Qumanu (*id.*).

In the south, Tiglath-pileser campaigned in his later years. Thus other inscriptions record the

main events of these campaigns:

at the command of Ninurta I marched on Babylon; I conquered the cities of Dur-Kurigalzu, Sippar, Babylon, and Opis, which is on the other side of the Tigris; I slaughtered them; I took alive men without number; I captured the palace of Marduk-nadin-ahhe, prince of Babylon, and burned it; with my chariots I destroyed Marduk-nadin-ahhe (ins. 4).

The campaigns in the west were against the most formidable foe. These are the main events of these campaigns in the first 5 years:

Ashur commanded me to march on the lands of Nairi and on the princes of the upper sea, who had never been conquered before; I traversed mountains which no prince had ever traversed; I traversed 16 mighty mountains; I cut down the trees in the mountains; I made bridges for my chariots to cross the Euphrates;

23 princes of the lands of Nairi came with their chariots and foot against me; I destroyed them like a storm; I made heaps of their corpses; I captured 120 chariots; altogether I defeated 60 princes; I chased them into sea; I burned, razed and destroyed; I carried off booty without number; I made the princes whom I captured swear an oath, I took their sons hostage, I imposed a tribute on them of 1 200 horses and 2 000 cattle, and I let them go back to their lands;

on the land of Hanigalbat I imposed an annual tribute of one measure of lead ore;

with my chariots and foot I marched against the Arameans; I took Carchemish and the lands of Hatti; they fled across the Euphrates; I followed them on rafts; I conquered 6 cities; I burned, razed, and destroyed (ins. 1).

The Aramean hordes did not relent, however, and Tiglath-pileser continued to campaign against them:

I conquered the lands of Nairi from Tammu to the upper sea; I subdued 30 of their princes; I destroyed the Arameans to Carchemish and the lands of Hatti (ins. 2);

I marched to mt Lebanon; I cut down the trees; I continued to the land of Amurru, and received the tribute of Byblos, Sidon, and Arvad; I crossed the Euphrates and pursued the Arameans to the land of Hatti (ins. 3).

In general:

I have crossed the Euphrates in pursuit of the Arameans 28 times, in one year twice (ins. 4).

Thus, the domain of Tiglath-pileser extended from the mountains in the east and the lower valley in the southeast to the Mediterranean in the west. As he describes it:

from the Lower Zab to the upper sea (ins. 1); from Babylon and the land of Akkad to the land of Amurru and the upper sea (ins. 4).

And Tiglath-pileser's was at this time the only state on earth. In the far southeast, a successor of Marduk-nadin-ahhe, prince of Babylon, lingered on. In the far west, there were still the Aramean hordes, and there were many princes of the kind of which Tiglath-pileser defeated not less than 90. The princes in the valley of the Nile were now of this kind, too. A state other than Tiglath-pileser's there was not.

Tiglath-pileser is also more explicit than his predecessors in affirming the end of the state. He is:

the prince without rival, lord of the earth, lord of the four quarters, prince of all princes, lord of all lords, to whom Shamash gave the authority over all peoples, who conquered all borders in the upper land and in the lower land.

The end, moreover, is rather explicitly to make all peoples one people. In his annals, Tiglath-pileser: burned, razed, and destroyed, not less than 12 times. Not less than twice, however, he also: counted them among the people of Ashur. In general:

I enlarged the land of Ashur; I enlarged the people of Ashur,

and:

to the land of Ashur I added land, to the people of Ashur I added people (ins. 1).

Thus, Tiglath-pileser is also:

the shepherd,

and:

I brought prosperity to the people; I gave them a secure abode (*id.*),

and his are the first Assyrian laws. The one state on earth is a state under the law.

The oldest Assyrian laws are recorded on one dozen-odd tablets. One of the tablets has a colophon:

month of Sha-sarate, 2nd day, year of Sagi (A),

the eponym dating it to the reign of Tiglath-pileser.

It is not a code, there is no preamble, no lofty exhortation. The laws are 100-odd. No laws regulate procedure, in particular. All laws protect property, the large majority more particularly the family and inheritance. More incidentally they are concerned as well with murder, assault, theft, debts, pledges, agriculture, the trades.

The main development is the greater specificity of regulation. There is more qualification than in earlier laws. The law has begun discovering the proviso, and proviso to the proviso. The laws are also more particular than earlier laws about the involvement of the officers of the court and about documentation. The law has begun discovering the duplicate, and duplicate of the duplicate.

These are four of the laws:

if a man goes abroad, and leaves his wife in his house or in her father's house, but does not leave her oil, wool, clothes, food, or anything else, and sends her no provisions from abroad, she shall wait for him 5 years and not take another husband; if she has sons, they shall be hired out to provide for her; in the sixth year she can take another husband; if her first husband then returns, he shall have no claim on her, she can remain with her second husband; but if he was detained through no fault of his own, because he was seized by enemies, and he proves this, he shall give to her second husband a wife comparable to her, and have her back; and if it is the palace that sends him abroad, and he does not return for 5 years, his wife shall continue to wait for him; and if she does not wait, and takes another husband, and bears him children, and her first husband then returns, he shall take her back with her children (A-36);

if a man is taken by the enemy, and his wife has neither a father-in-law or a son, she shall wait for her husband for two years; if she has no means to support herself, she shall so declare before the officials, and she shall become a ward of the palace; if she . . . ; . . . , she shall so declare before the judges; the judges shall question the officials in her city to determine the value of a field; and they shall assign to her a field and a house for two years; they

shall produce a document to this effect; after the two years, they shall certify her as a widow, and she can take another husband; if her first husband then returns, he shall take her back, but he shall have no claim to the children she bore to her second husband; the second husband shall take them; as to the field and house she was given, if they do not belong to the palace, he shall pay for them, and have them; if he does not return, the palace shall dispose with the field and house as it pleases (A-45);

. . . before he purchases a field or a house, he shall have the herald make a proclamation three times in one month in the city of Ashur, saying, I intend to purchase the field or house, which is in the common irrigated area and belongs to so-and-so, son of son-and so, let all who have a claim come forth with their documents and present them before the officials; and when their claims are considered, if successful, they shall take full possession of the field or house; when the herald makes the proclamation, the city scribe and officials of the palace shall be present; the officials of the city shall also be present; they shall document it as follows, the herald has made a proclamation three times in one month, he who has not presented a claim has forfeited it, and the field or house is clear for the benefit of the one who has had the herald make the proclamation; the judges will make three copies . . . (B-6);

if there is sufficient water in the common irrigated area, the owners of the fields shall work in common to irrigate his own field each, each in proportion to the size of his field; if someone among them will not work in common, one of those who work in common shall appeal to the judges; he shall obtain a document for their decision, and he shall then perform the work; and he shall have the waters of the other for himself to irrigate his field (B-17).

The conqueror, Tiglath-pileser is also a law-giver.

He is also an explorer. I climbed the peaks of the mountains where no man can walk. I conquered princes who had never been conquered before. I traversed mountains which no prince had traversed. In particular, I traversed 16 mighty

mountains.

He is the first prince concerned with where exactly his conquests are.

Urratinash is in the land of Panaru. Muratash and Saradaush are close to mt Atuma. Paphu is close to mt Hirihu. Arinu is at the foot of mt Aisa. Opis is on the other side of the Tigris.

The explorer, Tiglath-pileser is also the first Assyrian annalist.

He continued as well the labors of his predecessors on the problem of time reckoning. He counts:

my forefather Shamshi-Adad, prince of Ashur, son of Ishme-Dagan, prince of Ashur, built the temple of Anu and Adad;

641 years passed, and it fell into ruin; Ashur-dan, prince of Ashur, son of Ninurta-apil-Ekur, prince of Ashur, tore it down, but he did not rebuild it;

for 60 years the foundation stood bare; in the first year of my principship Anu and Adad commanded me to rebuild it (ins. 1).

Shamshi-Adad, son of Ishme-Dagan, is Shamshi-Adad III. The dates are,

Shamshi-Adad III prince c. 1590,

Ashur-dan prince 1179-33,

Tiglath-pileser prince 1115-076.

The 641 years Tiglath-pileser counts from Shamshi-Adad III to Ashur-dan are thus not an improvement on the results of his predecessors. But the 60 years he counts from Ashur-dan to himself are certain without qualification.

And the explorer, the annalist, Tiglath-pileser made a contribution also to marine biology. He discovered the whale.

In three of his inscriptions Tiglath-pileser reports: in the great sea, with a harpoon that I made, I killed the sea horse (ins. 4-5, 8).

This is how the sea horse enters the record. It cannot be quite certain that the sea horse is the whale. But Tiglath-pileser conquered the Asian Mediterranean littoral, and it is there and then that humanity became seagoing. It is there as well that six centuries later god will ask Job: can you pull the leviathan by a fishhook (*Job*, 40)? And it is quite certain that the sea horse is the leviathan.

Tiglath-pileser is the culmination of the second attempt of the princes of Ashur to bring all states under the one state of Ashur. The second of four.

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Ashur-bel-kala maintained the state strongly.

He is:

Ashur-bel-kala, lord of the earth, the mighty, prince of Ashur, son of Tiglath-pileser, lord of the earth, the mighty, prince of Ashur (ins. 10).

In the southeast, the synchronistic chronicle reports:

Ashur-bel-kala set up Adad-apla-iddina, son of Esagil-shaduni, son of nobody, prince in Babylon; Ashur-bel-kala took the daughter of Adad-apla-iddina for his wife; the peoples of Ashur and Babylon were united (*id.*).

In the southwest, Ashur-bel-kala subdued Mari (ins. 1).

In the west, Tiglath-pileser had crossed the Euphrates in pursuit of the Arameans 28 times, in one year twice. Ashur-bel-kala had to continue the pursuit. An annalistic inscription reports:

in that year he fought the Arameans at the city of Shasiru, which is near the city of . . . ;

in that year he fought the Arameans at the city of . . . ;

in that year he fought the Arameans at the city of Pauza, which is at the foot of mt Kashiar;

in that year he fought the Arameans at the city of . . . , which is on the Tigris;

in that year he fought the Arameans of the cities of Lishur-sala-Ashur, which are near the city of Sinamu;

in that year he fought the Arameans at the city of Murarir in the land of Shubru;

in that year he fought the Arameans from the land of Mahiranu to the land of Harran;

in that year he fought the Arameans at the city of Magrisu in the land of Iuru;

in that year he fought the Arameans at the city of Dur-katlimmu; in the same year he fought the Arameans at the city of Sangaritu, which is on the Euphrates;

in that year he fought the Arameans . . . ;

in that year he fought the Arameans in the land of Gulgulu;

in that year he fought the Arameans at the city of . . . mt Hanu;

in that year he fought the Arameans at . . . (ins. 7).

And Ashur-bel-kala not only continues Tiglath-pileser's labors at establishing where exactly localities are. He corroborates his marine discovery:

in the great sea, in a ship of the city of Arvad, he killed the sea horse (*id.*).

Tiglath-pileser pursued the Arameans 28 times, in one year twice. Ashur-bel-kala pursued them 14 times, in one year twice. It proved insufficient. The Aramean hordes will not relent for another half century.

Ashur-bel-kala was succeeded by feebler princes. The state retreated to the country around the city of Ashur again. Still, these princes, too, preserved the state, as well as the end of the state.

The next 4 princes are:

Eriba-Adad, lord of the earth (ins. 1);

Shamshi-Adad, lord of the earth (ins. 1);

Ashur-nasirpal, lord of the earth (ins. 1);

Shalmaneser, lord of the earth (ins. 1).

The next 4 princes are the nadir. They have left behind 2 inscriptions between them. That they yet preserved the state, and its end, Ashur-dan II attests. Ashur-dan II is:

Ashur-dan, the mighty, lord of the earth, prince of Ashur, son of Tiglath-pileser, the mighty, lord of the earth, prince of Ashur, son of Ashur-resh-ishi, the mighty, lord of the earth, prince of Ashur, son of Ashur-rabi, the mighty, lord of the earth, prince of Ashur (ins. 3).

And with Ashur-dan II the state began rising again.

By this time the raids of the Aramean hordes had abated. These hordes, too, had at long last settled. And several small states had appeared on the Mediterranean littoral.

Ashur-dan II is clear that he is restoring the authority of the state. He reports:

since the time of Shalmaneser, prince . . . , they had destroyed . . . murdered . . . the people of Ashur; . . . I destroyed them; I carried off the booty to my city . . . ;

since the time of Ashur-rabi, prince of Ashur, my forefather, they had ruled my land; they had taken . . . ; I mustered my chariots and foot, and destroyed them; I burned their cities; I pursued them . . . ; I carried off the booty; I brought them within the borders of Ashur;

since the time of . . . they had not paid tribute to Ashur; I conquered Shuhu, . . . ; I brought the booty to Ashur (ins. 1).

Ashur-dan II campaigned in the west to the Euphrates and in the east to the Lower Zab.

It is beginning with Ashur-dan II also that the princes have left behind the names of all years.

And with Adad-nirari II Ashur is once again the most powerful state.

Adad-nirari II campaigned annually west, east, and south. Hence, in the west:

I became the lord of the entire land of Hanigalbat,

I brought it within my borders, I brought it under my single command (ins. 2),

in the east:

I became the lord of the entire land of Kutmuhu,

I brought it within my borders (*id.*),

in the south:

I conquered the entire land of Babylon (*id.*).

The new developments are three.

Adad-nirari II's are the first true annals, describing events eponym by eponym, reign year by reign year. His longest inscription describes the prince's campaigns in 901, then his campaigns in 900, then his campaigns in 899, and through his campaigns in 894 (*id.*).

Adad-nirari II's descriptions of his movements are a further step toward the development of maps.

In 894, for instance, he campaigned in the east, then in the west, and on his way back collected the tribute of the cities along the Habur. The Habur is a left tributary of the Euphrates. Adad-nirari II reports:

I made my way along the Habur;

I stayed in the city of Arnabanu;

next I stayed in the city of Tabitu;

next I entered the city of Shadikanu; I received the tribute, chariots, and gold;

next I stayed in the city of Qatnu; I received the chariots, horses, wagons, and oxen;

next I stayed in the mountain by the river;

next I entered the city of Dur-aduklimmu; I affirmed that it is my city;

next I marched to the city of Zurih; I received the tribute;

next I marched to the city of Sirqu; I received the oxen, asses, and the tribute of the entire land of Laqu;

next I received the tribute of Hindanu;
and I brought everything to my city of Ashur
(*id.*).

And Adad-nirari II's are the first descriptions
of military operations. In 896, for instance, he
campaigned in the west. This is one of the events
of this campaign:

Nur-Adad ran away to Nasibina;
I built 7 bulwarks all around the city;
I stationed Ashur-dini-amur, my general, inside
the bulwarks;

Nur-Adad had dug a moat, in bedrock, all around
the city, nine cubits wide; my bulwarks were
next to the moat;

I had my men surround the moat like a raging
fire; his men howled like little children;
. . . a trap as strong as a flood; I deprived them of
grain;

and at the command of Ashur I plundered the
city; I took gold, stones from the mountains,
their gods, chariots with the teams of horses,
weapons, . . . (*id.*).

Tukulti-Ninurta II campaigned annually west,
east, and south, affirming the conquests of Adad-
nirari II. He reports:

by the power of Ashur and Shamash, from the
high mountains of the land of Subartu to the
land of Nairi I received every year . . . (ins. 5).
His inscriptions are also true annals.

His descriptions of his movements are as
explicit as those of Adad-nirari II.

Tukulti-Ninurta II reports also:

I had in harness 2 702 teams of horses and . . . ,
more than ever before (*id.*).

More than ever before. And in the hands of
Ashur-nasirpal II invincible.

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Ashur-nasirpal II is a major step of advance in
the development of the state of Ashur, in particu-
lar, and the development of the state, in general.

Ashur is the first enduring great state. From
Ashur-bel-nisheshu, prince *c.* 1417-08, to Ashur-
banipal, prince 668-27, it continues strongly for
eight centuries. It rises slowly to become the
overwhelmingly most powerful state on earth
under Tukulti-Ninurta, prince *c.* 1243-06. It
declines briefly, then it rises again to become the
overwhelmingly most powerful state on earth

under Tiglath-pileser, prince 1115-076. It de-
clined again, then it begins rising again to be-
come once again the overwhelmingly most pow-
erful state on earth under Ashur-nasirpal II,
prince 884-59. The rise continues under his
successor Shalmaneser III. It again declines
briefly, then it rises again and continues to rise to
become in the century from Tiglath-pileser III,
prince 745-27, through Ashurbanipal, prince 668-
27, the one and only state on earth, very nearly.

There is continuity in the labors of the princes.
There is also continuous advance with each rise
of the state. In all of the following. Smiting.
Expansion of the state. Bringing all lands and all
peoples under one state. Administration. Theory
of the state. Description of the surface of the
earth. History. In all of these Ashur-nasirpal II
continues the labors of his predecessors, in most
of these he is a substantial advance, in some of
these he is a decisive advance.

He has left behind 140+ distinct inscriptions,
most in several, many in numerous copies. One in
400+ copies. One is the longest inscription yet,
389 very long lines. His is by far the most abun-
dant record yet.

Many of the inscriptions are chronicles *par
excellence*.

Thus, the longest begins with an invocation of
Ninurta: the almighty, the foremost among the
gods (*id.*). The prince then affirms at some length
who he is. He then describes in detail his deeds,
campaigns and building, in the first 5 years of his
reign. He then reaffirms who he is, describes his
domain in general and the building of Kalhu, the
new city of his princeship, dedicated to Ninurta.
He then describes in detail his deeds, campaigns
and building, in the following years of his reign.
He concludes by again reaffirming who he is, and
describing his domain in general and the building
of Kalhu.

And these are, for instance, but some of his
deeds in one of his early years, but 29 of the 389
lines of the chronicle:

in the year of my name, Ili-ibni, governor of the
land of Suhu, a land which had not been under
the princes of Ashur, my forefathers, before
me, came to my presence in Nineveh to bring
his tribute, silver and gold, to save his life and
kin;

while I was still in Nineveh a report came that Hulaia, installed in the city of Halziluha by Shalmaneser, prince of Ashur, my forefather, had rebelled, and had assaulted my city of Damdamusa;
 at the command of Shamash and Adad, I mustered my chariots and foot;
 at the source of the Subnat, where the statues of Tiglath-pileser and Tukulti-Ninurta, princes of Ashur, my forefathers, stand, I erected next to theirs my statue;
 I received the tribute of the city of Izalla, oxen, sheep, and wine;
 I crossed to mt Kashiar, and came to Kinabu, the fortified city of Hulaia;
 after a fierce battle, I besieged him in his city; I stormed it, and I took it; I killed 800 in battle; I captured 3 000 and burned them; I left no one alive; I captured Hulaia; I made heaps of their corpses; I burned their boys and girls; I flayed Hulaia and hung his skin on the walls of Damdamusa; I razed, destroyed, and burned;
 I conquered the city of Mariru and its country; I killed 50 in battle; I burned 200;
 in the plains I killed in battle 332; I took men, oxen, and sheep;
 the whole land of Nirbu, which is at the foot of mt Uhira, rose and fortified itself in the city of Tela;
 from Kinabu I went to Tela; it was surrounded by 3 walls; they trusted their walls, and did not submit to me; I stormed the city, and I took it; I killed 3 000 in battle; I took men, oxen, and cattle; some of captives I burned, of some I cut off the arms, of some I cut off the noses and ears, some I blinded; I made one heap of the living and one heap of heads; I hung their heads on the trees around the city; I burned their boys and girls; I razed, destroyed, and burned;
 I razed, destroyed, and burned the whole land of Nirbu with its strong walls;
 I went to the city of Tusha, and I decided to rebuild it; I cleared away the old wall, measured it, laid the foundation, and completed the new wall from bottom to top; I erected my statue and inscribed it with my power and my deeds in the land of Nirbu; and I brought the weak people of Ashur, who had gone to the

land of Shubru because they were hungry, and settled them in Tusha; I stored barley in the city;

then the people of Nirbu, who had fled to the mountains, came down and submitted to me; I settled them in their cities; I imposed on them tribute heavier than before, horses, mules, oxen, sheep, wine, and bronze, and I took their sons hostage (*id.*).

The land of Suhu is in the southwest, on the Euphrates. The land of Nirbu is in the north, around the source of the Tigris. It was an Aramean land, too.

Ashur-nasirpal II's descriptions of his movements are also a further step toward the development of maps. These are, also for instance, but some of his movements in one of his early years: in the year of Miqti-adur, I marched for the third time against the land of Zamua;

I started from the city of Kalzi;

I crossed the Lower Zab;

I entered the passes of mt Babitu;

I crossed the Radanu, and lingered for a day at the foot of mt Simaki;

I crossed the Turnat during the night, and at first light came upon the city of Amali (*id.*).

He razed, destroyed, and burned, and continues:

I came to the city of Hudun (*id.*).

He razed, destroyed, and burned, and continues:

I came to the city of Kisirtu (*id.*).

He razed, destroyed, and burned, and continues:

I took the cities of the Bara and Bunisu as far as mt Hashmar;

I entered the pass between mt Lara and mt Bidirgi, rugged mountains difficult for chariots and troops;

I came to the city of Zamru;

I crossed the Lallu;

I marched to mt Etinu, a rugged mountain very difficult for chariots and troops, which no prince among my forefathers had ever entered; with my men I climbed to the peak of the mountain;

I crossed the Edir;

I passed between mt Su and mt Elaiu (*id.*).

He razed, destroyed, and burned, and continues:

I came to the cities of Arasidku, Ammaru, Parsindu, Iritu, and Suritu (*id.*).

He razed, destroyed, and burned, and continues:

I came to the cities of Arzizu and Arsindu at the foot of mt Nispi, which no prince among my forefathers had ever reached (*id.*).

He razed, destroyed, and burned, and continues: I marched to mt Lara, a rugged mountain very difficult for chariots and troops, cutting my way through the woods with iron axes;

I came to the city of Arrakdu (*id.*).

At this point all princes of Zamua submitted, and the expedition ended. Ashur-nasirpal II built a city in the conquered land, named it Dur-Ashur, and stored barley in it.

The land of Zamua is in the rugged mountains in the east, which no prince among his forefathers had ever entered.

Ashur-nasirpal II is a substantial advance in history, and a substantial advance in the description of the surface of the earth.

In the development of warfare he is a decisive advance.

Ashur-nasirpal II discovered cavalry.

Cavalry enters the record with his inscriptions. This is how:

In his 1st year:

I mustered my chariots and foot (*id.*),

in his 2nd year:

I mustered my chariots and foot (*id.*),

in his 3rd year:

I mustered my chariots and foot (*id.*),

in his 4th year:

I mustered my chariots, cavalry, and foot (*id.*), and in his late years invariably:

I mustered my chariots, cavalry, and foot (*id.*).

Cavalry will remain a most formidable weapon for the following twenty-seven and a half centuries.

He records the size of his army only once. He keeps counting, however, his foes. These are all his counted foes in the main chronicle:

200 killed in battle (*id.*);

260 killed in battle (*id.*);

800 killed in battle, 3 000 captured (*id.*);

50 killed in battle, 200 captured (*id.*);

332 killed in battle (*id.*);

3 000 killed in battle (*id.*);

1 460 killed in battle (*id.*);

320 killed in battle, 300 captured (*id.*);

326 killed in battle (*id.*);

172 killed in battle (*id.*);

50 killed in battle (*id.*);

800 killed in battle (*id.*);

500 killed in battle (*id.*);

2 800 killed in battle (*id.*);

700 killed in battle (*id.*);

1 000 killed in battle, 2 200 captured (*id.*);

3 050 captured (*id.*);

6 500 killed in battle (*id.*);

1 000 killed in battle, 500 captured (*id.*);

2 500 captured (*id.*);

600 killed in battle, 3 400 captured (*id.*);

1 400 killed in battle, 3 780 captured (*id.*).

All these numbers corroborate the only number he has for his army. On one occasion: I mustered 50 000 men (ins. 40).

Thus, under Ashur-nasirpal II the domain of Ashur extended in the east and in the north further than it ever had. In the east, he subdued the rugged mountains along their entire length. In the north, he reached the source of the Tigris. In the west, the domain extended as far as it ever had, to the upper sea. Ashur-nasirpal II reports: I cleansed my weapons in the great sea; I received the tribute of the princes of the coast, Tyre, Sidon, Amurru, Byblos, Mahallatu, Kaizu, Maizu, and Arvad (ins. 2).

And Tyre was at this time a very important state. In the south, the domain did not extend as far as it ever had. Ashur-nasirpal II neglected the lower valley, and did not reach the lower sea.

All in all, under him the domain of Ashur was somewhat smaller than it had been at its greatest under Tukulti-Ninurta.

Ashur-nasirpal II, however, subdued the domain more thoroughly than it ever had been, and subdued it rather for good. Building on the labors of his predecessors, for the two and a half decades of his reign, annually, with chariots, cavalry, and foot, mustering 50 000, he razed, destroyed, and burned one land after another, until all princes of the land submitted, he built a city in the conquered land, and installed his governor over it. Before Ashur-nasirpal II, when the state declined and retreated from the domain it had brought under itself, disorder followed and hordes of wild men. After Ashur-nasirpal II there will be no disorder. When the state continues to rise, when it declines briefly, when it rises to become the greatest state on earth, and when it is

destroyed, too, there will be no disorder. States will rise in the wake of the destruction of Ashur.

The population of his domain was some six million, some one twelfth of humanity. Ashur-nasirpal II subdued rather thoroughly, and for good, some one twelfth of humanity.

Thus, he is:

Ashur-nasirpal, the great prince, the mighty, lord of the earth, prince of Ashur, son of Tukulti-Ninurta, the great prince, the mighty, lord of the earth, prince of Ashur, son of Adad-nirari, the great prince, the mighty, lord of the earth, prince of Ashur;

the valiant, appointed by Ashur, who has no rival in the four quarters, the shepherd, invincible in battle, a flood which nothing can stop, the prince who subdued all who did not submit, who rules all peoples, the great man, who stepped on the necks of his foes, who destroyed all foes, who crushed the rebellious, led by the great gods, who has conquered all lands, who has vanquished all mountains and received their tribute, who has subdued all countries (ins. 26).

He rules all peoples. He destroyed all foes. He has conquered all lands. He has subdued all countries.

In not less than one half of his inscriptions Ashur-nasirpal II describes his domain in general, east to west the major countries he brought within his borders. The description sometimes varies in the list of countries, but it invariably ends:

I counted them among my people;
in all countries I appointed my governors (*passim*).

I counted them among my people.

Ashur-nasirpal II built massively. In all countries he built cities. As he reports:

I rebuilt many cities abandoned under my forefathers, and settled many people in them (ins. 30).

He built Kalhu:

the city of my princeship (*id.*),
and in the city of his princeship alone he built:
the temple of Enlil and Ninurta, the temple of Ea-Sharu and Damkina, the temple of Adad and Shala, the temple of Gula, the temple of Sin, the temple of Nabu, the temple of Sharrat-Niphi, the temple of Sibitti, the temple of

Kidmuru, temples of all the great gods (*id.*).

And:

to consecrate the palace of wisdom in Kalhu, I invited 47 074 men and women from every corner of my land, 5 000 notables from Suhu, Hindanu, Patina, Hatti, Tyre, Sidon, Gurgum, Malidu, Hubushku, Gilzanu, Kumm, and Musasiru, the 16 000 people of Kalhu, and the 1 500 officials of my palace;

altogether, people invited from all lands and people of Kalhu, 69 574;

I feasted them with food and drink, bathed them, and anointed them for ten days, and I sent them back to their lands in honor (*id.*).

Ashur-nasirpal II had 1 500 officials in his palace. The palace of wisdom.

Kalhu was a city of 16 000.

The 69 574 the prince feasted were rather more than the men he mustered.

And he does list the food and drink with which he feasted them before sending them back to their lands in honor.

Finally, Ashur-nasirpal II was quite the botanist.

He reports:

in my city of Kalhu I gathered wild animals to show to all the peoples of my land;

tigers, wild bulls, elephants, lions, ostriches, monkeys, wild asses, antelopes, bears, panthers (ins. 2).

Next to these 10 kinds, there are in the list 2 more names of indeterminate reference.

12 kinds of animals are not a large zoological garden.

Also, however:

from all lands through which I passed I collected trees and plants, and brought them to my garden;

cedar, cypress, juniper, almond, date, ebony, olive, oak, tamarisk, terebinth, pomegranate, fir, pear, quince, fig, grapevine, apple (ins. 30).

Next to these 17 kinds, there are in this list 23 names of indeterminate reference. A few more names are lost in a couple of lacunae.

40+ kinds are quite a botanical garden.

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Ashur, then, continued through the five centu-

ries from Ashur-uballit to Ashur-nasirpal II. It conquered the entire valley, and again, and again.

And the particulars indicate 8 other states in these five centuries. Early on Hattusa. Later on Babylon. Later on still Byblos, Tyre, the state of David with its successor state of Judah, the successor state of Israel, Damascus, and Moab.

Hattusa.

The princes are 8,

Tudhaliya III	prince c. 1365-50,
Suppiluliuma	prince c. 1350-25,
Arnawanda	prince c. 1325,
Mursili II	prince c. 1325-00,
Muwatali	prince c. 1300-280,
Mursili III	prince c. 1280-75,
Hattusili III	prince c. 1275-45,
Tudhaliya IV	prince c. 1245-15.

After one and a half centuries of disorder, with these princes the Hittite state is restored. Their indices reflect this fact. There had been with the first rise of the state Mursili, so there are now Mursili II and Mursili III. There had been Hattusili, and there is now Hattusili III, as a shadowy Hattusili II has also been inferred from the time of disorder. The two princes Tudhaliya are III and IV, as an uncertain number of Tudhaliyas has also been inferred from the time of disorder, either two, I and II, or one, I/II. For the same reason Muwatali is now I now II.

The inscriptions of these later Hittite princes are more abundant and more explicit than those of the earlier Hittite princes. The most important are these. The deeds of Suppiluliuma, recorded by his son Mursili II. Three treaties which Suppiluliuma imposed on lesser princes. The annals of Mursili II and two plague prayers of his. A treaty of Muwatali. The testament of Hattusili III and his treaty with Ramesses II. And a treaty of Tudhaliya IV.

This is how Hattusili III describes the time of disorder:

all foes sacked the lands of Hatti; the Kaska sacked the lands of Hatti and took Nenesa; the Arzawa came from the lower land, sacked the lands of Hatti, and took Tuwanuwa and Uda; the Arwana came from afar, sacked all the upper lands, and took Samuha; the Isuwa came and sacked Teragama; the Armatana came from afar, sacked the lands of Hatti, and took

Kizzuwadna; the city of Hattusa was burned down (Pirwa decree).

Then Suppiluliuma restored the state.

In the deeds of Suppiluliuma Mursili II begins: thus speaks Mursili, prince of Hattusa, son of Suppiluliuma, prince of Hattusa, son of Tudhaliya, prince of Hattusa (*id.*).

And in his first plague prayer Mursili II reports: Tudhaliya the younger became master of the land of Hatti; all lords swore allegiance to him; and my father swore allegiance to him; when my father revolted against Tudhaliya, all lords supported my father; they seized Tudhaliya, and killed him (*id.*).

Tudhaliya, then, the father of Suppiluliuma, became prince of Hattusa. He was succeeded by Tudhaliya the younger, his son, presumably. Suppiluliuma then succeeded by fratricide, or in any case by assassination. It had been the means of accession of choice of the earlier Hittite princes, and so it remained of these later Hittite princes.

Suppiluliuma vanquished all foes of Hatti, campaigned vigorously in the east, and brought the Hittite state to its greatest.

Mursili II reports in the deeds:

my father destroyed the Gasga;
he conquered Kashula, and its people brought their oxen and sheep to him;
he conquered Tumana, and made it part of Hattusa again;
he drove the foe out of Ishtakana, rebuilt the towns, and made the country part of Hattusa again (*id.*).

Central Asia Minor thus firmly in his domain, Suppiluliuma turned to the east. Mursili II reports:

the Hurrian chariots and foot came to Murmuriga;
the Egyptian chariots and foot came to Kadesh;
my father mustered his chariots and foot and fell upon the Hurrian;
the Egyptian took fright at my father (*id.*).

Suppiluliuma himself, in his treaty with Shattiwaza, reports:

I made the lands from mt Lebanon to the far bank of the Euphrates part of my land (*id.*).

More particularly, Suppiluliuma has left behind the three treaties which he imposed on the princes of those lands, the prince of Mittani,

beyond the Euphrates, the prince of Nuhasse, between the Euphrates and the coast, and the prince of Ugarit, on the coast. In all three treaties: Suppiluliuma, the sun, the great prince, the prince of Hattusa, the brave, the favorite of Tarhanna (*id.*),

describes first his deeds, then their consequences.

These are the deeds which led to the treaty with the prince of Mittani:

Tushratta, prince of Mittani, said to me, why are you plundering the far bank of the Euphrates? and he wanted to take the country for himself; but I, Suppiluliuma, the great prince, prince of Hattusa, crossed the Euphrates, and defeated them; Tushratta fled;

then his son killed Tushratta; the Hurrians were confused;

and I, Suppiluliuma, the great prince, prince of Hattusa, set up Shattiwaza, son of Tushratta, prince in Mittani, so that Mittani, the great country, will not perish.

Mittani perished in the next generation, and not at the hands of Suppiluliuma's successors, but at those of Adad-nirari and Shalmaneser.

These are the consequences for the prince of Ugarit:

thus says Suppiluliuma, the sun, the great prince, prince of Hattusa, the brave;

to Niqmaddu, prince of Ugarit, this is the tribute you owe;

for your lord, the prince, 12 talents and 20 large shekels of gold, 1 gold vessel weighing 1 talent, 4 linen cloths, 1 large linen cloth, 500 shekels' worth of blue wool, 500 of red wool; for the queen, 1 gold vessel weighing 30 shekels, 1 linen cloth, 100 shekels' worth of blue wool, . . . of red;

for the heir to the throne, 1 gold vessel weighing 30 shekels, 1 linen cloth, 100 shekels' worth of blue wool, 100 of red;

for the chief scribe, 1 gold vessel weighing 30 shekels, 1 linen cloth, 100 shekels' worth of blue wool, 100 of red (*id.*).

And the consequences continue for some time in the same way.

In those lands Suppiluliuma encountered the princes of Egypt. Those lands had been the tributaries of the princes of Egypt for one and a half centuries by this time.

Suppiluliuma is thus also the Hittite prince attested by the Amarna archive. He writes to the prince of Egypt: now that you have ascended the throne of your father, let us be friends. He sends much silver. And he adds: I want gold, send me gold; and tell me what you want. More important, unlike other correspondents of the prince of Egypt, he does not deliver a daughter.

Rather the contrary. In Egypt, that was the time when Amenhotep IV introduced the new worship of Aten, but after the brief reigns of his immediate successors the old worship was restored. During that time, Mursili II reports in the deeds:

the queen of Egypt wrote to my father, saying, my husband has died, and he has left no son; they say that you have many sons; send me one to be my husband (*id.*).

The queen was the widow of Tutankhamun. After some negotiation Suppiluliuma sent a son. He perished on the way. In Egypt, Ay succeeded Tutankhamun.

In Hattusa, Mursili II reports in his second plague prayer:

my father was enraged; they came and asked for a son of mine, he cried, and they killed him! and he flew against the Egyptian and destroyed his chariots and foot (*id.*).

As soon as the state was restored, then, Suppiluliuma built it into a powerful state. Earlier, when the Hittite state had first begun, Hattusili and Mursili had built it into a powerful state. Under their successors the state had declined, then fallen apart. Similarly, under Suppiluliuma's successors the state declined, then fell apart.

Mursili II continues in his second plague prayer:

my father brought back Egyptian captives, and a plague started among them (*id.*),

and in his first plague prayer reports:

it is now 20 years that the plague has been ravaging the land of Hatti (*id.*).

The succession was also disorderly. In his annals Mursili II reports:

when my father became a god, my brother Arnawanda succeeded him; when he became a god, I succeeded him (*id.*).

Accordingly:

all foes of Hatti rose to make war on me (*id.*).

And:

I went against them, and in 10 years I overcame them, and destroyed them (*id.*).

The annals are the record of these 10 years. The main foes Mursili II fought were the Kaska, north of Hattusa, the Arzawa, southwest of Hattusa, and the Kizzuwadna, southeast of Hattusa.

Mursili II reasserted the authority of the state in central Asia Minor as well as in the east: the land of Kadesh submitted to me (*id.*).

The succession was orderly. Muwatali succeeded his father.

Muwatali has left behind his treaty with Alaksandu, prince of Wilusa. Wilusa is somewhere west of Hattusa, where exactly is not clear. The main clause of the treaty is this:

when I, Muwatali, the sun, march from Hattusa against the princes equal to me, the prince of Egypt, or the prince of Babylon, or the prince of Mittani, or the prince of Ashur, you must march with me (*id.*).

If Muwatali contemplated the possibility of marching against the prince of Babylon, this rather shows that the memory of Mursili's raid on Babylon, three centuries earlier, was still cherished in Hattusa. Even if realizing the possibility would have involved, at this time, marching across the domain of the prince of Ashur, and the prince of Ashur was, at this time, Adad-nirari.

Marching against the prince of Ashur was a more distinct possibility. Adad-nirari was engaged in destroying Mittani, and reports:

the prince of Mittani asked the Hittites for help, and they took his money, but sent him no help.

Against the prince of Egypt Muwatali did march. He fought Ramesses II at Kadesh. In his testament Hattusili III reports:

my brother Muwatali defeated the prince of Egypt (*id.*).

The prince of Egypt, for his part, reports: my might made all my foes the Hittites fall in the Orontes, one upon the other, as crocodiles fall in the water.

Muwatali, then, asserted the authority of the state from western Asia Minor to the Orontes.

Muwatali also, however, took the two steps which, as it turned out, doomed the state.

He removed the seat of princeship from the city of Hattusa. Hattusili III reports:

at the command of the god, my brother Muwatali left the city of Hattusa, he took the gods of the city, brought them to Tarhuntassa, and made Tarhuntassa the seat of his princeship (*id.*).

Tarhuntassa is somewhere south of Hattusa, where exactly is again not clear.

Accordingly:

in his back the Kaska, Pishuru, and Daistipassa rose; they destroyed the lands of Ishupitta and Marista; they attacked Kanesh, . . . ; Kurustama and Gazziura rose against Hatti (*id.*).

Also, Hattusili III reports:

my brother Muwatali gave me the upper land to rule (*id.*).

Once divided, authority remained divided.

The succession was again disorderly, too.

Hattusili III reports:

my father Mursili had three sons, Halpashulupi, Muwatali, and Hattusili; I was the youngest; my bother Muwatali succeeded my father; when he became a god, his son Mursili succeeded him;

Mursili sought to kill me;

I made war on him;

and I am now Hattusili, the great prince, prince of Hattusa, son of Mursili, prince of Hattusa, grandson of Suppiluliuma, the great prince, prince of Hattusa (*id.*).

Hattusili III took the gods from Tarhuntassa back to Hattusa.

He made a treaty for peace and friendship forever with Ramesses II.

In the east, Shalmaneser was now the prince of Ashur. When he made Mittani part of his domain, Shalmaneser reports:

I slaughtered the Hittites like sheep.

And Hattusili III brought the gods from Tarhuntassa back to Hattusa, but that new seat of princeship did not remain vacant.

Hattusili III was succeeded by his son Tudhaliya IV, and in his treaty with Kurunta – another son of Muwatali – Tudhaliya IV reports: my father Hattusili set up Kurunta prince in Tarhuntassa;

and even before I, Tudhaliya, the great prince, succeeded my father, the god had brought Kurunta and me together in friendship;

Kurunta swore to me, I am your servant;

and I swore to him, I will stand by you (*id.*).

The main concern of the treaty is to fix the border between Tudhaliya IV and Kurunta. The domain of the great prince, Tudhaliya IV, had shrunk to the country around the city of Hattusa.

The prince of Ashur was now Tukulti-Ninurta. In one of his reports he notes, in passing:

I carried off 28 800 Hittites from beyond the Euphrates (ins. 23).

After Tudhaliya IV there are a shadowy Suppiluliuma II and a more shadowy Arnawanda II or III. Succession was by assassination, presumably. Either way, the Hittite state is no more. Even if in this case as in all others there are, now and again, local chieftains styling themselves prince of Hattusa.

From this time, the time of the later Hittite princes, is the composition *Princeship in heaven*.

The main events it records are these.

In the old days Alalus is the lord of heaven. Anu is his cupbearer, and for nine years stands in the feet of Alalus. In the ninth year Anu makes war on Alalus, vanquishes him, and Alalus goes down into the black earth. Now Anu is the lord of heaven. Kumbari is his cupbearer, and for nine years stands in the feet of Anu. In the ninth year Kumbari makes war on Anu, vanquishes him, and violates him. In the course of the violation, however, Anu impregnates Kumbari with Tarhanna, Aranzahas, and Tasmisus. After the violation Anu runs away, hides in heaven, and plots with the still unborn Tarhanna, still in Kumbari's belly, the overthrow of Kumbari. Tarhanna is born, makes war on Kumbari, vanquishes him, castrates him, and becomes the lord of heaven.

The importance of *Princeship in heaven* is in that it is a descendant of *When on high*, three centuries before itself. The descent is attested by the character of the recorded events and the names of their protagonists. The line of descent is well attested, too. Southeast to northwest, from the Akkadian Babylon to the Akkadian Ashur to the Hurrian Mittani to the Hittite Hattusa. Clearly, the reference and the true, little as it is in *When on high*, has all been lost along the way. With one exception, perhaps. One of the three with whom Anu impregnates Kumbari is Aranzahas, and Aranzahas is the Hurrian name for the Tigris. Then again, it is difficult to suspect the Hittites aware of the Tigris.

The more important descendants of *When on high* are the Yahwistic document and Hesiod's *Theogony*. And *Princeship in heaven* is important as well in that it is, in both space and time, along the line of descent from *When on high* to Hesiod's *Theogony*.

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Babylon.

1 prince of this fourth of the five discontinuous series of princes of Babylon is important, listing also his 4 successors,

Nebuchadnezzar prince c. 1125,

Enlil-nadin-apil prince c. 1105,

Marduk-nadin-ahhe – prince c. 1085,

Marduk-shapik-zeri – prince c. 1075,

Adad-apla-iddina prince c. 1065.

After the fall of the state of Hammurabi and his successors disorder prevails in the lower valley for a long time. Excepting the times when it is under the princes of Ashur, there is no state of even small stability or authority in the lower valley for ten centuries.

The synchronistic prince list counts 87 princes of Babylon in these centuries. Very few of these princes are attested otherwise, fewer still in succession of one another.

In the first two and a half of these ten centuries the Kassite hordes dominate the lower valley. They emerge from the disorder and attendant obscurity twice, the first time barely, both times briefly, with the second and the third of the five discontinuous series of princes of Babylon.

In the next two centuries Kassite princes of Babylon emerge from obscurity with the labors of the princes of Ashur.

Ashur-uballit set up twice a prince in Babylon. Enlil-nirari destroyed the prince of Babylon. A brief respite followed. Then Adad-nirari conquered the Kassites. Tukulti-Ninurta captured the prince of Babylon, put his foot on his neck, and became prince of Babylon himself. Again a brief respite followed. Then Ashur-dan marched on Babylon.

Then the end of the Kassite princes of Babylon comes, brought about not by the princes of Ashur, however, but by a prince of Elam.

Elam is the country in the east. It is in the record from the first, for fifteen-odd centuries by

this time, counting back to Enmebaragesi who smote Elam. And there is in these fifteen-odd centuries no state of even small stability or authority in Elam. Even if there is, now and again, a prince of Elam raiding far afield.

In particular, Shutruk-Nahhunte, prince c. 1155, has left behind his booty, and his inscriptions on his booty. On a stele of Naram-Sin:

Shutruk-Nahhunte, son of Hallutush-Inshushinak, beloved of Inshushinak, prince of Anshan and Susa, lord of Elam; at the command of Inshushinak I conquered Sippar; I took the stele of Naram-Sin and brought it to Elam (*id.*),

on a statue of Manishtushu:

Shutruk-Nahhunte, son of Hallutush-Inshushinak, beloved of Inshushinak, prince of Anshan and Susa; at the command of Inshushinak I conquered Eshnunna; I took the statue of Manishtushu and brought it to Elam (*id.*),

and on another statue of Manishtushu:

Shutruk-Nahhunte, son of Hallutush-Inshushinak, beloved of Inshushinak, prince of Anshan and Susa, lord of Elam; at the command of Inshushinak I conquered Babylon; I took the statue of Manishtushu and brought it to Elam (*id.*).

And then there is the fourth series of princes of Babylon. Styled also princes of Isin, they came from Isin, presumably, to establish themselves in Babylon. But 1 of them is important, Nebuchadnezzar.

Nebuchadnezzar conquered Elam.

A stele celebrates the feat:

Nebuchadnezzar, the pious, the best, the seed of Babylon, foremost among princes, lord of Babylon, sun of the land, who brings well-being to the people, who protects the borders, the righteous prince who renders justice, the hero who is always ready for war, who vanquished the land of the mighty Lullubum, who conquered the land of the Amorites, who plundered the Kassites, the greatest of princes, the lord, the beloved of Marduk;

he destroyed Hutelutush, prince of Elam; Hutelutush ran away;

Nebuchadnezzar, the prince, stood in victory; he conquered Elam; he carried off its treasures (*id.*).

Nebuchadnezzar conquered Elam. Thus, if its vanquished princes' had been an attempt to build

the state in Elam, Nebuchadnezzar arrested that attempt. If his was an attempt to build, or rebuild, the state in Babylon, this attempt was not too successful either.

Ashur-resh-ishi defeated Nebuchadnezzar, he slaughtered his men, and he carried off his treasures and 40 of his chariots.

Tiglath-pileser marched on Babylon, slaughtered them, captured the palace of Marduk-nadin-ahhe, and burned it, he destroyed Marduk-nadin-ahhe.

Ashur-bel-kala set up Adad-apla-iddina prince in Babylon.

The importance of Nebuchadnezzar is not in that he conquered Elam, it is in that he is the beloved of Marduk.

Nebuchadnezzar is celebrated in more literary compositions than any of the earlier princes of Babylon, including the earliest and very much greater, or any of the princes of Ashur, many of them very much greater as well.

What, in particular, all these compositions celebrate is one part or another of this. Marduk has gone to Elam, Nebuchadnezzar prays to Marduk to let himself be taken from the vile Elamite and brought back home to Babylon, Marduk responds favorably to the prayer, and Nebuchadnezzar marches on the vile Elamite and brings Marduk back home to Babylon.

Writing flourished greatly in the great state of Babylon, that of Hammurabi and his successors. With the fall of that Babylon writing suffered as greatly as the state. But at length, even as the state did not rise again in Babylon, beginning at the time of Nebuchadnezzar writing flourished again in Babylon. – There are analogies. – Athens was a great state and writing flourished greatly in the great state of Athens. After the rise of Macedon Athens became politically irrelevant, yet it remained the center of philosophy. – The early Ptolemies built Egypt into an important state, and their city of Alexandria into the greatest center of learning. Under the later Ptolemies Egypt declined, yet Alexandria remained the center of learning. – In all three cases, when the state was great, or in any case important, writing was also great, including in all three cases major advances toward the reference and the true. Later on, when the state was irrelevant, or in any case not impor-

tant, in all three cases writing devoted itself resolutely to the thought and the sense.

Thus, that Marduk is supreme is not new at the time of Nebuchadnezzar. Marduk has been supreme for some time. Four and a half-odd centuries earlier, in *When on high*:

your command is supreme,
your command cannot be changed,
your command shall be truth.

That Nebuchadnezzar conquers at the command of Marduk is not new either. The princes have been conquering at the command of one god or another for some time as well. The great princes of Babylon have been destroying at the command of Anu and Enlil, with the wisdom of Marduk. The princes of Ashur have been razing, destroying, and burning at the command of Ashur.

New is that Nebuchadnezzar is not commanded to just conquer the vile Elamite. He is commanded to conquer the vile Elamite in order to bring Marduk back home to Babylon.

New is also, and this is the major new development, that it is not that the vile Elamite has carried off Marduk as booty. Marduk has commanded the vile Elamite to carry him, Marduk, off as booty.

Thus, Nebuchadnezzar is important, but not very important. Very important is the composition from his time attesting this major new development, the *Marduk prophecy*.

It is a prophecy *par excellence*. Like all earlier and especially later prophecy, the *Marduk prophecy* tells the future such as it is, at the time of the prophecy, already the past. It tells of what will happen such as it has, at the time when it is told, already happened.

In the other valley this begins earlier, seven and a half centuries earlier, with *The prophecy of Neferti*. At the time of Amenemhet, the wise man Neferti tells the great prince Sneferu, six centuries before Amenemhet, that there will be in the future a time of calamity and disorder, then the great prince Amenemhet will bring prosperity and order. Prophecy begins earlier in that valley, but in that valley that first prophecy is not emulated much, and prophecy remains not very consequential.

In this valley, this begins later, with the *Mar-*

duk prophecy, but in this valley this first prophecy will be emulated very much, and prophecy will become very consequential. And this proposition is, indeed, itself prophetic, referring as it is to what has happened.

In the *Marduk prophecy* Marduk needs no wise man to tell the future. He does so himself. He tells of a great prince of Babylon who will arise, destroy Elam, and bring himself, Marduk, back home to Babylon.

The *Marduk prophecy* thus dates itself to the reign of Nebuchadnezzar.

The beginning of prophecy in this valley with the *Marduk prophecy* is very consequential. But the most consequential – the major new development with the *Marduk prophecy* – does not concern the future at all, it concerns the past such as it is the past. Marduk, Marduk reports, has commanded the past.

Marduk begins by presenting himself:

I am Marduk, the great lord, the watcher who watches, who roams the mountains, who watches carefully, who roams from the rising sun to the setting sun, back and forth, all the lands (*id.*).

And before telling the future, before telling of the great prince of Babylon who will arise, destroy Elam, and bring him back home to Babylon, Marduk tells the past, tells of what has happened:

I commanded that I go to the land of Hatti;
then a great king arose . . . I returned to Babylon;
. . . to the land of Ashur;

. . . I returned to Babylon;

then I commanded that I go to the land of Elam,
and all the gods came with me, I myself commanded it (*id.*).

Mursili destroyed Babylon and took Marduk to the land of Hatti. Mursili has not left inscriptions behind, but his successors have, and they destroyed, they report, at the command of Tarhanna. So it can be presumed that Mursili also destroyed Babylon and took Marduk to the land of Hatti at the command of Tarhanna. Not so. Marduk commanded it.

Tukulti-Ninurta destroyed Babylon and took Marduk to the land of Ashur, Tukulti-Ninurta reports, at the command of Ashur. Not so. Marduk commanded it.

Shutruk-Nahhunte destroyed Babylon and took

Marduk to the land of Elam, Shutruk-Nahhunte reports, at the command of Inshushinak. Not so. Marduk commanded it.

And how radical this new development is can be judged in the following two ways.

One. It is a descendant of Marduk's who informs Cyrus:

thus said the lord to Cyrus, leading him by the hand to subdue peoples and undo kings; I will go before you and I will level the hills, I will shatter the bronze gates, I will cut the iron bars; you do not know me, but it is I who has given you your title; you do not know me, but it is I who has given you your strength, so that through you all men from the rising sun to the setting sun will know that there is no one but me (*Isaiah*, 45).

Two. Ashur was a great state. Babylon was not, had not been for a long time. Ashur commanded that Ashur destroy. And it can confidently be presumed that Ashur would not have commanded either that Ashur be destroyed or that Ashur be carried off as booty. Babylon was destroyed, and again, and again, Marduk carried off as booty, and again, and again, before Marduk began commanding all that. And god's, when he began commanding it, was a much lesser state than Babylon, too, destroyed, and again, and again, and again, god carried off as booty, and again, and again, and again.

Finally, there is another development at this time in Babylon, far less consequential, but also far less somber. Literature flourished at this time.

In particular, the epic *Gilgamesh* is from this time. The numerous Babylonian scribes who disseminated the masterpiece uniformly style themselves in their colophons: descendent of Sin-liqe-unninni.

Sin-liqe-unninni composed *Gilgamesh*.

And fortunately, Sin-liqe-unninni can be traced back somewhat earlier than the time of Nebuchadnezzar. He can thus be dated with a reference to a greater prince. Tukulti-Ninurta was prince c. 1243-06. Sin-liqe-unninni composed *Gilgamesh* in the century before c. 1206.

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And in the last one and a half of the five centuries from Ashur-uballit to Ashur-nasirpal II

several small states appeared on the Asian Mediterranean littoral. Several very small states.

By this time, counting back to Sargon, the Asian Mediterranean littoral had been a borderland of the state for thirteen centuries.

In the first eight of these thirteen centuries the princes of Akkad had campaigned to the upper sea. Then the princes of Ur had campaigned to the upper sea. Then the ephemeral state of Yam-had had appeared between the Euphrates and the sea, then disappeared. Then the princes of Hattusa had campaigned to the Orontes. Toward the middle of this time Amorite hordes had overrun the entire valley, and had continued raiding the Mediterranean littoral, and one another when they had begun settling on the littoral, longer and more vigorously than other parts of the valley. Toward the end of this time Hurrian hordes had descended on the valley, and these as well had continued raiding the littoral, and one another when they had begun settling on the littoral, longer and more vigorously than other parts of the valley. At the end of this time the Hyksos hordes had descended on the valley of the Nile from the Asian Mediterranean littoral, too.

In the following four of these thirteen centuries the princes of Egypt had conquered the littoral north to the Euphrates. The local chieftains had begun prostrating themselves seven times and seven times again, and delivering excellent slaves and excellent horses. They had also continued raiding one another vigorously. The princes of Hattusa had again begun campaigning to the Orontes, and contesting with the princes of Egypt the collection of the tribute of the chieftains. Then the princes of Ashur had begun campaigning to the sea, staking their claim to the collection of the tribute. The next hordes had been Aramean, and these as well had continued raiding the littoral, and one another when they had begun settling on the littoral, longer and more vigorously than other parts of the valley.

In the last of these thirteen centuries the Hittite state was long gone. The new kingdom was long gone. In Ashur, Ashur-bel-kala was prince 1074-56, Ashur-dan II was prince 935-12. The one century-odd in between was the nadir of the state of Ashur.

And in this one century-odd several small

states appeared on the littoral. The particulars indicate 6 states with a claim to importance. Although in all 6 cases the claim is precarious, in 4 of the 6 cases also marginal.

All 6 are very small.
They are very small spatially. Of 4 of the 6 no attempts to establish their authority beyond the country around the walls of their cities can be inferred. Of the other 2 such attempts can be inferred. Feeble attempts, and not successful, and these 2 as well remained confined to the country around the walls of their cities.

They are very small temporally. Of 3 of the 6 no successions of princes longer than a couple of reigns are attested. Of the other 3 such successions are attested, not much better attested, however, in any of the 3. None of the 6 is attested independently, by another state, not even one of themselves, over the reigns of 3 consecutive princes.

They are very small politically. None of the 6 rose, and when Ashur rose again, they all became its tributaries.

Accordingly, later on, they are well attested by the princes of Ashur, smiting them, collecting their tribute. In these one and a half centuries, before the princes of Ashur began smiting them, they are not well attested at all. The evidence for all 6 is as small as they are. It is meager. And it is in all 6 cases more or less entirely inferential, in all 6 cases resting on long chains of inferences.

The importance of these states is in that they are the beginning of three very important developments. The alphabet. Seagoing. And Judaism. Although this, too, that they are the beginning, has to be in all three cases qualified.

Byblos.
Byblos is on the coast.
1 prince is important, listing also his predecessor,

Ahiram prince c. 1000,
Ittobaal prince c. 980.
Ittobaal, on a limestone sarcophagus, reports: Ittobaal, son of Ahiram, prince of Byblos, for Ahiram, his father (*id.*).
It is the oldest alphabetic inscription.
It is one of a half dozen alphabetic inscriptions from Byblos, identified as the oldest on paleographic grounds.

The language is Phoenician. All languages of the littoral, Aramean, Ugaritic, Phoenician, Hebrew, Moabite, are closely related.

Languages throughout the valley, including on the littoral, had borrowed cuneiform. Cuneiform is a syllabary. The oldest inscriptions attesting development from the syllabary of cuneiform into an alphabet are from Ugarit, also on the coast, 170 km north of Byblos, two-odd centuries earlier. The inscriptions from Byblos attest the completion of the analysis of the syllable into its component consonants.

The Byblos script was borrowed by all its neighbors. One of its developments is the Hebrew script, also a consonantal alphabet. Another of its developments, along the routes of the Phoenician colonization of the sea, is the Greek alphabet, in which the analysis of the syllable into its components is complete with the addition of signs for vowels.

The power of the alphabet is indicated by the fact that, where the syllabaries of cuneiform had to develop several hundred characters each, the Phoenician alphabet has 22. The Greek 24.

The alphabet is very important.
The state of Byblos is not important at all. Indeed, on the minimal standard of being attested by just one other state, or even the still more minimal standard of itself attesting just one other state, Byblos is not a state at all. Tiglath-pileser, prince 1115-076, reports: I received the tribute of Byblos, Sidon, and Arvad. Ashur-nasirpal II, prince 884-59, reports: I received the tribute of Tyre, Sidon, Byblos, and Arvad. In the meantime, no state notes Byblos, Byblos notes no state.

Tyre.
Tyre is also on the coast, 100 km south of Byblos.

Through the time of Ashur-nasirpal II, 1 prince is important, listing also his predecessor and his successors,

Abibaal prince c. 980,
Hiram prince c. 969-35,
Baal-Ezar prince c. 935-18,
Abdastartus prince c. 918-09,
Methusastartus prince c. 909-897,
Astartymus prince c. 897-88,
Phelles prince c. 888,
Ithobaal prince c. 888-56.

Tyre is a very important state. The evidence, however, is very difficult. Tyre notes no other state. One other state notes Tyre. This other state, however, is the state of David, and no other state notes that other state, the state of David. And when that other state, the state of David, notes itself, it does so many centuries after the fact, presuming that the state of David is a fact. And the presumption that the state of David is a fact is itself beset by many difficulties.

The importance of Tyre rests on long chains of inferences.

The series of the princes is from Josephus, quoting the *Phoenician history* of Menander of Ephesus (*Apion*, I, 18). Menander of Ephesus wrote, within a generation or so, c. 210/00. He thus wrote, given the dates above, seven and a half centuries after Hiram. Nor is there any evidence that anyone before Menander of Ephesus recorded the deeds of the princes of Tyre.

The princes of Tyre have not left inscriptions behind. They were not great writers, apparently.

Again, Tiglath-pileser, prince 1115-076, received the tribute of Byblos, Sidon, and Arvad. Tyre, just south of Sidon, was not yet worth noting, presumably. Ashur-nasirpal II, prince 884-59, received the tribute of Tyre, Sidon, Byblos, and Arvad. Tyre was now worth noting.

In the meantime Tyre rose under Hiram.

The only direct source for this is the Hebrew composition *Joshua*, *Judges*, *Samuel*, *Kings*. It was written, within a generation or so, c. 560/50. Given the dates above, this writer thus wrote four centuries after Hiram. Nor is this writer an irreproachable witness.

Writing about the glory days of David and Solomon, this writer notes Hiram several times: Hiram, the prince of Tyre, sent David cedar logs, carpenters, and masons, and they build a palace for David (*Samuel*, II, 5);

Hiram, the prince of Tyre, gave Solomon all the timber and gold needed to build the house of the lord and the royal palace; in return Solomon gave Hiram 20 cities in Galilee; when Hiram saw them, they did not please him; my brother, he said, what kind of cities have you given me? he nevertheless gave Solomon 120 talents of gold (*Kings*, I, 9);

Solomon built a fleet of ships in Edom on the

Red Sea; Hiram sent him his own men, seasoned seamen, to sail with Solomon's men; and they sailed to Ophir and brought back 420 talents of gold, which they gave to Solomon (*id.*);

Hiram's fleet, which brought gold from Ophir, brought also almug wood and gems (10);

Solomon had a fleet at sea which sailed with Hiram's fleet, and every 3 years they came back home, bringing gold, silver, ivory, apes, and monkeys (*id.*).

That is that about Hiram in the record.

Nevertheless, Hiram's men were seasoned seamen. They sailed to Ophir – even as it is not clear where Ophir is – and brought back gold, almug wood – even as it is not clear what almug wood is either – and gems. He had a fleet at sea which brought back gold, silver, ivory, apes, and monkeys.

It is not much, and it is not from an irreproachable witness. Nevertheless, that the state, and hence humanity, became seagoing in Tyre in the one century-odd beginning with Hiram is indicated clearly and distinctly, if indirectly, rather by the entire record.

The record is unambiguous that for centuries before this time and for many centuries after this time the Phoenicians built the best ships, they were the best seamen, and they had the largest and best fleet of ships.

Earlier, for instance, Tiglath-pileser reports: in the great sea, with a harpoon that I made, I killed the sea horse. And that the ship can only have been Phoenician Ashur-bel-kala attests: in the great sea, in a ship of the city of Arvad, he killed the sea horse.

Later, also for instance, another of the Hebrew writings, *Ezekiel* – a generation or so before *Joshua*, *Judges*, *Samuel*, *Kings* – while cursing in detail all nations, nation after nation after nation, when the turn of Tyre comes, curses in detail: the gateway of the nations (26); whose borders are on the high sea (27); which has all the seagoing ships (*id.*); whose seamen plow all waters (*id.*); which breaks the deep waters of the sea (*id.*).

Later still, also for instance, the Phoenicians, Herodotus reports: are the best seamen (VI, 6), and they provide the entire navy of the great king (III, 19).

Depictions of ships on stelae and statues, corroborated by excavation and salvage, indicate unambiguously that the keel, the caulking of planks, and the battering ram were all discovered early in these centuries in the Phoenician cities.

All this still does not point to Tyre, in particular, in the one century-odd beginning with Hiram, in particular.

The fact of colonization by sea does.

Carthage was founded by Tyre in 814. Both the fact and the date are attested firmly, first by Herodotus (III, 19) and first by Timaeus (fr. 60), respectively.

The distance from Tyre to Carthage is 2 300 km.

Before that one century-odd there is no record of a sea voyage beyond Crete. The distance from the Phoenician cities to Crete is 800 km.

And Carthage is only the greatest Tyrian colony. Tyre planted some dozens of colonies, and west of Carthage all the way to Gades beyond the strait of Gibraltar. The distance from Tyre to Gades is 3 800 km.

And Tyrian colonization in the one century-odd before the foundation of Carthage is indicated by Herodotus.

Herodotus found Phoenician foundations on Thera (IV, 147), north of Crete, on Cythera (I, 105), northwest of Crete, on Thasos (II, 44), in the northern Aegean, and in Boeotia, on the mainland, as dramatically as this: the Phoenicians who came with Cadmus to Boeotia brought with them much learning, and in particular the alphabet, which, I think, the Greeks did not know before that (V, 58).

That these Phoenician foundations are Tyrian, in particular, can be inferred from the fact of the centuries-long predominance of Tyre among the Phoenician cities. That the foundations predate the foundation of Carthage, in particular, can be inferred from the two facts, that the oldest Greek inscriptions are contemporary with the foundation of Carthage, for the Greeks did not know the alphabet before that, and that by the time of the foundation of Carthage, and not before that, Greek cities dominate the Aegean.

Colonization by sea has extended very vastly and very quickly the reach of the state, and of all that the state brings along with it. Twice. The

largest waves of colonization by sea have been two.

Exploration of the surface of the earth resumed with prince Henry and the rounding of cape Bojador by Eanes in 1434, in 1492 Columbus crossed the Atlantic, and then the second wave started, and continued for four-odd centuries.

The first wave was, relative to population, the larger of the two. The Greek cities learned colonization, as they did the alphabet, from the Phoenician cities, and this first wave of colonization by sea continued for four and a half centuries. It started in Tyre in the one century-odd beginning with Hiram.

Colonization by sea is very important.

It is also how the state, and hence humanity, became seagoing.

The state of Tyre is very important.

The state of Tyre planted some dozens of colonies, but it did not build a maritime empire over them. Before the foundation of Carthage already Tyre had become the tributary of the princes of Ashur. Athens, four centuries later, will build the first maritime empire. One century later still, Carthage will build the next.

The state of David with its successor state of Judah.

Jerusalem, the seat of princeship of this state, is just inland, 160 km south of Tyre.

Through the time of Ashur-nasirpal II the particulars attested by the Hebrew holy writings are these,

David	prince c. 1003-963,
Solomon	prince c. 963-23,
Rehoboam	prince c. 923-10,
Abijah	prince c. 910-08,
Asa	prince c. 908-876,
Jehoshaphat	prince c. 876-57.

Had it not been for the development of Judaism there would have been no evidence for the state of David with its successor state of Judah before Tiglath-pileser III, prince 745-27. Tiglath-pileser III reports:

I received the tribute of Ahaz of Judah (ins. I, 787/804).

Ahaz was prince of Judah c. 738-26. Given the dates above, had it not been for the development of Judaism, there would have been no evidence for the state of David with its successor state of

Judah for the first two and a half-odd centuries of its development, such as this development is attested by the development of Judaism.

Before Ahaz, no other state notes this state. This state notes no other state. The princes of this state have left no inscriptions behind. They were not great writers either, apparently. On the minimal standard of being attested by just one other state, or even the still more minimal standard of itself attesting just one other state, before Ahaz the state of David with its successor state of Judah is not a state at all.

Worse, the only witness to this state is the holy writing *Joshua, Judges, Samuel, Kings*, and being a holy writing, this witness is not an irreproachable witness, not irreproachable at all.

As it is, however, there is the development of Judaism, Judaism is very important, in the development of Judaism such as Judaism describes it the state of David with its successor state of Judah is very important, and it is thus very important to extract, from all the abundance of the thought and the sense which constitutes the development of Judaism, the little that there is of the reference and the true.

And from *Joshua, Judges, Samuel, Kings* alone reference and true cannot be extracted. From *Joshua, Judges, Samuel, Kings* alone nothing but thought and sense can be extracted. Reference and true can be extracted from this witness only on the ground of two other reports. One report of the three prophetic books, *Amos, Isaiah, and Jeremiah*. And crucially, one report of Sheshonq, prince of Egypt c. 928-07.

The oldest of the writings collected in the Hebrew scriptures is the Yahwistic document. Next are the prophetic books. Next, and by far the most important, are 4 writings of which *Joshua, Judges, Samuel, Kings* is the second. It is with these 4 writings that Judaism was established. With their dates,

Deuteronomy the law promulgated in
622,

Joshua, Judges, Samuel, Kings – the two
generations after 587,

Priestly code the century before 445/33,
Chronicles, Ezra, Nehemiah – the century
after 445/33.

Deuteronomy is the book of the law. And it

introduces the law by relating the events of the lawgiving, how the lord gave the law to Moses, and Moses gave the law to the Hebrews. It is dated from the promulgation of the law under Josiah in 622.

Joshua, Judges, Samuel, Kings then relates all that befell the Hebrews after the Mosaic lawgiving through the destruction of Judah in 587. It is dated from the latest events it relates.

And so much should suffice to show that this witness is not irreproachable. The lord gave the law to Moses, and this witness proposes to find the hand of the lord in all that befell the Hebrews after Moses, and does find it.

And he is the only witness.

Chronicles, Ezra, Nehemiah collects from the earlier Hebrew writings the genealogies leading from Adam to David, then revisits all that befell the Hebrews from David to the destruction of Judah, adding what has since befallen the Hebrews, namely, the great assembly under Ezra. The concern of this witness is liturgical. He proposes to find the uninterrupted proper worship of the lord in Jerusalem, in his temple, under his priests, the Levites, from its institution by David through the building of the temple by Solomon through the princes of Judah through the destruction of Judah through the great assembly, and does find it. Excepting the great assembly, all that befell the Hebrews this witness borrows from the earlier witness, *Joshua, Judges, Samuel, Kings*.

Joshua, Judges, Samuel, Kings begins with the conquest of the promised land. God, upon giving the law to the Hebrews, has promised it, and so the land is conquered by Joshua as promised. The witness, however, writes after the destruction of Judah. The promised land has been long subdued by the princes of Ashur, and is at the time of writing under the princes of Babylon. It could have appeared that god's promise has succumbed to the princes of Ashur and the princes of Babylon.

Not so. When Marduk had been carried off as booty to the land of Hatti, then carried off as booty to the land of Ashur, then carried off as booty to the land of Elam, it had not been that the prince of Hatti, or the prince of Ashur, or the prince of Elam had commanded it, Marduk had in each case commanded it. In the same way, it was

not that the princes of Ashur commanded the destruction of Judah, or the princes of Babylon commanded the destruction of Judah, in each case god commanded it.

On these more general grounds, then, no reference and true can be extracted from *Joshua*, *Judges*, *Samuel*, *Kings* alone.

And the more particular grounds are not different.

Joshua tells in detail of the conquest of the promised land and its division among the tribes of the Hebrews. *Judges* then is shorter and tells quickly of the many centuries between the conquest and David. *Samuel* then is much longer and tells in great detail of the feats of David and thus the beginning of the great state blessed by god, as: David grew steadily stronger, for the lord, the lord of hosts, was with him (II, 5). *Kings* then is of about the same size as *Samuel*, as all the successors of David in both Israel and Judah, 40 of them, deserve all 40 of them as much detail as David. Moreover, in *Samuel* David is the prince, Samuel is the prophet, and David deserves more detail than Samuel. The prophets in *Kings* are many, and beginning with Elijah (I, 17-9), they deserve much more detail than the princes.

On this ground, too, no reference and true can be extracted from this witness alone.

The great state blessed by god begins with David.

And these are but two of David's feats, his first and his last.

His first feat is slaying Goliath. Goliath, the witness reports:

was 6 cubits and 1 span tall (*Samuel*, I, 17).

1 cubit is about .5 m, 2 spans = 1 cubit.

His last feat is counting the Hebrews. The witness reports:

in Israel there were 800 000 soldiers ready to draw the sword, in Judah 500 000 (II, 24).

No reference and true about David from this witness alone.

Solomon succeeded David. Solomon does not deserve nearly as much detail as David, yet deserves more detail than any of his successors.

Solomon built the house of the lord.

Other than that:

Solomon ruled all princes from the Euphrates to the border of Egypt; he was the lord of all

princes west of the Euphrates;

everyone in his domain had his own vine and his own fig tree;

Solomon had 40 000 stalls of horses for his chariots and 12 000 horsemen (*Kings*, I, 5); he excelled all princes on earth in wealth and in wisdom; the entire earth came to pay homage to Solomon and listen to the wisdom that god had given him; every year everyone brought their tribute, silver, gold, robes, weapons, spices, horses, mules (10).

No reference and true about Solomon from this witness alone either.

After Solomon the state split into Israel and Judah. These princes, 19 in Israel, 20 in Judah, deserve little detail.

In fact, the reports of the witness on these 39 princes are all the same.

18 of the 19 princes of Israel and 12 of the 20 princes of Judah, for a total of 30 of the 39, one and all: did what was displeasing to the lord (*passim*). Namely: set up shrines to the false gods of other peoples and made sacrifices and offerings abhorrent to the lord (*passim*). – This explains the destruction of Israel and Judah. – 1 of the 19 princes of Israel and 8 of the 20 princes of Judah, for a total of 9 of the 39, one and all: did what was pleasing to the lord (*passim*). Namely: destroyed the shrines of the false gods and offerings of other peoples, and worshiped the lord as his father David had done (*passim*). – This explains the continuance of the lord's worship.

Concluding his account of each prince, with but a couple of exceptions, the witness writes: the other events of his reign are recorded in the annals of the princes of Israel (*passim*), or: the other events of his reign are recorded in the annals of the princes of Judah (*passim*). It is very difficult to burden these annals with the presumption of reality, or, if these annals are yet so burdened, to so burden the witness's examination of these annals.

No reference and true about these 39 princes from this witness alone either.

There are, however, the prophetic books, even if these, being prophetic books, are not irreproachable witnesses either, and the less so as they are all amplified by much spurious writing, added centuries after the first prophesy such as

the first prophesy announces itself. Still, *Amos* begins:

the breeder of sheep Amos prophesied about Israel in the reigns of Uzziah, prince of Judah, and Jeroboam, son of Jehoash, prince of Israel (1).

Isaiah begins:

Isaiah prophesied about Judah and Jerusalem in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, princes of Judah (1).

Jeremiah begins:

the word of the lord came to the priest Jeremiah in the 13th year of the reign of Josiah, prince of Judah (1).

And hence, from the joint testimony of the prophets and their successor *Joshua*, *Judges*, *Samuel*, *Kings* it can be concluded – cautiously – that the series of princes of Israel and of Judah, beginning with Jeroboam, son of Jehoash, and with Uzziah, respectively, has a reference.

Hence, on the ground of the reports of the princes of Ashur and the reports of *Joshua*, *Judges*, *Samuel*, *Kings* those princes of Israel and of Judah can be dated. Hence the prophetic books can also be dated,

<i>Amos</i>	prophecy between c. 791 and c. 750,
<i>Isaiah</i>	prophecy began c. 750,
<i>Jeremiah</i>	prophecy began in 627.

Amos thus predates *Joshua*, *Judges*, *Samuel*, *Kings* by two-odd centuries, *Isaiah* predates it by two centuries, *Jeremiah* predates it by some two generations.

Jeremiah is derivative of the earlier prophetic books. And it is contemporary with *Deuteronomy* and the promulgation of the Mosaic law. But *Amos* and *Isaiah* are not derivative. And they predate *Deuteronomy* and the promulgation of the Mosaic law by some one and a half centuries. *Amos* and *Isaiah* are, with the other early prophetic book *Hosea*, as close as the Hebrew holy writings come to being witnesses of facts, as distinct from witnesses to the lord.

Amos, the oldest prophetic book, discovered the cursing of all nations, nation after nation after nation. And the cursing of all nations complete, *Amos* concludes:

thus said the lord,
and I will set up again the fallen house of David,

I will repair the walls, I will raise it up again,
I will built it firm as it was in the days of old (9).

Isaiah concurs. On both the cursing, and on the restoration:

these are the words of the lord of hosts,
a prince will be born, great in battle,
and great will be again the domain,
boundless the peace, of the throne of David (9).

Jeremiah as well concurs, and on both the cursing and the restoration:

thus said the lord of hosts,
I will bless again Israel and Judah;
I will make a righteous branch of David spring up again;
and there will be no end on the throne of Israel to the successors of David (33).

The princes of Israel and of Judah are the house of David.

Hence, it can be concluded – still cautiously – that the entire series of princes of Israel and of Judah beginning with David has a reference.

The prince of Egypt Sheshonq reports:

I smote the Asiatics in the north; I raged over them like a fire.

Hence, crucially, it can be presumed that *Kings* identifies the Asiatics in the north over whom the fire raged:

in the 5th year of Rehoboam, Sheshonq, prince of Egypt, seized Jerusalem, and took the treasures from the house of the lord and from the palace of the king (I, 14).

Rehoboam is the successor of Solomon in Judah.

And hence, finally, it can be concluded, first, that the entire series of princes of Israel and of Judah beginning with David has a reference – confidently now.

Second, that – although no witness earlier than *Joshua*, *Judges*, *Samuel*, *Kings* notes Solomon – given that while smiting the Asiatics, Sheshonq took the treasures from the house of the lord, Solomon's building of the temple has a reference.

About the state of David with its successor state of Judah through the time of Ashur-nasirpal II, then, this much can be affirmed.

David established the state in Jerusalem.

His successor Solomon built a temple.

The state then split and continued diminished in the more southerly Judah.

And no more can be affirmed.

In particular, with all due respect to the development of Judaism such as Judaism describes it, the development of Judaism does not begin at this time. It begins later.

Amos, the oldest prophetic book, is one century after this time. *Deuteronomy*, with which the Mosaic law was promulgated, is two and a half centuries after this time. *Joshua*, *Judges*, *Samuel*, *Kings*, which first traces the development of Judaism back to the state established by David and the building of the temple by Solomon, is three-odd centuries after this time.

At this time the development of Judaism begins not more than David had 1 300 000 soldiers ready to draw the sword, the entire earth came to pay homage to Solomon, and all 39 of the following 39 princes of Israel and Judah did either what was displeasing or what was pleasing to the lord.

The state of David with its successor state of Judah is yet important only because of the later development of Judaism.

The successor state of Israel.

The seat of principship of this state became Samaria, 60 km north of Jerusalem.

Through the time of Ashur-nasirpal II the particulars attested by the Hebrew holy writings are these,

Jeroboam	prince c. 923-05,
Nadab	prince c. 905-3,
Baasha	prince c. 903-883,
Elah	prince c. 883-1,
Zimri	prince c. 881,
Omri	prince c. 881-71,
Ahab	prince c. 871-53.

These princes have not left behind inscriptions either, not great writers either, apparently. Nevertheless, on the standard of being attested by at least one other state, Israel is, unlike Judah, a state. It is, in fact, attested by two other states. Even if it would have, presumably, rather remained unattested by one of these states.

The successor of Ashur-nasirpal II, Shalmaneser III, prince 859-24, began the reduction of the principalities on the littoral with his victory at Qarqar, in his 6th reign year, over a coalition of the principalities. Recording his victory, Shalmaneser III lists the contingents of his foes, and the

second largest contingent is Israel's:

Ahab brought 2 000 chariots and 10 000 foot (ins. 2).

Later on, in his 18th reign year, Shalmaneser III reports:

I received the tribute of Jehu of the house of Omri (ins. 8).

And one century later, when he began the final destruction of the principalities, Tiglath-pileser III reports:

in the land of Omri, when they removed Pekah, I installed Hoshea (ins. I, 815/9).

On the authority of the princes of Ashur, then, Omri and his successor Ahab are the 2 important princes of Israel. Israel is: the house of Omri, and: the land of Omri. Ahab fielded 2 000 chariots and 10 000 foot.

And this is corroborated by the fact that the other state attesting Israel attests, in particular, these 2 princes. This other state is Moab. Mesha, prince of Moab, was a greater writer than any of the princes of Israel, or of Judah, apparently, he has left an inscription behind. And Mesha reports:

Omri humbled Moab;

and the son of Omri said, I will also humble Moab;

but I, Mesha, vanquished the son of Omri and his house, and Israel has perished forever (stone).

Although, pace Mesha, Israel did not perish forever just then, or at the hands of Mesha, when it did.

It can even be concluded that *Joshua*, *Judges*, *Samuel*, *Kings*, too, corroborates the conclusion that Omri and Ahab are more important than the other princes of Israel. This witness reports:

Omri did what was displeasing to the lord, indeed he was worse than all that preceded him (*Kings*, I, 16);

Ahab did what was displeasing to the lord, indeed he was worse than all that preceded him (*id.*); indeed no one devoted himself to doing what was displeasing to the lord more than Ahab, at the instigation of his wife Jezebel (21).

His wife Jezebel was a daughter of the prince of Sidon (16).

And this exhausts the importance of Israel, such as it is.

Damascus.

Damascus is inland, 100 km northeast of Tyre. 1 prince is important, listing also his successor,

Hadadezer prince c. 885-45,
Hazeal prince c. 845-10.

Damascus's was the largest contingent at Qarqar. Shalmaneser III reports:

Hadadezer of Damascus brought 1 200 chariots, 1 200 horse, and 20 000 foot (ins. 2).

And this exhausts the importance of Damascus, such as it is.

Shalmaneser III notes once more Hadadezer (ins. 10), and once his successor Hazeal (ins. 16), as he continued the reduction of the principalities on the littoral, in general, and of Damascus, in particular.

Joshua, Judges, Samuel, Kings also notes Hadadezer and Hazeal.

Hadadezer invaded Israel. Israel under Ahab: slaughtered 100 000 Aramean soldiers in one day (*Kings*, I, 20).

The prophet Elijah was succeeded by the prophet Elisha, the prophet Elisha went to Damascus, Hazeal came to see him, and the prophet wept: why? Hazeal asked; because you will put the Israelites to the sword, the prophet replied; but how can I, a mere dog, son of nobody, do that? Hazeal asked; the lord has shown me a vision, the prophet replied (II, 8).

Moab.

The country of Moab is also inland, on the far side of the Dead Sea, some 60 km southeast of Jerusalem along the great circle.

The particular is 1,

Mesha prince c. 860.

Mesha reports that he was humbled by Omri, but then vanquished Ahab, and Israel perished forever.

Joshua, Judges, Samuel, Kings notes Mesha as well:

prince Mesha of Moab was a breeder of sheep; he paid 100 000 lambs and the wool of 100 000 rams in tribute to the prince of Israel (II, 3).

The prince to whom Mesha paid 100 000 lambs and the wool of 100 000 rams in tribute was Ahab, who also slaughtered 100 000 Aramean soldiers in one day, and also devoted himself to doing what was displeasing to the lord more than anyone. And, in any case, when Ahab died, Jeho-

ram, son of Ahab, mustered all Israel, called on Jehoshaphat, prince of Judah, to follow him, and together they slaughtered the Moabites.

Either way, the state of Moab is not important at all.

Mesha, however, is important. Among all the princes south of Byblos, those of Damascus and Tyre and Israel and Judah not less than those of Moab, Mesha was the only writer, apparently.

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In the five centuries from Ashur-uballit to Ashur-nasirpal II, then, the main developments are these.

In these five centuries Ashur became the greatest state. On all the following counts.

One. Continuity. From Ashur-uballit to Ashur-nasirpal II it is a continuous series of 29 princes.

Two. Smiting. It is the foundation in this case as in all others. 14 of the 29 princes are warriors, Ashur-uballit, Enlil-nirari, Arik-den-ili, Adad-nirari, Shalmaneser, Tukulti-Ninurta, Ashur-dan, Ashur-resh-ishi, Tiglath-pileser, Ashur-bel-kala, Ashur-dan II, Adad-nirari II, Tukulti-Ninurta II, and Ashur-nasirpal II. 6 are great warriors, Adad-nirari, Shalmaneser, Tukulti-Ninurta, Tiglath-pileser, Adad-nirari II, and Ashur-nasirpal II. By the end of this time Ashur-nasirpal II has discovered cavalry. He also fields 50 000 men.

Three. Expansion. Under Tukulti-Ninurta the domain of the state is the entire valley, upper sea to lower sea. Under Tiglath-pileser the domain of the state is again nearly the entire valley. Under Ashur-nasirpal II the domain of the state is again nearly the entire valley.

Four. Administration and the law. In all countries he conquers Ashur-nasirpal II appoints his governors. Of the 69 574 invited to the consecration of the palace of wisdom 1 500 are his officials. And the law promulgated by Tiglath-pileser is not an advance over the code of Hammurabi. It is yet a development, the law has begun discovering the proviso of the proviso and the duplicate of the duplicate.

Five. The theory of the state. The princes affirm explicitly the unity of all countries and all peoples under the one and only one state. Adad-nirari: I scattered all foes, subdued all peoples, extended all borders. Tukulti-Ninurta: I brought

all foes under my single command. Tiglath-pileser: and I counted them among the people of Ashur. Ashur-nasirpal II: and I counted them among my people.

Six. Writing. These princes are the greatest writers. They have left behind more inscriptions than all their predecessors and contemporaries combined. Adad-nirari has left behind 50+ distinct inscriptions, Shalmaneser 35+, Tukulti-Ninurta 40+, Tiglath-pileser 30+, Ashur-nasirpal II 140+. One inscription is attested in 400+ copies.

Seven. The description of the surface of the earth. The princes describe their campaigns steadily more explicitly. The state is in steadily more definite space.

Eight. History. The princes are historians *par excellence*. They write chronicles. They write true annals. They reach back to their predecessors across several centuries. The state is in steadily more definite time.

From Ashur-uballit to Ashur-nasirpal II it is a continuous series of 29 princes. These 29 princes are also, beginning with Ashur-bel-nisheshu, one half century earlier, a part of a continuous series of 33 princes. These 33 princes are also, ending with Ashurbanipal, two and a half centuries later, a part of a continuous series of 45 princes. And on all the above counts the advance will continue.

The other 8 states in these five centuries in this valley and the adjoining domain present rather a continuum from that greatest state through lesser states all the way to the not state.

Hattusa is a series of 8 princes. Succession is seldom orderly. 3 of the 8 princes are warriors, Suppiluliuma, Mursili II, and Muwatali, 1 is a great warrior, Suppiluliuma. The state expands from central Asia Minor to the Euphrates. The earlier Hittite state has been brought under the law just before it has disappeared. These princes are not lawgivers. They impose, however, several treaties on the lesser princes on the borders of the state. These princes are writers, one of them, Mursili II, a substantial writer. They are not very explicit in the descriptions of their campaigns. The state continues in largely indefinite space. They write annals, and they describe explicitly their succession. But they do not count their reign years. The state continues in largely indefinite

time, if not quite as indefinite as space.

The first attempt of the state to establish itself beyond the valley in Asia Minor has ended after one and a half centuries. Then there has been no state for one and a half centuries. Then this second attempt of the state to establish itself also ends after one century-odd. Then it will be five and a half centuries before the state begins again in Asia Minor.

The fourth Babylon, like the second and the third earlier, is a brief series of princes, rulers of the great city of Babylon, briefly emerging from obscurity. In particular, but 1 prince is important, Nebuchadnezzar. He conquers Elam, and that is that. He is a writer, if not a great writer. Babylon, however, becomes under him once again a center of flourishing writing. And if with this writing the description of the state, or of space, or of time, does not flourish, the description of Marduk does. Marduk commands that he, Marduk, be carried off as booty. Three times.

The state has begun in the lower valley. It has become great in the lower valley. With Akkad. Then Ur. Then the first Babylon. Then the lower valley becomes a periphery of the state. Excepting the times of dominion by Ashur, there is no state of even small stability or authority in the lower valley for four and a half centuries through the time of this fourth Babylon. Then, with the same exception, there will be no such state in the lower valley for five and a half more centuries.

In 3 of the 6 small states on the littoral longer series of princes are attested. Through the time of Ashur-nasirpal II, a series of 8 princes in Tyre, a series of 6 princes in the state of David with its successor Judah, a series of 7 princes in Israel. But only 2 of these 21 princes, Omri and Ahab in Israel, are attested by other princes. In the other 3 states, Byblos, Damascus, and Moab, the series are brief, and only the 2 princes of Damascus are attested by other princes. Distances alone – 90 km from Byblos to Damascus, 100 km from Damascus to Tyre, 110 km from Tyre to Samaria, 60 km from Samaria to Jerusalem, 60 km from Jerusalem to Moab, all in all 290 km from Byblos to Moab – distances alone will guarantee smiting. The smiting is not very consequential, however. There is no authority for David's military prowess or Solomon's rule from the Euphrates to

Egypt other than god's. The colonization of the sea begins from Tyre in the century-odd beginning with Hiram. But Tyre does not rise. These are not states of administration or the law either. In Byblos, with Ittobaal, the alphabet begins. Even so these are not states of writing either. The alphabet begins in Byblos with but a half dozen brief inscriptions. The princes of Tyre, Judah, Israel, and Damascus are not writers at all. In Moab but one prince is a writer. These states thus also continue in indefinite space and time.

Ashur-nasirpal II has begun reducing these states to tribute. His successors will eventually bring them all firmly under Ashur.

In these five centuries, with the rise of Ashur, the center of the state has shifted northwest. Earlier, the state has begun in the lower valley, and all powerful states dominating the valley have been centered in the lower valley, in the southeast. Now, the powerful state dominating the valley is centered in the upper valley, further north and west. The princes of Ashur also campaign more and more vigorously north and west than east or south. The Hittite state, even as it has failed to establish itself firmly, has been in Asia Minor, in the far northwest. The small states on the littoral are also in the west. Colonization is also of the sea in the west.

The domain under the state is not extended in these five centuries. The state has begun pressing harder on the borders of this domain, however. The attempts of the state to spread further east and further north are more decisive. And several attempts of the state to begin further west are indicated, even if these are still not very successful attempts.

In the east are the mountains of wild men. But the princes of Ashur campaign continuously in the countries in the mountains along their entire length, and bring them repeatedly under the state of Ashur. In the far southeast Elam remains a borderland of the state. But there are some dozens of cuneiform inscriptions in Elamite from this time, and some of these attest princes of Elam. Even if these princes are not attested by other princes. And there is now and again a prince of Elam raiding far afield. Shutruk-Nahhunte conquers Sippar, Eshnunna, and Babylon, and carries off Marduk to Elam, too.

In the north the Hurrian hordes have settled briefly in the state of Mittani, in the country between the Tigris and the Euphrates, before this state is destroyed by the princes of Ashur. And the princes of Ashur continue campaigning vigorously in this country, and bring it repeatedly, and steadily more firmly, under the state of Ashur.

In the west, in central Asia Minor, there has been the Hittite state for one and a half centuries and, after a hiatus of one and a half centuries, again for one century-odd. And several attempts of the state to begin further west are indicated.

There is Arzawa. Earlier, a prince of Arzawa is attested by the Amarna archive delivering a daughter to the prince of Egypt. The Amarna archive indicates that Arzawa is rather on the southern coast of Asia Minor. The later Hittite princes attest repeatedly their foe Arzawa. Their reports indicate that Arzawa is rather in western or southwestern Asia Minor. None of these reports is very explicit. Nor does Arzawa attest itself.

There is Ahhiyawa. Beginning with the annals of Mursili II, the Hittite princes attest a couple of times also their foe Ahhiyawa (*id.*). Apparently west of their state. And the name Ahhiyawa readily suggests the Homeric Achaeans. Even if neither the reports of the Hittite princes, being of largely indefinite space and time, should readily corroborate the poet, nor the poet, being the poet, should readily corroborate the Hittite princes.

There is Troy. – There is also, on the authority of the poet, the Trojan war. Herodotus first dated both the poet and the war. He writes: Pan, the son of Penelope and Hermes, was after the Trojan war and about 800 years before my time (II, 145); Homer and Hesiod were 400 years before my time and no more (53). Somewhat more than 800 years before the time of Herodotus, the Trojan war would be at about the time of the first rise of Ashur with Adad-nirari, Shalmaneser, and Tukulti-Ninurta. Closer to the event spatially, it would be at about the time of Muwatalli and Hattusili III in Hattusa. Homer, however, is, in fact, not more than 400 years before the time of Herodotus. And on the ground alone that not less than four centuries would separate the war and the poet, the war cannot be burdened with the

presumption of reality. – Troy, on the Aegean coast of Asia Minor, has been excavated, by Schliemann, beginning in 1870. The city of Troy is real. But there is no state yet that far west. In particular, no prince of Troy is attested, not by himself, not by any other prince.

In the sea there is the island of Cyprus. There is also Alashiya in the record. And that Alashiya is Cyprus is attested firmly. Earlier, a prince of Alashiya, who does not name himself, even as he styles himself prince, is attested by the Amarna archive, delivering his tribute to the prince of Egypt, even if, Alashiya not being important enough, the tribute does not include a daughter. At the time when the later princes of Hattusa still dominate Ugarit, a prince of Alashiya, who does not name himself either, even as he also styles himself prince, writes to a prince of Ugarit. – The prince of Ugarit is Ammurapi. The prince of Alashiya writes to Ammurapi: you write to me that you have seen enemy ships; where are your men? who will deliver you from the enemy (*id.*)? Ammurapi writes back: my men are all in Hatti; the enemy ships are burning down my villages, they are pillaging my country (*id.*). – These princes of Alashiya style themselves princes. As the princes of Ugarit also do. As an indefinite number of other local chieftains also do. Tiglath-pileser alone defeated not less than 90 such princes.

Further west in the sea is the island of Crete. Thutmose III attests Keftiu. And that Keftiu is Crete can be inferred from the number and distribution of other localities which Thutmose III attests. But Crete is far in the west, and other than that, it is not attested by the states.

Further west and north is the Peloponnese, and it is not attested by the states either.

Beginning in 1876 Schliemann excavated Mycenae, however, and there has since been a Mycenaean civilization. In 1900 Evans began excavation on Crete, and there has since been also a Minoan civilization. This last not named very fortunately, if it is to be real, considering that Minos was the son of Zeus and judge of the dead in the netherworld. In any case, those may be two civilizations. Civilizations being civilizations, however, they may also be one and the same civilization. They may also be more than

two civilizations, Helladic, Cycladic, and so on.

Civilizations being civilizations, those two, or one, or more, civilizations begin long before the five centuries at issue. But it is at this time, at about the time of the first rise of Ashur with Adad-nirari, Shalmaneser, and Tukulti-Ninurta – which would be the time also of the Trojan war – that they are at their peak.

In the Peloponnese, on Crete, and on several Aegean islands excavation has attested much pottery, many tombs, some palaces. It has attested a few artifacts from the states, a scarab of queen Tiye, wife of Amenhotep III, for instance. It has attested also writing. An earlier script, linear A, of a number of signs not large enough to allow – or warrant – decipherment, mostly on jars. And a later script, linear B, deciphered in 1952 by Ventris. Linear B is a script of ideograms and a syllabary of some 90 characters attested by some 150+ brief inscriptions. The two, or one, or more, civilizations have left behind substantially less than Ashur-nasirpal II all by himself. Nor has excavation attested but 1 prince.

The 9 states present rather a continuum from the greatest state through lesser states to the not state. All those – Elam, Alashiya, Arzawa, Ahhiyawa, Troy, the Mycenaean and Minoan civilizations – rather present a continuum of attempts of the state to begin on the borders of the domain under the state. Attempts of varying success, yet all still abortive.

Two to three centuries after Ashur-nasirpal II these attempts will succeed, and spectacularly.

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The one century-odd from Ashur-nasirpal II to Tiglath-pileser III.

The particulars indicate 5 states. Ashur conquered the entire valley, then retreated. During its retreat, Urartu asserted itself in the north. On the littoral Tyre, Israel, and Judah continued.

Ashur.

The particulars are 7, the 6 princes,

Shalmaneser III prince 859-24,

Shamshi-Adad V prince 824-11,

Adad-nirari III prince 811-783,

Shalmaneser IV prince 783-73,

Ashur-dan III prince 773-55,

Ashur-nirari V prince 755-45,

and the general,

Shamshi-ilu under Adad-nirari III.

Shalmaneser III has left behind 90+ distinct inscriptions.

He is:

Shalmaneser, lord of all peoples, prince of Ashur, the mighty, lord of the four quarters, the sun of all peoples, the ruler of all lands, chosen by Enlil, appointed by Ashur, who attends to the gods, the pious, the faithful shepherd who brings peace to the peoples of Ashur, the overseer of the commands of the gods, who has conquered the upper sea and the lower sea, who has no rival in the four quarters, who has seen all distant lands, who has trodden on all mountain peaks;

son of Ashur-nasirpal, prince of Ashur, son of Tukulti-Ninurta, prince of Ashur, son of Adad-nirari, prince of Ashur (ins. 1).

Ashur-nasirpal II brought nearly the entire valley under Ashur. Shalmaneser III brought the entire valley under Ashur.

The foundation is once again smiting. Shalmaneser III reigned 35 years. Several of his inscriptions are annals. In the most comprehensive – the black obelisk (ins. 14) – he describes annual campaigns in the first 31 of his 35 reign years.

His inscriptions abound in numbers. Once, in his 6th year, at the battle of Qarqar, he lists the total forces of his foes, implying a total for his own force. And in his 14th year he records a total for his own force.

In his 6th year, at the battle of Qarqar:

I vanquished 12 princes (ins. 2).

The 12 princes brought to the battle:

3 940 chariots, 1 900 horse, and 52 200 foot;

I slaughtered 14 000 of them; I dammed the Orontes with their corpses (*id.*).

It can be inferred that Shalmaneser III fielded a comparable force, chariots, horse, and foot, some 50 000. As Ashur-nasirpal II reports fielding 50 000. Shalmaneser III reports also: in my 14th year I led 120 000 across the Euphrates (ins. 8).

Ashur-nasirpal II and Shalmaneser III fielded several tens of thousands for six decades annually.

Once Shalmaneser III totals also his booty:

from my 1st year through my 20th year I collected this booty, 110 610 captives, 82 600 killed, 9 920 horses, 35 565 oxen, 19 690 asses, 184 755 sheep (ins. 10).

Many of the numbers are of those he counted among the people of Ashur. These are the largest: from the land of Hatti I brought 22 000 to my city of Ashur (ins. 3);

I captured 44 000, and I counted them among my people (ins. 5).

Thus, the domain under the state is at its greatest. As Shalmaneser III describes it:

I have conquered from the great sea in the land of Nairi to the source of the Tigris and the source of the Euphrates to the lower sea beyond the land of Chaldea (ins. 23);

I have conquered from the upper sea to the lower sea; I have seen the sources of the Tigris and the Euphrates (ins. 25).

More particularly, in the south he subdued the lower valley and the state extended to the Persian Gulf for the first time since Tukulti-Ninurta, three and a half-odd centuries earlier. In the north he reached the source of the Euphrates, he is the first prince reporting: I have seen the source of the Euphrates, since Naram-Sin, fourteen centuries earlier. In the west the states on the littoral remained his tributaries:

I received the tribute of Tyre, Sidon, and Byblos (ins. 14);

I received the tribute of Jehu of the house of Omri (ins. 8).

And further west, he attests the first contact of the princes of Ashur with Egypt since Ashur-uballit, five centuries earlier. One of the contingents of his foes at Qarqar is:

1 000 foot from Egypt (ins. 2),

and on the black obelisk he reports:

I received the tribute of Egypt, camels, buffalo, a rhinoceros, an antelope, an elephant, monkeys, and apes (ins. 89).

And Shalmaneser III also reaches back to his predecessors across centuries. He reports:

the wall in my city of Ashur, built by Puzur-Ashur, son of Ashur-nirari, rebuilt by Adad-nirari, son of Arik-din-ili, rebuilt by Tukulti-Ninurta, son of Shalmaneser, rebuilt by Tiglath-pileser, son of Ashur-resh-ishi, had fallen into ruin; I rebuilt it completely from the

bottom to the top (ins. 10).

He does not count explicitly. The dates yet are,

Puzur-Ashur III	prince c. 1550,
Adad-nirari	prince c. 1305-273,
Tukulti-Ninurta	prince c. 1243-06,
Tiglath-pileser	prince 1115-076,
Shalmaneser III	prince 859-24.

Shalmaneser III reigned 35 years. And in the first 26 of his reign years Ashur is at a peak.

He describes annual campaigns in the first 31 of his 35 reign years. Through his 26th year he led his troops himself. Beginning in his 27th year, his general, Dayyan-Ashur, led his troops (ins. 14).

Shamshi-Adad V has left behind 10+ distinct inscriptions. Several are annals.

He reports:

under Shalmaneser, my father, Ashur-dain-apla treacherously revolted, incited rebellion, made the land rise up in arms, made the people of Ashur above and below rise up to wage war, 27 cities revolted against Shalmaneser, lord of the four quarters, my father;
at the command of the gods, my lords, I vanquished them (ins. 1).

Shamshi-Adad V suppressed the revolt quickly, established himself firmly, and began annual campaigns west, north, east, and south. He reduced the west in his 1st year already (*id.*). He campaigned repeatedly in the north, defeating Urartu (*id.*). He campaigned repeatedly in the east as well, and he first attests the Medes beyond the mountains (*id.*). And he campaigned repeatedly in the south as well, subduing the lower valley (*id.*).

Shamshi-Adad V maintained the entire valley under Ashur. He had to smite the entire valley all over again, however, to maintain it under Ashur.

Adad-nirari III has left behind 25+ distinct inscriptions.

Adad-nirari III is the next important historian in the long series of important historians among the princes of Ashur.

He is the last prince whose deeds are recorded in the synchronistic chronicle, which was thus composed under him. The synchronistic chronicle correlates princes of Ashur with princes of Babylon recording also their deeds. It is the first treatise since the Sumerian prince list, twelve-odd centuries earlier, concerned explicitly with more than one succession of princes.

Adad-nirari III also styles himself:

Adad-nirari, the great prince, lord of the earth, prince of Ashur,
son of Shamshi-Adad, the great prince, lord of the earth, prince of Ashur,
son of Shalmaneser, the great prince, lord of the earth, prince of Ashur,
son of Ashur-nasirpal, the great prince, lord of the earth, prince of Ashur,
descendant of Adad-nirari,
descendant of Tukulti-Ninurta,
descendant of Shalmaneser,
descendant of Ila-kabkaru (ins. 1).

Ila-kabkaru is the father of Shamshi-Adad, prince c. 1809-776, ten and a half centuries before himself.

Adad-nirari III also attests his mother:

Adad-nirari, prince of Ashur, son of Shamshi-Adad, prince of Ashur, and of Semiramis, the queen, wife of Shamshi-Adad, prince of Ashur, mother of Adad-nirari, prince of Ashur, daughter-in-law of Shalmaneser, lord of the earth (ins. 3).

Semiramis has herself left behind an inscription: Semiramis, the queen, wife of Shamshi-Adad, lord of the earth, mother of Adad-nirari, lord of the earth, daughter-in-law of Shalmaneser, lord of the four quarters (ins. 2001).

And Semiramis is attested by Herodotus. He writes:

there were many princes of Babylon, and I will report on them in my Assyrian book; there were 2 women among them; the first was 5 generations before the second; her name was Semiramis; she built great dikes in the valley; before her the river ran all over the valley and flooded it (I, 184).

His Assyrian book remained unwritten, and Semiramis is as far back as the father of history reaches into Mesopotamian antiquity. Semiramis yet attests the firmest of bonds, in fact, between the father of history and his Mesopotamian predecessors.

Adad-nirari III also attests several of his officials, including Shamshi-ilu, the general.

Adad-nirari III is an important historian. But he was not a warrior.

He reports campaigns in the south, in the west, and in the north (ins. 3, 5, 8).

Under him Ashur retreated, however, in the south, in the west, and in the north.

In the south, the synchronistic chronicle records victories of Shamshi-Adad V in the lower valley. Of Adad-nirari III it reports: he determined his border with the prince of Babylon (*id.*).

Ashur has retreated from the lower valley.

In the west, Adad-nirari III reports: Adad-nirari, the great prince, the mighty, lord of the earth, prince of Ashur, and Shamshi-ilu, his general, determined their border in the land of Hamath; they divided the Orontes between them (ins. 2).

As Adad-nirari III's successor Shalmaneser IV reports, Shamshi-ilu remained general under him as well (ins. 1). And Shamshi-ilu, the general, has left behind his own inscriptions. He reports:

Shamshi-ilu, the general, the great herald, the commander of the great army, the governor of the lands of Hatti, Gutu, and Namri, the conqueror of the west, who vanquished the lands of Musku and Urartu and pillaged their peoples, who destroyed the lands of Utu, Rubu, Hadadu, and Lubdulu;

Argishti, prince of Urartu, came to do battle with men as many as a thick cloud; at the command of Ashur, Shamshi-ilu, the general, the great herald, the commander of the great army, flew against him like a storm; Argishti ran away like a thief (ins. 2010).

Shamshi-ilu, the general, the great herald, the commander of the great army, does not style himself prince. But he does not acknowledge any prince of Ashur in his inscriptions either. Shamshi-ilu is his own lord. The state of Ashur has retreated from the littoral.

And in the north, Argishti, prince of Urartu, ran away like a thief. Urartu under Argishti nevertheless controlled the country northeast of the upper Tigris. Ashur has retreated in the north as well.

The next 3 reigns are a nadir.

Shalmaneser IV has left behind 4 inscriptions, Ashur-dan III – 1 inscription, Ashur-nirari V – 1 inscription.

Ashur retreated.

Then Tiglath-pileser III ascended.

Urartu.

Before the time of Tiglath-pileser III, the particulars are 5,

Lutipri	prince c. 850,
Sarduri	prince c. 830,
Ishpuini	prince c. 810,
Menua	prince c. 790,
Argishti	prince c. 765.

Urartu is an important state, if not very important. With Urartu the domain brought under the state expanded, a little, in the north.

Urartu asserted itself in the country northeast of the upper Tigris, around lake Van. Beginning with Sarduri, it asserted itself in the couple of generations after Shalmaneser III and before Tiglath-pileser III, during the retreat of Ashur. But it did not assert itself too forcefully.

Nor is the record of the state too abundant. Of the 5 princes above 4 have left inscriptions behind, Sarduri 1 brief inscription, Ishpuini 1 very brief inscription, Menua 1 longer inscription, and Argishti 1 longer inscription. Nor are the inscriptions too explicit.

The firmest evidence for the state of Urartu, and the most explicit, affirmative and negative, are the reports of the princes of Ashur.

Indeed, the name which has established itself for the state, Urartu, is from the princes of Ashur as well. Of the 4 princes of Urartu who have left inscriptions behind, Sarduri styles himself:

prince of Nairi (ins. 1/3),

the other 3 style themselves with no country at all. In the inscriptions of the princes of Ashur Nairi has long been the more common name for the country in the north. Beginning with Shalmaneser III Urartu becomes the more common name.

The inscriptions of the princes of Urartu are also of indefinite time. The dates of these princes are thus also fixed from the reports of the princes of Ashur.

And when and how the state of Urartu begins, too, the princes of Ashur attest, Shalmaneser III, in particular.

Shalmaneser III reports defeating in his 3rd year:

Aramu, prince of Urartu (ins. 14),

defeating in his 11th year:

Aramu (ins. 16),

without describing him as the prince of any

particular country, somewhere across the Euphrates, and defeating in his 25th year:

Aramu, prince of Bit-Agusi (ins. 14).

Uratu is more to the north. Bit-Agusi is more to the west, across the Euphrates. Aramu is a common Aramean name, even if the Urartians would rather be Hurrians. Shalmaneser III thus attests 1 Aramu, or 2 Aramus, or 3 Aramus. Whatever their number, these are but 1, or 2, or 3, of the scores of princes Shalmaneser III reports defeating.

But in his 27th year Shalmaneser III reports: my general, Dayyan-Ashur, defeated Sarduri, prince of Urartu (*id.*).

And with Sarduri the state of Urartu begins, because a series of princes begins, and princes attested by other princes, too.

The one thing which the princes of Urartu attest unambiguously is their affiliations, and hence their series. Sarduri reports:

Sarduri, son of Lutipri (ins. 1/3),

Ishpuini reports:

Ishpuini, son of Sarduri (ins. 4/18),

Menua reports:

Menua, son of Ishpuini (ins. 28/126),

Argishti reports:

Argishti, son of Menua (ins. 127/54).

In addition, Sarduri affirms who he is:

Sarduri, son of Lutipri, great prince, lord of the earth, prince of Nairi, prince without rival, prince of princes, to whom all princes bring tribute (ins. 1/3).

Menua and Argishti do not style themselves, but they report their deeds. Haldi is the god of the Chaldeans. And led by Haldi, Menua vanquished some two dozen cities and countries. The description is of indefinite space as it is of time, and of only 2 of those it is clear where they are:

I came to the country of Ashur (ins. 28/126),

and:

I marched on the land of Hatti (*id.*).

Menua reports also:

I captured 2 113 men in one year, some I killed, some I led away alive (*id.*).

Led by Haldi, Argishti vanquished some three dozen cities and countries. Of none of these is it clear where it is. Argishti reports also:

I captured 52 675 men, some I killed, some I led away alive, I took 1 204 horses and 35 015

cattle; for Haldi I did all this in one year; in the next year I captured 20 279 men, some I killed, some I led away alive (ins. 127/54).

Shalmaneser III reports defeating Sarduri. Shamshi-Adad V reports defeating Ishpuini (ins. 1). Shamshi-ilu reports defeating Argishti.

All in all, it can be concluded that under Menua and Argishti Urartu dominated the country north of Ashur, around lake Van, northeast and northwest of the lake, and southwest from the lake to the land of Hatti, between the Euphrates and the sea.

Then Tiglath-pileser III ascended, and the destruction of Urartu began.

Tyre.

The particulars are 3, none of them important,

Baal-Ezar II prince c. 856-0,

Matten prince c. 850-21,

Pygmalion prince c. 821-774.

With these princes ends the series recorded by Josephus on the authority of Menander of Ephesus (*Apion*, I, 18).

These would be the princes whose tribute the princes of Ashur report collecting, through Adad-nirari III (ins. 7). In particular, the prince who delivered the tribute to Adad-nirari III would be Pygmalion.

Josephus reports also:

Carthage was founded in the 7th year of Pygmalion (*id.*).

The year is 814, recorded first by Timaeus. Timaeus first records also the story of the foundation of Carthage by: Elissa or, as she was called by the Libyans, Dido (fr. 82).

The rise of Carthage was still two and a half centuries into the future. The rise of the story of the foundation of Carthage by Elissa or, as she was called by the Libyans, Dido was several more centuries into the future.

As to Tyre, having delivered its tribute to Adad-nirari III, it disappears from the record until Tiglath-pileser III, when it reappears to deliver its tribute to him (ins. I, 761/79).

Israel.

Before the time of Tiglath-pileser III the particulars attested by *Joshua*, *Judges*, *Samuel*, *Kings* are 10, 1 of whom is important,

Ahaziah prince c. 853-1,

Jehoram prince c. 851-41,

Jehu	prince c. 841-17,
Jehoahaz	prince c. 817-03,
Jehoash	prince c. 803-790,
Jeroboam II	prince c. 790-56,
Zechariah	prince c. 756,
Shallum	prince c. 756,
Menahem	prince c. 756-41,
Pekahiah	prince c. 741-39.

2 of the 10 are attested by the princes of Ashur. Shalmaneser III reports:

I received the tribute of Jehu of the house of Omri,

and Adad-nirari III:

I received the tribute of Jehoash, the Samarian (ins. 7).

And – excepting the Hebrew writings – Israel, like Tyre, disappears from the record until Tiglath-pileser III, when it reappears, like Tyre, to deliver its tribute to him (ins. I, 761/79).

As to *Joshua, Judges, Samuel, Kings*, 9 of the 10: did what was displeasing to the lord. 1 of the 10: did what was pleasing to the lord.

In particular, Jehu did what was pleasing to the lord. He did what all the other princes – all of them in Judah – who did what was pleasing to the lord did, namely: destroyed the shrines of the false gods and offerings of other peoples, and worshiped the lord as his father David had done. In particular: Jehoshaphat is the prince of Judah; Jehu is his son; but through the prophet Elisha the lord tells Jehu, I will anoint you prince of Israel; Jehu conquers Israel; and he kills Jezebel, kills the 70 sons of Ahab, kills all the priests of Baal, and destroys the shrines abhorrent to the lord (*Kings*, II, 9-10). Even if, the witness concedes: Jehu did not destroy the golden calves at Bethel and Dan (10).

The decisive witness is the earlier, *Amos*: the breeder of sheep Amos prophesied about Israel in the reigns of Uzziah, prince of Judah, and Jeroboam, son of Jehoash, prince of Israel. Jeroboam II is thus important.

Judaism begins with the prophets of the prophetic books – as distinct from those of *Joshua, Judges, Samuel, Kings* – Amos is the prophet of *Amos*, *Amos* is the first prophetic book, and Amos prophesied in the reign of Jeroboam II.

Amos prophesies: thus said the lord, an enemy will fall upon your

land, will strip you of your strength, will plunder your palaces (3).

Tiglath-pileser III will fall upon your land, and it is, in fact, under Tiglath-pileser III, and for this reason, because Tiglath-pileser III will fall upon your land, that Judaism begins.

Judah.

Before the time of Tiglath-pileser III the particulars attested by *Joshua, Judges, Samuel, Kings* are 7, and 1 of these as well is important,

Jehoram	prince c. 857-1,
Ahaziah	prince c. 851-0,
Athaliah	prince c. 850-45,
Jehoash	prince c. 845-14,
Amaziah	prince c. 814-791,
Uzziah	prince c. 791-50,
Jotham	prince c. 750-38.

The first 3 did what was displeasing to the lord, the other 4 did what was pleasing to the lord.

The decisive witnesses are again the earlier. *Amos*. Amos prophesied in the reign of Uzziah. And *Isaiah*:

Isaiah prophesied about Judah and Jerusalem in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, princes of Judah.

Isaiah began prophesying in the reign of Uzziah.

Uzziah in Judah is thus important in the same way Jeroboam II in Israel is.

Isaiah prophesies:

the lord will bring against you the prince of Ashur and his multitude, he will overflow your land, he will sweep over you like a flood (8).

The lord will bring against you Tiglath-pileser III, and again, it is, in fact, under Tiglath-pileser III, and for this reason, because the lord will bring against you Tiglath-pileser III, that Judaism begins.

Thus, also, excepting the Hebrew writings, Judah does not appear in the record until Tiglath-pileser III, when it does, like Tyre and Israel, to deliver its tribute to him (ins. I, 787/804).

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And the following conclusions can be drawn from the development of the state in the thirteen centuries from Ibbi-Sin to Tiglath-pileser III in the valley of the two rivers and the domain bordering the valley where in these centuries the

development of the state begins to spread.

The state is fundamentally one.

In the first six and a half centuries of the development of the state, the six and a half centuries from Enmebaragesi to Ib-bi-Sin, the state is built, and it is built into one state, Akkad. When Akkad falls, the state is rebuilt, and it is rebuilt again into one state, Ur. In the following thirteen centuries, the thirteen centuries from Ib-bi-Sin to Tig-lath-pileser III, when Ur falls, the state is again rebuilt, and it is again rebuilt into one state, Babylon. When Babylon falls, and the state is again rebuilt, it is again rebuilt, and again, and again, into one state, Ashur.

The state is fundamentally Akkad – Ur – Babylon – Ashur.

It is a natural process. And learning, from experience, is indicated throughout.

In the first three and a half centuries of the development of the state there are the small states of Kish, Uruk, Ur, Lagash, Umma, and Akshak. And the state is fundamentally one, and fundamentally Akkad, as the states smite one another from the first, smiting intensifies and Lagash rises, attesting with Eanatum the first explicit attempt to bring all states under one state, the attempts to bring all states under one state continue, and culminate in Sargon.

In the following one and a half centuries the state is Akkad, and only Akkad. Sargon and his 4 successors bring all earlier states under the one state of Akkad. And they greatly expand the domain under the one state of Akkad. Before them the domain under the state is the lower valley. They bring the entire valley under the state, from the lower sea in the southeast and the mountains in the east to the mountains in the north and the upper sea in the west. In the south is the desert.

In the following one half century-odd disorder prevails. The Gutian hordes descend on the state from the mountains in the east. In the wake of Akkad there are also the small states of Lagash, Elam, and Uruk. And the state is fundamentally one, and fundamentally Ur, as the disorder is brief, and the attempts to restore the valley under one and only one state culminate in Ur-Nammu.

In the following one century the state is Ur, and only Ur. And the one and only one state is

fundamentally the same. Ur continues Akkad. Ur-Nammu and his 4 successors are the princes of Sumer and Akkad as Sargon and his 4 successors have been. Their domain is the same, the entire valley, from the lower sea and the mountains in the east to the mountains in the north and the upper sea. And the princes of Ur continue the pacification of the domain as the princes of Akkad have begun it. The princes of Akkad campaign for one century annually over the domain, then they bring it under administration. The princes of Ur bring it under the law.

In the following two and a half centuries again disorder prevails. The hordes are this time Amorite from the mountains in the north. In the wake of Ur there are the smaller states of Isin, Larsa, Ashur, Babylon, Eshnunna, Mari, and Yamhad. And the state is fundamentally one, and fundamentally Babylon, as the states smite one another, first one state, Isin, predominates, then another state, Larsa, predominates, then the smiting intensifies, Ashur, Eshnunna, and Larsa divide the valley, and the attempts to bring the entire valley under one and only one state culminate in Hammurabi.

In the following two centuries the state in the valley is Babylon, and only Babylon. And again the one and only one state is fundamentally the same. Babylon continues Ur, and Akkad. Hammurabi and his 5 successors are the princes of Sumer and Akkad as Ur-Nammu and his 4 successors have been, and first Sargon and his 4 successors have been. The domain of the princes of Babylon does not reach the upper sea. Other than that the domain is the same, from the lower sea and the mountains in the east to the mountains in the north and the upper reaches of the Euphrates. And the princes of Babylon continue the pacification of the domain as their predecessors have begun it. The state is brought under the code of Hammurabi. For one century decisive peace and prosperity prevail.

Throughout, the external foes of the state are fundamentally the same. Hordes of wild men descend on the state. Attack them, and they will retreat, retreat, and they will attack – as Senwosret, in the other valley, judges the external foes of the state. Gutian hordes descend on Akkad. Amorite hordes descend on Ur.

The internal foes of the state are also fundamentally the same. Parts of the state would be its own state each. Local chieftains would be his own prince each. The maxim should be similar, crush them, and they will submit, relent, and they will secede. After Akkad there are several small states where Akkad has been, and many local chieftains. After Ur there are more smaller states where Ur has been, and many more local chieftains.

In both its external foes and its internal foes the state encounters the not state. Hordes of wild men and local chieftains are both the not state.

The not state takes the cattle, sheep, asses, and people. And the state takes the cattle, sheep, asses, and people. But the state also builds the army, expands, builds administration, develops the law, religion develops under the state, writing flourishes under the state, knowledge is acquired under the state.

It is eleven centuries from the beginning of the state, with Enmebaragesi, to the fall of Babylon, with Samsuditana. And in these eleven centuries the state prevails decisively against the not state.

In these eleven centuries the state vanquishes decisively its external foes. The Gutian hordes are repulsed quickly. By Ur. The Amorite hordes are not repulsed, and overrun the entire valley, yet they eventually settle, in the state of Larsa, in the state of Ashur. And in the state of Babylon. The state vanquishes decisively its internal foes as well. The entire valley is brought firmly under Akkad. It is brought more firmly under Ur. And it is brought more firmly still under Babylon.

Also, in these eleven centuries in all the ways in which the state is different from the not state, the army, expansion, administration, the law, religion, writing, the acquisition of knowledge, the advance in the development of the state is very great. And of all the eleven centuries the advance is achieved fundamentally, first and foremost, in the four and a half centuries of Akkad, Ur, and Babylon.

The state begins in the lower valley. Then there is a great expansion of the domain of the state under Akkad. The entire valley becomes the state. Then there is no expansion beyond the valley under Ur. And there is no expansion beyond the valley under Babylon. The state has

reached natural limits.

The valley is defined sharply by features on the surface of the earth, seas, mountains, and the desert. In the southwest is the Persian Gulf. In the east are the Zagros mountains, running southeast to northwest along the entire length of the Tigris, rising along their entire length to peaks of 4.0 km, 4.4 km, 4.3 km, 4.1 km, 3.6 km, 3.4 km, 3.2 km. In the north are the Taurus mountains, running northeast to southwest, from the Zagros to the Mediterranean, rising along their entire length to peaks of 3.8 km, 3.0 km, 3.9 km, 3.5 km, separating the valley from central Asia Minor. In the east is the Mediterranean. In the south is the desert.

Sargon conquers the entire valley. And – with one exception – the state does not reach beyond the valley for sixteen and a half centuries after Sargon. Throughout these sixteen and a half centuries – with the same exception – the state develops within the valley. The advance in the development of the state is intensive more than extensive.

In the wake of Ur independent states appear in the upper valley, Ashur in the north, Mari in the west, Yamhad in the far west, on the littoral. These do as the state does, smite, try to expand. Ashur and Mari are then brought under Babylon. Yamhad fades.

The exception is Hattusa, beyond the Taurus, in central Asia Minor. It also does as the state does, smites, expands. And it expands southeast, toward the valley, and the state, it does not expand toward the not state, north, or west. It also expands quickly and greatly. Mursili destroys Babylon.

In the first eleven centuries of its development the state prevails decisively against the not state. And how decisively it has prevailed, the code of Hammurabi, the flourishing of mathematics, and the beginning of physics each spectacularly shows.

In the following eight and a half centuries the state does not prevail decisively against the not state. In the first two and a half of these centuries the not state prevails decisively against the state. In the following six of these centuries the state begins to prevail again, slowly, gradually, against greater resistance, before it begins prevailing decisively again.

In the two and a half centuries after the fall of Babylon great disorder prevails. The hordes are Kassite from the mountains in the east, Hurrian from the mountains in the north. In the wake of Babylon there are barely any states. The Kassites settle twice briefly in Babylon. The Hurrians settle briefly in the state of Mittani. Ashur appears, disappears, reappears. In Asia Minor Hattusa declines, and disappears. Hordes of wild men and local chieftains dominate the valley.

It is in these centuries that the new kingdom breaks out of the valley of the Nile and conquers the Asian Mediterranean littoral. The development of the state in the valley of the Nile and the development of the state in the valley of the two rivers nevertheless remain substantially independent of one another. The great state of Thutmose and his successors breaks out of the one valley and is forcefully present in the other. But in the other there is no state, either to learn from the great state of Thutmose and his successors, or for the great state of Thutmose and his successors to learn from it.

In the following six centuries the state is Ashur, not only Ashur through all the six centuries, yet fundamentally Ashur through all the six centuries, and only Ashur, and again, and again, repeatedly in the course of the six centuries.

The state is fundamentally the same. Ashur continues Babylon, and Ur, and Akkad. Even if the princes of Ashur have to rebuild the state all over again. The princes of Ashur are princes of Sumer and Akkad as the princes of Babylon have been, and the princes of Ur have been, and first the princes of Akkad have been. Their domain is the same, the entire valley under Tukulti-Ninurta, nearly the entire valley again under Tiglath-pileser, nearly the entire valley again under Ashur-nasirpal II. And they again begin and advance the pacification of the valley as their predecessors have begun and advanced it.

The princes of Ashur have to rebuild the state all over again. And against greater resistance. Through Akkad through Ur through Babylon, the state has been learning. But the not state has been learning, too.

Great disorder follows the fall of Babylon, and for a long time. The hordes of wild men are more, and much more resilient as pillaging hordes. The

local chieftains are many more, and very much more resilient as their own princes all.

How well the hordes have learned, the length and intensity of the havoc they wreak indicates. In the south the Kassites overrun the lower valley. They never settle for long. And in the lower valley, where the state has flourished for eleven centuries, there is after the Kassites no state of even small stability or authority for ten centuries. In the north the Hurrians overrun the upper valley. They never settle for long either. The havoc they wreak continues long enough to merge into the havoc which the next horde, the Arameans, wreaks. Tiglath-pileser pursues the Arameans 28 times, Ashur-bel-kala pursues them 14 times. The Arameans continue. Through the times of rise and decline of Ashur, the littoral is dominated by hordes for six centuries, the northwest for seven centuries.

How well the local chieftains have learned, their numbers indicate. The princes of Ashur vanquish scores of princes in the southeast, scores of princes in the east, and many scores of princes in the north and west. In the north and west alone Tiglath-pileser alone vanquishes not fewer than 90 princes. There is no state of even small stability or authority on the littoral until Tyre and the state of David, in the north until Urartu.

The princes of Ashur rebuild the state, and build it into its greatest, in 4 steps.

The rise of Ashur begins with Ashur-uballit, and one and a half centuries later the first step culminates in Tukulti-Ninurta. His domain is the entire valley.

There is no other state in the valley in these one and a half centuries. In Asia Minor the state of Hattusa is restored, continues for one century-odd, then the state of Hattusa disappears altogether. The first attempt of the state to establish itself beyond the valley of the two rivers in Asia Minor has thus not been too successful. It is five and a half centuries before the state begins in Asia Minor again.

In the one and a half centuries of the first rise of Ashur also the hold of the princes of Egypt on the Asian Mediterranean littoral weakens. It is nevertheless in these centuries that the development of the state in the valley of the Nile and the

development of the state in the valley of the two rivers as well as Asia Minor come the closest to becoming one joint development. Yet it is not too close. Ashur-uballit writes to Amenhotep IV. Yet as Ashur rises, Egypt retreats from the littoral, then the new kingdom disappears, and there is no contact between Ashur and Egypt in the following five centuries, until Shalmaneser III. The contact of the princes of Hattusa and the princes of Egypt is intense. There is the possibility that a son of Suppiluliuma would become a prince of Egypt. Later on the prince of Hattusa and the prince of Egypt fight a battle, and both report the battle, sign a treaty, and both record the treaty. Yet Egypt retreats from the littoral, Hattusa disappears, the Aramean hordes overrun the upper valley and the littoral, the hordes of Libyans, peoples of the sea, and Asiatics overrun Egypt, and the new kingdom disappears. The development of the state in the valley of the two rivers and the development of the state in the valley of Nile remain independent of one another.

The second step in the rise of Ashur culminates, one century-odd after the first, in Tiglath-pileser. His domain is nearly the entire valley. He promulgates laws.

There is but one other state in this one century-odd. Another brief series of princes of Babylon emerges from obscurity, and reverts to obscurity.

The third step culminates, two-odd centuries after the second, in Ashur-nasirpal II. His domain is again nearly the entire valley. He feasts 69 574. 1 500 are his officials.

In these centuries disorder abates. Several small states appear on the littoral, Byblos, Tyre, the state of David with its successors Judah and Israel, Damascus, Moab. In Tyre the colonization of the sea begins.

In the one century-odd after Ashur-nasirpal II Shalmaneser III brings the entire valley under the state, then the state briefly retreats. Then Tiglath-pileser III will ascend, and the fourth and final step will begin.

Tyre, Israel, and Judah continue in this one century-odd.

The state is fundamentally one, fundamentally large, and fundamentally made one, and large, and larger.

The development is cumulative.

The princes of Ashur continue the labors of the princes of Babylon, Ur, and Akkad, and are a decisive advance in the accumulation of these labors.

The princes of Ashur are a decisive advance in the development of warfare. They discover cavalry. They field several tens of thousands annually. And they produce more warriors, longer, and greater warriors than all their predecessors. Of the 5 princes of Akkad, 4 are warriors, all 4 great warriors. Of the 5 princes of Ur, 3 are warriors, all 3 great warriors. Of the 6 princes of Babylon, 2 are warriors, both great warriors. It is a series of 35 princes from Ashur-uballit to the predecessor of Tiglath-pileser III. Of the 35, 16 are warriors, 7 are great warriors. Of the 6 princes beginning with Tiglath-pileser III, all 6 will be warriors, 5 will be great warriors.

The princes of Ashur are a decisive advance in the expansion of the state. The princes of Akkad expand to the limits of the valley. The princes of Ur expand to the limits of the valley. The princes of Babylon expand nearly to the limits of the valley. The princes of Ashur expand to the limits of the valley, expand again nearly to the limits of the valley, expand again to the limits of the valley, and beginning with Tiglath-pileser III will expand beyond the limits of the valley.

The princes of Ashur are an important step in the development of administration. Ashur-nasirpal II has 1 500 officials. His successors will have more.

The princes of Ashur are not an advance in the development of the law. They yet promulgate laws, and the laws attest development.

They are not a step in the development of religion.

They are a great advance in writing. They are the greatest writers. Adad-nirari, Shalmaneser, Tukulti-Ninurta, Tiglath-pileser, Ashur-nasirpal II have each left behind more inscriptions than any of his predecessors. And their successors will leave behind more, and more.

They are a decisive advance in the description of the surface of the earth. And the state is in steadily more definite space.

They are a decisive advance in history. And the state is in steadily more definite time.

Akkad, from its rise with Sargon, through its

greatest, decline, and disappearance, is a continuous series of 11 princes. Ur, from its rise with Ur-Nammu, through its greatest, decline, and disappearance, is a continuous series of 5 princes. Babylon, from its rise with Hammurabi, through its greatest, decline, and disappearance, is a continuous series of 6 princes. Hammurabi and his successors trace the beginning of Babylon back to Sumuabum. And from its remotest beginning to its disappearance, from Sumuabum to Samsuditana, Babylon is a continuous series of 11 princes.

Ashur, from the beginning of its rise with Ashur-uballit through its continuing rise, decline, rise again, decline again, rise again, decline again to the predecessor of Tiglath-pileser III, is a continuous series of 35 princes. Beginning with Ashur-bel-nisheshu, it is a continuous series of 39 princes. Through its greatest from Tiglath-pileser III through Ashurbanipal, it will become a continuous series of 45 princes. The princes of Ashur trace the beginning of Ashur back to Puzur-Ashur, and further. Counting all the princes in the Assyrian prince list from Puzur-Ashur to Ashurbanipal, it is a continuous series of 84 princes.

And the fact of the series of the princes suffices to show that the great advance in warfare, great advance in expansion, development of administration, development of the law, great advance in writing, great advance in the description of the surface of the earth, great advance in history, are one another's causes and effects.

From the first, as they have built the state, the princes, and the princes in both valleys, have also developed the theory of the state. The prince destroys all foes, he extends all borders, he subdues all lands, he counts all peoples among his people. Sargon and his 4 successors have implemented the theory. Ur-Nammu and his 4 successors have implemented the theory better. Hammurabi and his 5 successors have implemented the theory better. And Ashur-uballit and his 34 successors through the predecessor of Tiglath-pileser III – 40 successors through Ashurbanipal – have implemented – and will continue to implement – the theory very much better yet.

Ashur is a decisive advance in the development of the state.

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In the law, in particular, the princes of Ashur are not an advance, even if they promulgate laws, and the laws attest development. Earlier, however, there is a very great advance in the law in these centuries in this valley, culminating in the code of Hammurabi, in Babylon.

The steps of advance in the development of the law through Hammurabi are five. Urukagina, who discovered the law. The first code, the code of Ur-Nammu. The second code, the code of Lipit-Ishtar. The third code, the code of Dadusha. And the greatest code, the code of Hammurabi. The dates are,

Urukagina	prince c. 2340,
Ur-Nammu	prince c. 2121-03,
Lipit-Ishtar	prince c. 1933-22,
Dadusha	prince c. 1785,
Hammurabi	prince c. 1792-49,

and the states are, respectively,

Lagash,
Ur,
Isin,
Eshnunna,
Babylon.

Since time began, since life began, that is how it was, the chief boatman took the boats, the chief herdsman took the asses and the sheep. But Urukagina changed the old ways. The strong shall not strike the weak. He shall not take the widow and the orphan. Urukagina has discovered the law. His new ways add something to natural law and subtract something from it.

Then Nanna gave the princeship to Ur-Nammu so that justice and truth prevail, and Ur-Nammu established justice in the land. He did not let the strong take the weak. And the first code of laws has some 40 laws. Procedure is distinguished clearly. The additions to natural law and subtractions from it are definite. Ur-Nammu has established a standard unit of measurement. I fashioned a copper vessel, and said, it is 60 sila. And the additions add and subtractions subtract radically. 1 strong man = 4 perjuries. 15 weak men = 1 perjury. 1 strong man = 30 knocked-out teeth. 2 weak men = 1 knocked-out tooth. In general, 1 strong man = 60 weak men. Ur-Nammu is also clear that order in the state and the law depend on one another. I put the boats in all rivers in order,

I established road stations and planted orchards beside them, I did not let the strong man take the orphan.

Then An and Enlil gave the princship to Lipit-Ishtar, and Lipit-Ishtar established justice in the land. The second code of laws has some 50 laws. The additions and subtractions are more, and more radical.

Then . . . Enlil . . . the princship . . . Dadusha. The third code of laws has some 60 laws. The additions and subtractions are more, and more radical.

And then Anu and Enlil commanded Hammurabi to make justice prevail in the land, to stop the strong from taking the weak, Marduk commanded him to bring justice to the land, and Hammurabi established truth and justice in the land, increased the well-being of the people.

The greatest code of laws has some 280 laws.

The additions and subtractions are many more, and much more radical. Procedure is separated sharply from the rest of the law. The law is divided into kinds, and each kind is treated exhaustively before the next. All laws are definite, and most of them are quantified explicitly. None of the laws is inconsistent with any other.

And most of all, I am the shepherd, I have not been heedless of the multitude of men whom Marduk made my flock, I have not been lazy, I have destroyed all foes, I have given the people peace, I have made them stop fighting, I have made them live well, I have made them safe in their pastures.

Hammurabi has discovered how to make them all abide by the law. He has discovered that the formal ground of abidance by the law is the integrity of procedure, the material ground is the protection of property, the protection of property entails the protection of the family, and the protection of the family entails the protection of the individual.

One century of decisive peace and prosperity follows. For one century the entire domain under the state is at peace, the state has no foes to smite, internal or external.

The development of the law is a part of the development of the state.

In the first eleven centuries of its development the state prevails decisively against its external

foes and its internal foes.

And the advance in the development of the law is achieved entirely in these centuries. All five steps of advance in the development of the law are part of the development of the state in these centuries. In these centuries the state is fundamentally Akkad – Ur – Babylon. And the advance in the development of the law culminates in the code of Ur-Nammu and the code of Hammurabi as the advance in the development of the state culminates in Ur and Babylon.

More particularly, in the first three and a half centuries the first small states smite one another from the first, as the smiting intensifies Lagash is the first explicit attempt to bring all states under one state, the attempts continue, and culminate in Sargon.

And the law is discovered by Urukagina, in Lagash, in the generation before Sargon.

The law is discovered in the state which first attempts to bring all states under one state. At the time also when these attempts are about to succeed. The law is an attempt to assert the authority of the state.

The law is discovered, however, by the last in the series of princes of Lagash, when Lagash is not the predominant state any longer. The first attempt to assert the authority of the state by the law is thus not successful. With all other earlier states Lagash becomes part of Akkad, and the law is in abeyance under Akkad.

Much smiting remains to be done. In the following one and a half centuries the state is Akkad. And the princes of Akkad have to continue crushing the internal foes of the state for one century before the valley is thoroughly subdued, and brought under administration.

The following disorder is brief. One half century after the fall of Akkad Ur-Nammu repulses the external foes of the state.

And Ur-Nammu promulgates the first code of laws.

In the following one century the state is Ur, and the attempt to assert the authority of the state by the law is this time successful. Peace and prosperity prevail. The state has external foes to fight. But in this one century the state has no internal foes to fight.

The valley has been pacified by the princes of

Akkad, then it has been brought under the law by the princes of Ur, and these are one another's cause and effect. Because it has been pacified, it has been brought under the law, and because it has been brought under the law, it is pacified further. The power of smiting has been transferred to the law.

When Ur falls it takes two and a half centuries to restore the valley under one state. The valley does not descend into great disorder, however. The hordes eventually settle. And at first one state predominates, Isin. Then another state predominates. Then the attempts to bring the valley under one state become more vigorous again, three states divide the valley, one of these is Eshnunna, and then the attempts culminate in Hammurabi.

The second code is promulgated in Isin, the state which predominates at first. The third code is promulgated in Eshnunna, one of the three states which divide the valley.

Hammurabi then conquers the valley.

And promulgates the greatest code.

In the following two centuries the state is Babylon, and the attempt to assert the authority of the state by the law is at its most successful. Decisive peace and prosperity prevail. For one century the state has no foes to fight, internal or external.

Babylon is a state of law-abiding population.

And how great this success of Babylon is, the fact shows, that of all the fifty-odd centuries since the beginning of the state, the centuries when the entire domain under the state has been at peace, the state has had no foes to fight, internal or external, have been but three. The one century under the later princes of Babylon. And the two centuries of *pax Romana* beginning with Augustus.

That the success of Babylon is cumulative is indicated by the development of the codes. The law is discovered, two-odd centuries later the first code is promulgated, some 40 laws, two centuries later the second code, some 50 laws, one and a half centuries later the third code, some 60 laws. And one generation later the fourth and greatest code, some 280 laws.

More fundamentally, that the success is cumulative is indicated by the development of the

ground of the success. The valley is subdued thoroughly by the princes of Akkad. It is brought under the law by the princes of Ur. And it is made to abide by the law by the princes of Babylon.

The state is a great power. Akkad shows the power very great, some three million thoroughly subdued. Ur shows it greater yet, some three million under the law. Babylon shows it yet greater, some four million abiding by the law.

But a fragile great power.

A state with a law-abiding population has to be substantially less likely to have internal foes. Urukagina would not let the strong strike the weak. Ur-Nammu did not let the strong take the weak. Anu and Enlil commanded Hammurabi to stop the strong from taking the weak. And if the strong consents, the strong has to be substantially less likely to keep becoming stronger, and strong enough to be his own prince.

A law-abiding population, however, has to be liable to enfeeble the state in the face of its external foes, when these appear. Prosperity has to be liable to make both the strong and the weak poorer soldiers. The strong by making him weaker, the weak by making him stronger, if the strong is to lead the charge against the foes, and the weak is to be led in the charge. And the longer the state prospers, the more likely have to be its external foes to appear.

Thus, in the following eight and a half centuries the state does not prevail decisively against its external foes and its internal foes.

And there is no advance in the development of the law in these centuries.

In the first two and a half of these centuries its external and internal foes prevail decisively against the state. The state is well-nigh annihilated.

In the following six centuries the state is fundamentally Ashur, and again, and again, and again only Ashur. But Ashur has to rebuild the state all over again, and against greater resistance. And Ashur does prevail against the external and the internal foes of the state, but slowly, gradually, over six centuries before it begins prevailing decisively again.

There are two developments in the law in these centuries.

The Hittite laws.

The state begins in Asia Minor, becomes briefly powerful, declines. The last of the series of 8 princes, Telipinu, promulgates laws. And that a descendant of the code of Hammurabi has appeared beyond the valley is important.

But this descendant has not learned procedure, or generality, or consistency, or even discrimination. Learning is difficult.

Then the Hittite state disappears. When one and a half centuries later it is restored, and continues again for one century-odd, the laws of Telipinu are copied. Indicating no further learning. Then the Hittite state disappears altogether.

And the Assyrian laws.

How far the development of the state has retreated after the fall of Babylon is indicated, both, by how hard the princes of Ashur have to labor to conquer the valley and by their failure to subdue it in these six centuries.

Sargon and his 4 successors have had to campaign for one century annually to conquer and subdue the valley. But subdue it they have.

Hammurabi has conquered the valley in 4 years, Samsuiluna has subdued it in 11 years. And subdued it has remained.

Counting only the reigns of the great warriors, it takes the princes of Ashur the 99 years of the reigns of Adad-nirari, Shalmaneser, and Tukulti-Ninurta to conquer the valley. And they fail to subdue it, after Tukulti-Ninurta the state retreats. It takes them the 39 years of the reign of Tiglath-pileser to conquer nearly the entire valley again. And they again fail to subdue it, after Tiglath-pileser the state again retreats. It takes them the 88 years of the reigns of Adad-nirari II, Ashurnasirpal II, and Shalmaneser III to conquer the valley again. And they again fail to subdue it, in the last years of Shalmaneser III already the state again begins to retreat.

Tiglath-pileser, with the second rise of the state, promulgates the laws.

The laws are 100-odd. They are not a code, there is no preamble, no lofty exhortation.

But these laws are also a descendant of the code of Hammurabi. And this descendent has learned procedure, generality, consistency, and discrimination.

The main development is the greater specific-

ity of regulation. There is more qualification in the laws. The law has begun discovering the proviso. There is also greater involvement of the officers of the court in the laws and more documentation. The law has begun discovering the duplicate.

Greater formalism has thus reasserted the integrity of procedure.

And all the laws protect property, the large majority more particularly the family and inheritance.

Both the formal and the material grounds of abidance by the law are thus there in the Assyrian laws.

But the deeper ground of abidance by the law is not there in the valley.

The valley is dominated by the foes of the state, and both its external foes and its internal foes. Hordes of wild men which will not settle, and more hordes, and many scores of local chieftains, and many more scores.

Which explains why the princes of Ashur are not great lawgivers.

Adad-nirari, Shalmaneser, and Tukulti-Ninurta have to burn, raze, and destroy for 99 years, in order to count them among the people of Ashur. But they will not be counted among the people of Ashur. So Tiglath-pileser has to burn, raze, and destroy for 39 years again, in order to count them among the people of Ashur. But still they will not be counted among the people of Ashur. So Adad-nirari II, Ashurnasirpal II, and Shalmaneser III have to burn, raze, and destroy for nearly 80 years again, in order to count them among the people of Ashur. And still they will not be counted among the people of Ashur. – Next time they will.

In these centuries, then, there is a very great advance in the law, earlier in these centuries, through the time of Babylon, the great Babylon.

And in these centuries there is a major development in religion. Twice, and both times in Babylon. The first time, earlier in these centuries, when Babylon is great. The second time, later in these centuries, when Babylon is small.

From the time of the great Babylon is *When on high*.

When on high is the first account of creation.

And creation in the first account of creation can be analyzed into six steps.

One. The account begins at the beginning. When on high the heaven had no name, and down below the earth had no name, no hut had been built, no god had been born, no one had a name, Apsu was the begetter, Tiamat bore all.

Two. The account then establishes a line of procreation leading from the beginning to the greatest. Within Apsu and Tiamat Lahmu and Lahumu are formed, within them the greater Anshar and Kishar are formed, their firstborn is their equal Anu, he begets the great Ea, and he begets the greatest Marduk.

Three. The account then forcefully asserts that the greatest is the greatest. The great gods themselves assert that Marduk is the greatest of the great gods, his destiny is unrivaled, his command is supreme, his command cannot be changed, his command shall be truth, his word shall never be wrong, no god shall ever go beyond the limits he sets.

Four. The account is now ready to turn to creation, and describes explicitly the creation of the most important things by the greatest. Marduk sets up heaven, sets up the stations of the stars, sets up the year and marks its limits, twelve months of three stars each, makes the days of the year, fixes the paths of the stars, fixes the zenith, makes the moon, lets the Euphrates and the Tigris flow, makes the netherworld, builds Babylon.

Five. The creation of men follows, not by the greatest. Ea makes men.

Six. In conclusion the account extols the greatest, making it clear that all good things that come to men come from the greatest. Marduk has bestowed ploughing, fixed the boundaries of the fields, created grain and seed, oversees justice, distinguishes truth and falsehood, destroys all foes, every one of them into nothing, brings the gods into their temples, opens the canals, brings abundant waters, enriches the entire earth.

When on high is a great advance in the acquisition of knowledge. It is the first inkling of the world. With all the following. With the first attempt, and a very successful attempt, to begin at the beginning. The heaven had no name, the earth had no name, no hut had been built, no god had been born, no one had a name. With the first attempt, and a very successful attempt, too, to collect explicitly the most important things into

their creation by the greatest. Heaven, the stations of the stars, the year, months, and days, the paths of the stars, the zenith, the moon, the Euphrates and the Tigris, the netherworld, Babylon. With the exclusion of men from creation by the greatest. And with the attempt to collect all good things that come to men. Ploughing, the boundaries of the fields, grain and seed, justice, truth, the destruction of all foes, every one of them into nothing, the temples of the gods, the canals, abundant waters, the enrichment of the entire earth.

Thus, one of the descendants of *When on high* is Hesiod's *Theogony*, whose descendants in turn are the first philosophers.

But *When on high* attests also a major development in religion. With the elevation of Marduk above all creation.

Religion is older than the state. As soon as the state begins, however, it takes over religion. The prince ministers to the gods, he builds their temples, the priests are his officials. The development of religion becomes inseparable from the development of the state. In particular, the elevation of one god is inseparable from the growth of the power of the state, of the prince, in particular. And nothing in the record before *When on high* indicates that the one god is more powerful than the prince.

Lagash is the first explicit attempt to bring all states under one state, Lagash is at its most powerful under Eanatum, and Eanatum first affirms: all lands trembled before Eanatum. He first affirms also: Enlil, lord of heaven and earth.

Enlil is the lord of heaven and earth. And perhaps the lord of heaven and earth is more powerful than the prince before whom all lands trembled. But nothing in the record indicates this. Eanatum reports also: Inanna gave Eanatum the princship. And perhaps the lord of heaven and earth is more powerful than the lady who bestows the princship. Perhaps the lady who bestows the princship is more powerful than the lord of heaven and earth. And perhaps the lady who bestows the princship is more powerful than the prince on whom she bestows it. Perhaps the prince who exercises the princship for her is more powerful.

In Akkad, when the valley is unified for the

first time, and pacified, Naram-Sin becomes the god of Akkad, and beginning with him, the prince of Akkad is the god of Akkad. Enlil is the lord of heaven and earth, and he himself now bestows the princship. An is now also the lord of the gods. As to the relations of the three gods, the god of Akkad is the anointed of the lord of the gods and governor for the lord of heaven and earth.

And perhaps the lord of the gods is more powerful than the lord of heaven and earth. Perhaps the lord of heaven and earth is more powerful than the lord of the gods. Either way, nothing in the record indicates that either the lord of the gods or the lord of heaven and earth is more powerful than the god of Akkad, the anointed of the one, governor for the other. Or that the lord of heaven and earth, who bestows the princship, is more powerful than the god of Akkad, on whom he bestows the princship, and who exercises the princship for him.

In Ur, when the valley is unified for the second time, and brought under the law, Shulgi becomes the god of the land, and beginning with him, the prince of Ur is the god of the land. Enlil is the lord of heaven and earth, and bestows the princship. An is the lord of the gods. The god of the land is the anointed of the lord of the gods and governor for the lord of heaven and earth.

And again, nothing in the record indicates that either the lord of the gods or the lord of heaven and earth is more powerful than the god of the land, on whom one of the two lords bestows the princship, and who exercises the princship for him.

In Babylon, when the valley is unified for the third time, and made to abide by the law, the prince is not a god. Marduk, however, is the god of Babylon. Anu and Enlil allot the supreme command to Marduk, and exalt him above the gods to govern all peoples for Enlil. The prince of Babylon, for his part, is victorious for Marduk, destroys with the great power of Marduk, destroys with the wisdom of Marduk.

The god of Babylon is now clearly more powerful than the lord of the gods and the lord of heaven and earth. They themselves allot the supreme command to him. But still nothing indicates that the god of Babylon is more powerful than the prince of Babylon, victorious for him,

destroying for him with his great power and wisdom.

And then Marduk is elevated above all creation. In some detail. Above the gods, above destiny, above command, above heaven, above the stars, above the year, above the zenith, above the moon, above the Euphrates and the Tigris, above the netherworld, above Babylon, above men, above ploughing, above the boundaries of the fields, above grain and seed, above justice, above truth, above all foes, every one of them, above the temples of the gods, above the canals, above the waters, above the entire earth.

Marduk is now definitely more powerful than the prince of Babylon. Even if in words more than in deeds.

Religion has begun separating itself from the state. *When on high* attests the first step, in this valley, in the separation.

Counting back to Eanatum, the power of smiting has been transferred to religion for eight and a half centuries. Now not only all the power of the prince is transferred to Marduk, the power is increased beyond all bounds in the transfer. Even if, again, in words more than in deeds.

Thus, another of the descendants of *When on high* is the Yahwistic document, whose descendants in turn are the writings that will become the Hebrew scriptures.

When on high is from a time of great advance in the acquisition of knowledge. In the accumulation of the reference and the true. More important, it is from a time of massive writing. Of the accumulation of much more of the thought and the sense than of the reference and the true. And the major development in religion is attested in a literary composition, which is a poetic masterpiece, too.

Most important, *When on high* is from a time when the state has been great, but is not so great any longer. It is from the century around the fall of Babylon.

Still, the separation is not yet complete. All is happy in *When on high*. Procreation proceeds to the greatest, he is celebrated by the great gods, he is victorious in battle, he creates the most important things, he bestows all good things on men.

The next development is gloomier.

The great Babylon disappears. A small Baby-

lon appears and disappears. Another small Babylon appears and disappears. Another small Babylon appears and disappears.

And from the time of this last Babylon is the *Marduk prophecy*.

Mursili has destroyed Babylon and carried off Marduk as booty to the land of Hatti. Tukulti-Ninurta has destroyed Babylon and carried off Marduk as booty to the land of Ashur. Shutruk-Nahhunte has destroyed Babylon and carried off Marduk as booty to the land of Elam.

In the *Marduk prophecy* Marduk reports:
I am Marduk, the great lord, the watcher who watches;
I commanded that I go to the land of Hatti;
. . . to the land of Ashur;
I commanded that I go to the land of Elam;
I myself commanded it.

The separation is now complete. The prince does as he does. He carries off Marduk as booty to the land of Hatti, carries him off as booty to the land of Ashur, carries him off as booty to the land of Elam. Marduk, for his part, does as he pleases. He commanded it, he himself.

Under the prince, the state is a power reducing the wills of men unto one will. Under Marduk, religion is now ready to become itself a power reducing the wills of men unto one will, with or without the state.

The *Marduk prophesy* is from a time of writing, and not of advance in the acquisition of knowledge. The major development in religion is again attested in a literary composition, and not a poetic masterpiece this time.

It is from a time when no state has been able to unify the valley for four and a half centuries, and there has been in Babylon, in particular, no state of even small stability or authority for four and a half centuries.

In the first eleven centuries of its development the state prevails decisively against its foes. The state is Akkad – Ur – Babylon. And the advance in the law is entirely in these centuries.

In the following eight and a half centuries the state does not prevail decisively against its foes. In the first two and a half of these centuries the state is well-nigh annihilated, in the following six centuries the state is fundamentally Ashur, as Ashur keeps laboring to unify the valley. And the

major development in religion is in these centuries. Nor does it occur in Ashur.

Hence, also, in the centuries when the state prevails against its foes, the transformation of custom is at its most successful. The taming of humanity culminates in Babylon. Four million, one eleventh of humanity, abide by the law. The strong has not just been made to stop taking the weak, he has consented to stop taking the weak. The virtues which must be practiced are practiced. As attested by one century of decisive peace and prosperity.

In the centuries when its foes prevail against the state, humanity reverts to its older ways. As attested by the hordes of wild men which will not settle and the many scores of local chieftains and many more. As attested also by the princes of Ashur, who have to burn, raze, and destroy, and again, and again, and again, in order to count them among the people of Ashur. And they will not be counted among the people of Ashur.

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And the development of the state in the thirteen centuries from Ibbi-Sin to Tiglath-pileser III attests a very great advance in the acquisition of knowledge.

As great, on balance, as in the previous six and a half centuries, those from Enmebaragesi to Ibbi-Sin. Even if the advance is not as evenly distributed over all the centuries.

The building of the state attests the acquisition. The great state of Ur falls. But the greater state of Babylon is built. Babylon falls as well. But the greater state of Ashur is built. The first attempt is also made to build the state beyond the valley, in Asia Minor.

After the fall of Ur, the one and only one state is rebuilt in two steps. Shamshi-Adad, Dadusha, and Rim-Sin bring the valley under the three states of Ashur, Eshnunna, and Larsa. Then Hammurabi brings it under the one and only one state of Babylon. – Samsuiluna then pacifies the valley, and the state remains one and only one for two centuries. By the time of Ammisaduqa decisive peace and prosperity have prevailed for one century.

The attempt to build the state beyond the valley, in Asia Minor, begins auspiciously with

Hattusili and Mursili. It does not continue auspiciously.

The rise of Ashur begins with Ashur-uballit. And against greater resistance now, Adad-nirari, Shalmaneser, and Tukulti-Ninurta bring the valley again under one and only one state, Tiglath-pileser brings it again under one and only one state, Adad-nirari II, Ashur-nasirpal II, and Shalmaneser III bring it again under one and only one state. And if the attempts to keep it under one and only one state do not succeed the first time, and the second time, and the third time, Ashur has continued trying for six centuries, will continue trying, and the fourth time will succeed.

The advance in the law, earlier in these centuries, attests the acquisition. With Lipit-Ishtar. Dadusha. And Hammurabi is a decisive advance in the development of the law.

The advance in warfare, later in these centuries, attests the acquisition. Hattusili, in Hattusa, first attests the chariot. The new kingdom, in the other valley, rises on chariots. Ashur, in this valley, rises on chariots. Ashur-nasirpal II first attests cavalry. He first musters 50 000. He and his successor Shalmaneser III first field tens of thousands for decades annually. Ashur-nasirpal II is a decisive advance in the development of warfare.

The theory of the state remains in these centuries fundamentally the same, such as the princes have developed it in the previous centuries. Princeship is one, the prince destroys all foes, extends all borders, subdues all lands, counts all peoples among his people. The advance is in the implementation of the theory. In Babylon. And Ashur.

The domain under the state expands in these centuries, slowly, gradually, haltingly. After the fall of Ur independent states appear in the upper valley, Ashur in the north, Mari in the west, Yamhad in the far west. The domain of Babylon is not larger than the domain which Akkad has first brought under the state, and has also been the domain of Ur. Babylon expands to the limits of the valley in the south, east, and north. Late in the time of Babylon, however, the state begins beyond the valley, in Asia Minor, with Hattusa. The domain of Ashur is also not larger than the domain which Akkad has first brought under the

state, and has been the domain of Ur and of Babylon. Ashur expands to the limits of the valley in the east, north, west, and south. Ashur, however, begins pressing harder against the limits in the east and in the north. And in the last of these centuries the attempts of the state to spread further north, east, and west are more decisive. Urartu in the north. Less successfully Elam in the east. Less successfully as well, all these still abortive attempts, Alashiya, Arzawa, Ahhiyawa, Troy, the Mycenaean and Minoan civilizations in the west.

At this time also the colonization of the sea begins in Tyre. It can be traced back to Hiram. The beginning of the colonization of the sea attests the acquisition of knowledge.

And the description of the surface of the earth advances very greatly in these centuries. Hammurabi attests an advance. From the time of disorder after the fall of Babylon is the very great advance of the map of Nippur. And with the campaigns of the princes of Ashur the description of the surface of the earth advances as greatly as it has earlier with the campaigns of the princes of Akkad.

In the preamble to the code, Hammurabi enumerates 25 cities. The enumeration is the first definite inkling of orientation, south to north.

The map of Nippur is the first solution of the problem of distance and orientation, across 2 km.

Describing their campaigns, Adad-nirari, Shalmaneser, and Tukulti-Ninurta note steadily more localities, steadily more explicitly in their spatial relations to one another. Describing his campaigns, Tiglath-pileser notes more localities, more explicitly in their spatial relations to one another. The descriptions of Adad-nirari II are a further step toward the development of maps:

I made my way along the Habur;
I stayed in the city of Arnabanu;
next I stayed in the city of Tabitu;
next I entered the city of Shadikanu;
next I stayed in the city of Qatnu;
next I stayed in the mountain by the river;
next I entered the city of Dur-aduklimmu;
next I marched to the city of Zurih;
next I marched to the city of Sirqu;
next I received the tribute of Hindanu;
and I returned to my city of Ashur.
And the descriptions of Ashur-nasirpal II are a

further step toward the development of maps:

I marched against the land of Zamua;
 I started from the city of Kalzi;
 I crossed the Lower Zab;
 I entered the passes of mt Babitu;
 I crossed the Radanu, and lingered for a day at
 the foot of mt Simaki;
 I crossed the Turnat during the night, and at first
 light came upon the city of Amali;
 I came to the city of Hudun;
 I came to the city of Kisirtu;
 I took the cities of the Bara and Bunisu as far as
 mt Hashmar;
 I entered the pass between mt Lara and mt Bid-
 irgi, rugged mountains difficult for chariots
 and troops;
 I came to the city of Zamru;
 I crossed the Lallu;
 I marched to mt Etinu, a rugged mountain very
 difficult for chariots and troops; I climbed to
 the peak of the mountain;
 I crossed the Edir;
 I passed between mt Su and mt Elaiu;
 I came to the cities of Arasidku, Ammaru, Par-
 sindu, Iritu, and Suritu;
 I came to the cities of Arzizu and Arsindu at the
 foot of mt Nispi;
 I marched to mt Lara, a rugged mountain very
 difficult for chariots and troops, cutting my
 way through the woods with iron axes.

The princes of Ashur are a decisive advance in
 the description of the surface of the earth. With
 Ashur-nasirpal II the description is very close to
 becoming systematic investigation. Becoming
 geography.

And these are the important historians in these
 centuries,

1965	antediluvian prince list,
1920	Esagil chronicle,
1861	Larsa prince list,
1854	Isin prince list,
1814	Mari archive,
1665	Babylonian prince list,
1665	Babylonian chronicle beginning with the descent of princeship from heaven,
1570	Babylonian chronicle reporting the Hittite raid on Babylon,
1550	Telipinu,

1330 - 1273	Adad-nirari,
1300 - 1243	Shalmaneser,
1270 - 1206	Tukulti-Ninurta,
1140 - 1076	Tiglath-pileser,
950 - 891	Adad-nirari II,
910 - 859	Ashur-nasirpal II,
851	synchronistic chronicle,
850 - 783	Adad-nirari III.

The antediluvian prince list is not an advance.
 It attests the broadening, not the deepening, of the
 concern with the past.

The Esagil chronicle is an advance. It is the
 third chronicle. It collects deeds of 14 princes of
 5 cities.

The Larsa prince list, the Isin prince list, and
 the Babylonian prince list are each an advance.
 With their predecessor – the list – they have
 established the continuous series of the princes
 from Sargon through Samsuditana, over seven
 and a half centuries.

The Mari archive is not an advance. The
 second archive, it is the first massive collection of
 documents, a few of them important, the large
 majority very not important.

The Babylonian chronicle beginning with the
 descent of princeship from heaven is not an
 advance. It attests synthesis of sources. But not a
 very good judgment, for a historian, in the selec-
 tion of the sources.

The Babylonian chronicle reporting the Hittite
 raid on Babylon is an advance. It attests synthesis
 of sources. As well as a good judgment, for a
 historian, in the selection of the sources.

Telipinu is an advance. He is the first prince to
 record the deeds of his 7 predecessors.

With Adad-nirari the inscriptions of the
 princes have become chronicles. Adad-nirari
 describes the deeds of his predecessors as well as
 his own, in detail, spatial as well as temporal, and
 systematically, generalizing over them. He re-
 ports also:

my forefather Ilushuma, son of Shallim-ahhe,
 built the temple of Ishtar;
 I rebuilt it.

Adad-nirari has reached, not explicitly, yet six
 and a half centuries into the past.

Shalmaneser's inscriptions are better chroni-
 cles. He reports also:
 my forefather Ushpia built the temple of Ashur;

my forefather Erishu rebuilt it;
 159 years passed; my forefather Shamshi-Adad
 rebuilt it;
 580 years passed; I rebuilt it.
 Shalmaneser has reached six and a half centuries
 into the past explicitly now, by counting.

Tukulti-Ninurta's inscriptions are better chron-
 icles. He reports also:
 my forefather Ilushuma built the temple of Ishtar;
 720 years passed; I rebuilt it.
 Tukulti-Ninurta has, by Shalmaneser's method,
 counting, made explicit Adad-nirari's result,
 when their forefather Ilushuma was.

The inscriptions of Tiglath-pileser are yet
 better chronicles. The inscriptions are now also
 annals. He reports also:

my forefather Shamshi-Adad built the temple of
 Anu and Adad;
 641 years passed, my forefather Ashur-dan tore it
 down;

60 years passed; I rebuilt it.

And more work remains to be done on the prob-
 lem of when exactly the remoter forefathers of the
 princes of Ashur were. But the problem of when
 exactly Tiglath-pileser's forefather Ashur-dan
 was is solved. Ashur-dan is thus the first prince
 whose date is certain without qualification.
 Ashur-dan was prince 1179-33, not *circa*.

The inscriptions of Adad-nirari II are yet better
 chronicles. The inscriptions are now also true
 annals, eponym by eponym, reign year by reign
 year. Adad-nirari II also first describes military
 operations.

The inscriptions of Ashur-nasirpal II are a
 culmination of the advance in development of the
 chronicle by the princes of Ashur, longer, more
 detailed, more explicit temporally and spatially,
 more systematic, generalizing further.

And Adad-nirari III reaches, not explicitly, yet
 ten and a half centuries into the past.

The princes of Ashur are a decisive advance in
 history, too. With their labors space and time,
 both, have been steadily more definitely deter-
 mined.

And the synchronistic chronicle is an advance.
 It correlates the deeds of the princes of Ashur
 with princes of Babylon. It is the first treatise
 since the Sumerian prince list concerned with
 more than one succession of princes.

All in all, then, the steps of advance in the
 acquisition of knowledge indicated by the devel-
 opment of the state and the development of
 history, including geography, are these.

Lipit-Ishtar, who promulgated the second code
 of laws.

The Esagil chronicle.

Shamshi-Adad, who brought the upper valley
 under Ashur.

Rim-Sin, who brought the lower valley under
 Larsa.

The Larsa prince list.

The Isin prince list.

Dadusha, who brought the middle valley under
 Eshnunna, and who promulgated the third code of
 laws.

Hammurabi, who conquered the entire valley
 and brought it under Babylon, promulgated the
 greatest code of laws, and attests the first definite
 inkling of orientation, south to north.

Samsuiluna, who established the peace and
 prosperity of Babylon.

Ammisaduqa, with whom the peace and
 prosperity of Babylon had continued for one
 century.

The Babylonian prince list.

Hattusili, who first attests the chariot, and with
 whom Hattusa rose.

Mursili, with whom Hattusa was at its greatest.

The Babylonian chronicle reporting the Hittite
 raid on Babylon.

Telipinu, who records the deeds of his 7
 predecessors.

The map of Nippur.

Ashur-uballit, with whom the continuing rise
 of Ashur began.

Adad-nirari, who began the conquest of the
 entire valley, who notes more localities and more
 explicitly than his predecessors, whose inscrip-
 tions are chronicles, and back to whom the at-
 tempts to solve the problem of time reckoning
 across centuries can be traced.

Shalmaneser, who continued the conquest of
 the entire valley, who notes more localities and
 more explicitly than his predecessors, whose
 inscriptions are better chronicles, and with whom
 the attempts to solve the problem of time reckon-
 ing across centuries have become explicit.

Tukulti-Ninurta, who completed the conquest

of the entire valley, who notes more localities and more explicitly than his predecessors, whose inscriptions are better chronicles, and with whom the attempts to solve the problem of time reckoning across centuries continue.

Tiglath-pileser, who conquered nearly the entire valley, who notes more localities and more explicitly than his predecessors, whose inscriptions are better chronicles, and with whom the attempts to solve the problem of time reckoning across centuries have begun to be unambiguously successful.

Hiram, back to whom the beginning of the colonization of the sea can be traced.

Adad-nirari II, who once again began the conquest of the entire valley, whose inscriptions imply maps, and are better chronicles, and who first describes military operations.

Ashur-nasirpal II, who first attests cavalry, who first mustered 50 000, who first fielded tens of thousands annually, who continued the conquest of the entire valley, whose inscriptions more clearly imply maps, and are better chronicles.

Shalmaneser III, who completed the conquest of the entire valley.

The synchronistic chronicle.

Counting centuries here as above, with respect to 3040, the distribution is,

2040-1941	1,
1940-1841	5,
1840-1741	3,
1740-1641	3,
1640-1541	3,
1540-1441	1,
1440-1341	1,
1340-1241	3,
1240-1141	—,
1140-1041	1,
1040- 941	2,
940- 841	3,
840- 741	—.

The distribution rather clearly indicates the time of Babylon and the time of Ashur.

Also, again, Babylon is the time of the first great flourishing of mathematics, and of the beginning of physics.

Nor is it an accident that Tiglath-pileser first attests the whale, Ashur-nasirpal II first attests

the botanical garden.

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Finally, the following conclusions can be drawn from the development of the state, and of history, in both valleys in these centuries, the centuries from Mentuhotep to Piye and from Ibbsi-Sin to Tiglath-pileser III.

In the previous centuries, the first centuries of the development of the state, the nine and a half of its development in the valley of the Nile from Narmer to Mentuhotep, and the six and a half of its development in the valley of the two rivers from Enmebaragesi to Ibbsi-Sin, the two developments are altogether independent of one another. The two developments are nevertheless fundamentally one development, and fundamentally the same development. The development of the state is a natural process.

In these centuries, centuries of continuing development of the state, the thirteen-odd of its development in the valley of the Nile from Mentuhotep to Piye, and the thirteen of its development in the valley of the two rivers from Ibbsi-Sin to Tiglath-pileser III, the two developments begin to converge, slowly, gradually, haltingly, still remaining substantially independent of one another. And the two developments continue to be fundamentally one development, and fundamentally the same development. The development of the state is a natural process.

There are fundamental differences. Yet more fundamentally the development is the same.

All differences are differences fundamentally in the rate of the development. In one of the valleys the development is faster, and accelerates more, and more.

And all differences indicate that the development is fundamentally the same, and the more fundamental the differences the more strongly they indicate that the development is fundamentally the same.

To begin with, a main cause of the differences in the development of the state in the two valleys have to be the natural differences between the two valleys.

The valley of the Nile is just that, the valley of one river. It is bounded by the desert in the west, by the desert in the east, by the sea in the north,

by the cataracts in the south. It is fundamentally one-dimensional. The valley of the two rivers is the valley of two rivers, the two rivers diverging in their middle courses widely from one another, one of them approaching the sea. It is bounded by the desert and the sea in the south, by the mountains in the east, by the mountains in the north, by the sea in the west. It is two-dimensional. The valley of the Nile is some 800 km from the sea to the first cataract, some 1 700 km from the sea to the fifth cataract. The valley of the two rivers is some 1 000 km from the mountains in the north to the sea in the south and some 1 200 km from the sea in the west to the mountains in the east. It is larger by orders of magnitude.

The state is fundamentally one, large, and larger, and fundamentally made one, large, and larger.

And the sizes of the two valleys already indicate that the building of the state – one, large, and larger – will be more difficult in the valley of the two rivers.

In both valleys the state expands. In each of the valleys the state expands to the natural limits of the valley. And in the valley of the two rivers the expansion of the state to the natural limits of the valley demands more labor. Demands the accumulation of more experience, and faster. Demands learning more, and faster.

In the valley of the Nile the state begins with the old kingdom. The old kingdom extends from the first cataract in the south to the sea in the north from the first. It continues for seven and a half centuries. The middle kingdom expands to the second cataract in the south and Sinai in the north. It continues for two and a half-odd centuries. The new kingdom expands to the fifth cataract in the south and the Euphrates in the north. It continues for four centuries. The state is built successfully – one, large, and larger – three times. Each time it expands to further natural limits. And all in all, of the twenty-two and a half-odd centuries from Narmer to Piyi, it has continued – one, large, and larger – for fourteen-odd of those centuries.

In the valley of the two rivers it is three and a half centuries after the beginning of the state before Akkad unifies the entire valley. The limits of Akkad are the limits of the valley, from the

seas in the south and in the west to the mountains in the east and in the north. It continues for one and a half centuries. Ur then unifies the entire valley again. Its limits are again the limits of the valley. It continues for one century. Babylon then unifies nearly the entire valley again. If not quite in the west, in the north, east, and south its limits are again the limits of the valley. It continues for two centuries. Ashur then tries to unify the entire valley, and again, and again. It conquers the entire valley, again conquers nearly the entire valley, again conquers the entire valley. The state is built successfully – one, large, and larger – three times, and three more times the attempts to build it – one, large, and larger – come close to success. The state expands to the limits of the valley six times. And all in all, of the nineteen and a half centuries from Enmebaragesi to Tiglath-pileser III, the state has continued – one, large, and larger – under Akkad, Ur, and Babylon, for four and a half centuries. Counting from the beginning of the state to the fall of Babylon and again from the beginning of the rise of Ashur, however, the attempts to build the state – one, large, and larger – have continued for not less than seventeen of those centuries.

The state is power. It is of the essence of the state to exercise the power which it is. *Ipso facto* it is of the essence of the power to increase. Extensively and intensively.

In the valley of the Nile the middle kingdom is more powerful than the old. The new kingdom is more powerful than the middle. And the increase of the power is substantially extensive. The middle kingdom expands further than the old. The new kingdom expands further than the middle. Intensively, the state is brought under administration. But it never discovers the law.

In the valley of the two rivers Akkad already is a more powerful state than the state ever becomes in the valley of the Nile. It has been more difficult to build. It is the successor of three and a half centuries of smiting, and increasingly more vigorous smiting. It is thus more powerful extensively. Sargon discovers the army. Sargon, Rimush, Manishtushu, and Naram-Sin campaign annually for one century. They campaign across 2 100 km. The state is larger by orders of magnitude. And it is more powerful intensively. After

one century of annual campaigns the entire valley is brought under administration.

And Ur is more powerful than Akkad. Intensively. The valley is brought under the law.

And Babylon is more powerful than Ur. Again intensively. The valley is made to abide by the law.

And Ashur is more powerful than Babylon. Again extensively. By the time of the third attempt of the state of Ashur – the sixth attempt of the state – to unify the valley, Ashur-nasirpal II has discovered cavalry, and fields annually tens of thousands. The labors of the princes of Ashur to unify the valley have continued for six centuries.

The increase of the power of the state is a cause and an effect, both, of the increasing strength of its foes, external and internal. A cause, for the state has created its foes in the first place. And an effect, for it is fighting its foes that the state continues – one, large, and larger.

Its external foes are the hordes of wild men. Attack them, and they will retreat, retreat, and they will attack. And the state has first attacked them, and thus taught them to attack. And as the state has continued to attack them, they have retreated, but as soon as the state has retreated, they have attacked.

The state borders the not state. And the hordes of wild men are another of the natural features determining the borders of the state, and a more substantial feature than the deserts, seas, cataracts, and mountains. For as the state fights the hordes, it becomes more powerful, but they become stronger, too, and as the state continues to fight them, it becomes still more powerful, but they become stronger still, too, and if the state ceases to become more powerful, they will destroy the state.

And the state in the valley of the two rivers has more external foes, attacks them more vigorously, and retreats less.

In the valley of the Nile, the old kingdom does not expand, and it has no external foes. It continues in serenity. The middle kingdom begins to expand, and it has external foes. And when it ceases to become more powerful, hordes, the Hyksos, overrun the valley. The new kingdom resumes the expansion, expands further, and it

has more and more powerful external foes. And when it ceases to become more powerful, more hordes, the Libyans, peoples of the sea, and Asiatics, overrun the valley, and destroy the state rather for good.

In the valley of the two rivers, Akkad conquers the valley. When it ceases to become more powerful, hordes, the Gutians, overrun the valley. Ur conquers the valley. When it ceases to become more powerful, more hordes, the Amorites, overrun the valley, and wreak havoc longer. Babylon conquers the valley. When it ceases to become more powerful, many more hordes, the Kassites and the Hurrians, overrun the valley, and wreak havoc much longer. They destroy the state in the lower valley rather for good. In the upper valley they are joined by more hordes, the Arameans. And the rise of Ashur, and again, and again, is a continuous fight against hordes in the south, in the east, in the north, and in the west, as Ashur becomes more powerful, and more, and more.

In both valleys the hordes eventually settle. They eventually learn from the state more than smiting. The Hyksos eventually settle. The Libyans eventually settle. The Nubians eventually settle. In the other valley, the Amorites eventually settle, and very consequentially, in Larsa, in Ashur, and in Babylon. The Kassites settle repeatedly, if briefly. The Hurrians settle briefly, and again. The Arameans eventually settle.

And all hordes, in both valleys, settle within the domain which the state has first, before the hordes have descended on it, brought under itself.

Its external foes are a cause of the increase of the power of the state extensively. Its internal foes are a cause of the increase of the power of the state intensively.

Its internal foes are the parts of the state which would be its own state each. The local chieftains who would be his own prince each. Crush them, and they will submit, relent, and they will secede. And again, the state has first taught these, too, its parts to be its own state each, the local chieftains to be his own prince each. And as the state has continued to crush them, they have submitted, but as soon as the state has relented, they have seceded.

The state is built out of the not state. It is made

– one, large, and larger – out of parts which have each not been a part of the state before. And as the state adds parts to itself, and crushes them in order to make them its parts, it becomes more powerful, and as it becomes more powerful, its parts become stronger, and as it continues to crush them, it becomes still more powerful, and as it becomes still more powerful, its parts become stronger still as well, and if the state ceases to become more powerful, its parts, too, will destroy the state.

And the state has many parts. All the earlier states which it has brought under itself. All the countries which have never been under a state before. All the hordes which have eventually settled. And, ultimately, all the organisms which are the human population of the state. These are all internal foes of the state. Relent, and they will secede. To be its own state each, his own prince each.

And as it has more external foes, attacks them more vigorously, and retreats less, so the state in the valley of the two rivers has more internal foes, crushes them more successfully, and relents less.

In the valley of the Nile, the old kingdom has no internal foes. It continues in serenity. But it falls apart. And the middle kingdom begins by crushing local chieftains. It also falls apart. And the new kingdom begins by crushing more local chieftains. It also falls apart. And local chieftains, not less than hordes of wild men, destroy the state rather for good.

In the valley of the two rivers, the state begins as several small states in the lower valley. Akkad brings all these under itself, as well as all the countries in the upper valley. Akkad thus has many internal foes. It falls apart, and there are scores of princes in the valley. When Ur falls apart, there are more scores of princes in the valley. When Babylon falls apart, there are many more scores of princes in the valley. In each case, when Akkad ceases to become more powerful, when Ur ceases to become more powerful, when Babylon ceases to become more powerful, local chieftains, not less than hordes, destroy the state. And the rise of Ashur, and again, and again, is a continuous fight against scores of princes, not less than hordes, in the south, in the east, in the

north, and in the west, as it becomes more powerful, and more, and more.

Its internal foes are a cause of the increase of the power of the state intensively. Crush them, and they will submit.

Thus, as the state becomes more powerful, and more, in both valleys it develops administration, and develops it further in the valley of the two rivers. In the valley of the two rivers it further discovers the law, and advances it greatly. In each valley there is also major development in religion. And in each valley custom is transformed.

These are among the fundamental differences in the development of the state in the two valleys. The discovery and advance of the law in the one and not the other. The differential development of religion in each. And the differential transformation of custom.

The cause is the same. To build the state in the valley of the two rivers – one, large, and larger – is more difficult, demands the accumulation of more experience, and faster. The state has more external foes, attacks them more vigorously, and retreats less, and it has more internal foes, crushes them more successfully, and relents less.

Sargon brings the entire valley of the two rivers under one state. Sargon is the successor of three and a half centuries of smiting, and steadily more vigorous smiting. The explicit attempts to bring the valley under one state have begun one century-odd before Sargon, and become steadily more vigorous, too. And Sargon discovers the army. And Sargon and his successors campaign for one century annually over the valley. And then Naram-Sin develops administration. After four and a half centuries of smiting, and steadily more vigorous smiting, and annual smiting in the last of these centuries, the power of smiting is transferred to officials.

The valley is very well subdued. Then Akkad falls. Only two generations after the fall of Akkad, however, Ur-Nammu brings the valley under one state again. And under the law. The valley has been very well subdued, it has then fallen into disorder, but order is then quickly restored, by smiting, vigorous smiting, too, and the power of smiting is transferred to the law.

The first inkling of the law also predates Ur-Nammu by two-odd centuries. Urukagina has first

proposed to change the old ways, in the generation before Sargon, when smiting is already at its most vigorous.

In this valley in the first five and a half centuries of the development of the state more smiting is accumulated than in all the nineteen centuries of the development of the state from the old kingdom through the middle through the new in the other valley.

And in this valley, when the one state falls again, there is the second code of the laws, then the third code of laws, smiting becomes very vigorous again, the valley is brought under one state again, by very vigorous smiting again, and the state is brought under the greatest code of laws. The valley is made to abide by the law, and one century of decisive peace and prosperity follows.

The power of smiting has been transferred to the law successfully.

When the one state falls again, greater disorder follows. The foes of the state, external and internal, are both stronger and many more. And when in this greater adversity Ashur begins and continues to fight to restore the one state, it is under the law. Tiglath-pileser promulgates the Assyrian laws.

The power of smiting has been transferred to the law – at least in part, at least prospectively – permanently.

The law is not discovered in the other valley.

More smiting – more law.

Less smiting – less law.

Religion is older than the state. By many millennia. In both valleys, however, as soon as it begins, the state takes over religion. This has to be a matter of course, if religion has for millennia been a bond keeping organisms together in tribes, and the state, a power reducing the wills of men unto one will, has to reduce the wills of men in their tribes unto one will. It has to be a matter of course, if the state has to make out of all the tribes one tribe – one, large, and larger.

In both valleys, as soon as the state begins, the prince ministers to the gods, he builds their temples, the priests are his officials. Religion becomes inseparable from the state. And in both valleys religion remains for some time inseparable from the state, then begins to separate itself

from the state, then separates itself completely from the state. In both valleys when the state becomes more powerful religion becomes more powerful, and when the state ceases to become more powerful religion continues to become more powerful. In both valleys with the increase of the power of the prince one god is elevated steadily higher. The power of the prince is transferred to one god. But then the one god is elevated high above the prince, too, his power now very much greater than the power of the prince.

In the valley of the two rivers, it is more difficult to build the state. Smiting becomes the main concern of the state. The state has more external foes and more internal foes. Smiting is the main concern of the state, hence administration, and hence the law. Religion is inseparable from the state, but it is not the main concern of the state.

In the first eleven centuries of its development the state prevails decisively against its foes. In these centuries the state is fundamentally Akkad – Ur – Babylon. The advance in the law is entirely in these centuries. And in these centuries the elevation of one god is inseparable from the increase of the power of the prince. This culminates in the elevation of Marduk above Enlil and Anu. The lord of heaven and earth and the lord of the gods allot the supreme command to the god of Babylon. Because the prince of Babylon is victorious for the god of Babylon. And the god of Babylon is more powerful than the lord of heaven and earth and the lord of the gods, but he is not more powerful than the prince of Babylon. The prince of Babylon is victorious for him.

In the following eight and a half centuries the state does not prevail decisively against its foes. The state is at first well-nigh annihilated. Then the state is fundamentally Ashur, as Ashur keeps laboring to unify the valley. There is no advance in the law in these centuries. And in these centuries the one god is elevated high above the prince. Not in Ashur. In two literary compositions.

In *When on high* Marduk is elevated above all creation. The one god is now more powerful than the prince. Even if in words more than in deeds. Religion has begun separating itself from the state.

And in the *Marduk prophecy* Marduk is ele-

vated further. He is elevated above the past. Above what has happened. The prince has carried off the god as booty. Not so. The god has commanded it.

The separation is now complete. Under the prince, the state is a power reducing the wills of men unto one will. But one god is now more powerful than the prince. Under the one god, religion is now ready to be itself a power reducing the wills of men unto one will, with or without the state.

The state has thus failed to assimilate religion. When the state has become more powerful, it has given its power to religion. But when the state has ceased to become more powerful, the power of religion has continued to increase. The state is thus a cause of the increase of the power of religion. But not the sole cause.

In the valley of the Nile, the old kingdom has no external foes, no internal foes. And religion is very much the main concern of the state. The middle kingdom has foes, and smiting becomes a main concern of the state. Next to religion. Religion remains its main concern. The new kingdom has more foes, and for a while smiting becomes its main concern. Again, next to religion. Religion remains the main concern of the state. Then religion becomes its only concern.

Beginning to end, the state in the valley of the Nile is a procession of tombs, more tombs, and more.

The old kingdom continues in serenity for seven and a half centuries. The first five and a half are centuries of vigor. The prince is great god. And nothing is greater.

Then the vigor wanes. Re begins to predominate among the gods. From this time is the composition inscribed on the Shabaka stone, the first inkling of creation, by one god, Ptah. And from this time are the pyramid texts. Unas discovers that he is an indestructible spirit going to Re in heaven.

And in this last the development of religion in this valley is fundamentally different from its development in the other valley. In both valleys one god is elevated steadily higher, and eventually high above the prince. In this valley, however, the prince goes to heaven. In the other valley the prince does not go to heaven. In this

valley every lesser official begins going to heaven. And then everyone begins going to heaven. In the other valley everyone does not go to heaven. Not before everyone in that valley learns, centuries after the centuries at issue, from everyone in this valley.

Thus, in the middle kingdom the elevation of one god continues. From this time are also the coffin texts. Every lesser official begins going to Re in heaven.

In the new kingdom the elevation of one god culminates in Aten, elevated above all creation. When the old religion is restored, Re is elevated above all creation. Religion has thus begun separating itself from the state. Even if it has not discovered yet, in this valley, the elevation of the one god above the past. But from this time also is *The book of the dead*. And when everyone begins going to Re in heaven the separation of religion from the state is in this valley as complete as it is not yet in the other valley. Religion is the power, with or without the state, reducing the wills of men unto one will.

The state has failed to assimilate religion in this valley as well. In this valley, rather, religion has assimilated the state.

The fundamental difference indicates a cause.

Unas already goes to heaven to eat the gods and shed his seed.

The cause is the organism.

The state is built out of the not state. Ultimately, out of the organisms which are the human population of the state. And they are all internal foes of the state. Crush them, and they will submit, relent, and they will secede.

And in the valley of the two rivers the state smites them, and more, and more, brings them under administration, smites them more, brings them under the law, smites them more, makes them abide by the law.

Then the state falls, and they revert to their older ways. The state has to smite them again, and again, and again.

In the valley of the Nile religion takes the prince to heaven, then takes also the lesser officials there, then takes everyone there. To eat the gods and shed his seed.

When the new kingdom falls, the state is destroyed rather for good. Everyone continues

going to heaven.

More smiting – more law – less religion.

Less smiting – less law – more religion.

It can be concluded that religion is a foe of the state. Its most formidable internal foe.

And the conclusion is corroborated by the transformation of custom in the two valleys.

In both valleys the practice of the virtues which must be practiced is generalized from the men of the tribe to the men of a larger tribe, and larger.

In the valley of the two rivers, in the centuries when the state prevails against its foes, the transformation is at its most successful. The taming of humanity begins in Akkad, continues in Ur, and culminates in Babylon. Four million, one eleventh of humanity, abide by the law. The strong has consented to stop taking the weak. For one century the virtues which must be practiced are practiced by one eleventh of humanity.

In the centuries when its foes prevail against the state, humanity reverts to its older ways. The princes of Ashur have to burn, raze, and destroy, and again, and again, and again, in order to count them among the people of Ashur. And they will not be counted among the people of Ashur.

In the valley of the Nile, the taming begins in the old kingdom, continues when the old kingdom falls, continues in the middle kingdom, continues when the middle kingdom falls, continues in the new kingdom, continues when the new kingdom falls. Five million, one twelfth of humanity go to heaven. They one and all declare: I am pure, pure, pure, pure, pure. One twelfth of humanity is pure, pure, pure, pure, pure.

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The most fundamental difference in the development of the state in the two valleys is in the acquisition of knowledge. Much more is acquired in the course of the development of the state in the valley of the two rivers. Yet again, the development is fundamentally one, and fundamentally the same. And this most fundamental difference indicates most clearly and distinctly that the development is one, and the same. It is a natural process.

Irrespective of any and all of their practical ends, the following are all theoretical advances,

all advances in the search for truth. In both valleys. Great advances.

The building of the state is a theoretical advance.

The princes have built the state in the old kingdom, better in the middle kingdom, better in the new kingdom. They have built it in Akkad, better in Ur, better in Babylon, better in Ashur. The building culminates in Ashur. The princes of Ashur have discovered how to maintain a state for six centuries, and in increasing adversity make it the most powerful state, and again, and again.

It is twenty-two and a half-odd centuries from Narmer to Piyl, nineteen and a half from Enmebaragesi to Tiglath-pileser III. Beginning with Plato, the philosophers have been building the state in speech for twenty-four centuries now. They are yet, after these twenty-four centuries, to build it better than the princes in the two valleys have built it in those twenty-two and a half-odd centuries.

The development of warfare is a theoretical advance.

This culminates in Ashur-nasirpal II. Ashur-nasirpal II has discovered how to muster 50 000.

50 000 is not less than 3 % of all able-bodied men in the state. Close to 1 % of the human population of the state. Close to 0.1 % of humanity.

The discovery and development of the law is a theoretical advance.

This culminates in Hammurabi. Hammurabi has discovered the ground on which the state will be made to abide by the law.

The human population of the state is some 4 million. 8 % of humanity abide by the law for one century.

The theory of the state is a theoretical advance.

The princes in both valleys have developed the theory. The same theory. Princeship is one, the prince destroys all foes, extends all borders, subdues all lands. In the valley of the two rivers the prince also counts all peoples among his people.

Nor have the philosophers been more successful in developing the theory of the state, or in implementing the theories they have developed, than in building the state.

The description of the surface of the earth is a very great theoretical advance.

The inscriptions of the princes of the new kingdom have begun determining the orientation of the countries from the Mediterranean islands in the north to Punt in the south, from Libya in the west to the Asian Mediterranean littoral in the east. The inscriptions of the princes of Ashur have noted steadily more localities, steadily more explicitly in their spatial relations to one another, implying steadily more unambiguously maps. The advance has culminated earlier, in the map of Nippur, with the determination of distance and orientation across 2 km.

The description of the past and the beginning and development of history is a yet greater theoretical advance.

In the new kingdom the prince lists have determined the succession of the princes back to the first. The Abydos prince list has 76 princes, from Seti back to Narmer. Seti was prince *c.* 1302-291, Narmer was prince *c.* 3000.

History begins in Ur with the Sumerian prince list. The Sumerian prince list has the first prince to leave his inscriptions behind, Enmebaragesi. From Ur are also the first chronicles. The prince lists continue the Sumerian through the Babylonian. The last prince in the Babylonian prince list is Samsuditana. Samsuditana was prince *c.* 1625-594, Enmebaragesi was prince *c.* 2680. In Babylon the chronicles are also more and better. The Assyrian prince list is compiled under Shalmaneser V. The first prince in the Assyrian prince list to leave his inscriptions behind is Shallim-ahhe. Shalmaneser V was prince 727-2, Shallim-ahhe was prince *c.* 1960. In Ashur the chronicles are also more and better. The advance in the chronicle as well culminates in Ashur-nasirpal II. His inscriptions are the longest, the most detailed, the most explicit temporally and spatially, the most systematic.

And the building of the state is the fundamental cause of the development of warfare, the discovery and development of the law, the development of the theory of the state, the advance in the description of the surface of the earth, and the advance in the description of the past and the beginning and development of history.

In the valley of the Nile, the old kingdom

extends from the first cataract in the south to the sea in the north. The middle kingdom expands to the second cataract in the south and Sinai in the north. The new kingdom expands to the fifth cataract in the south and the Euphrates in the north. The new kingdom then falls.

It is twenty-two and a half-odd centuries from Narmer to Piye. And in these twenty-two and a half-odd centuries the state does not begin outside the domain which the one state – old kingdom, middle kingdom, new kingdom – has brought under itself. No state appears south of this domain. No state appears east of this domain. No state appears west of this domain.

In the north is the Mediterranean littoral.

In the valley of the two rivers, the entire valley is the domain of Akkad. From the desert and the sea in the south to the mountains in the east to the mountains in the north to the sea in the west. The entire valley is the domain of Ur. Nearly the entire valley is the domain of Babylon. Ashur conquers the valley, and again, and again. And the state begins to expand beyond the valley, slowly, gradually, haltingly. In the southeast Elam remains a borderland of the state. In the northwest, in the time of Babylon, the most successful attempt of the state to begin beyond the valley is in Asia Minor, with Hattusa. Even if three centuries after it has first begun Hattusa disappears. In the west, the Mediterranean littoral remains a borderland of the state until, late in the time of Ashur, Tyre and the state of David. Tyre first ventures on the sea. And in the north, later still in the time of Ashur, the state expands its domain a little, with Urartu.

It is nineteen and a half centuries from Enmebaragesi to Tiglath-pileser III. And in these nineteen and a half centuries the state does not begin outside the domain which the one state – Akkad, Ur, Babylon, Ashur – with its extensions – Elam, Hattusa, Tyre, Urartu – has brought under itself. No state appears south of this domain. No state appears east of this domain. No state appears north of this domain. No state appears west of this domain, including on the sea.

The state has brought under itself the domain from the source of the Euphrates in the north to the fifth cataract in the south and from the plain of the mouth of the Nile in the west to the plain

of the mouth of the two rivers in the east.

And warfare is not developed, the law is not discovered, the theory of the state is not developed, the surface of the earth is not described, and the past is not described outside of this domain.

The state has developed out of the not state. And it has developed for twenty-two and a half-odd centuries surrounded by the not state, expanding against the not state, differentiating itself more, and more, from the not state.

It is a natural process.

The seven and a half centuries from Tiglath-pileser III to Augustus

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These are the decisive centuries in the development of the state, and of history.

The dates are,

Tiglath-pileser III prince 745-27,
Augustus prince 27^{BC}-14^{AD}.

It is 759 years from 745 to 14^{AD}.

From 745, the beginning of the reign of Tiglath-pileser III, to 627, the end of the reign of Ashurbanipal, the Assyrian princes conquered the entire valley of the two rivers and the valley of the Nile. These are 118 years of great advance in the development of warfare.

From 559, the beginning of the reign of Cyrus, to 479, when Sparta and Athens defeated them, the great kings conquered the domain from the gulf of Sidra to the Indus. – The rise of Sparta and Athens began before 479. Counting only from 479 to 323, the end of the reign of Alexander, in these years the rise of Sparta and Athens continued, Sparta defeated Athens, Thebes rose and defeated Sparta, Macedon rose and conquered Greece and then conquered the entire domain of the great kings. – The rise of Rome began before 323. Counting only from 323 to 31, when Augustus defeated Antony, in these years Rome conquered the domain from the Atlantic to the Euphrates, and fought the civil wars. From 31 to 14^{AD}, from his victory over Antony to his death, Augustus built the first, and the greatest, by far, standing army, and deployed it. – These are 573 years of continuing and steadily greater advance in the development of warfare.

691 of the 759 years are thus accounted for.

Nor were the remaining 68 years lost. Between 627, the end of the reign of Ashurbanipal, and

559, the beginning of the reign of Cyrus, the Babylonian and Mede princes destroyed Assyria, then with the Egyptian and Lydian princes fought one another steadily further afield.

These 759 years are nearly all of them of very vigorous warfare, steadily more vigorous, and 691 of them of the greatest continuous advance in the development of warfare, before or after.

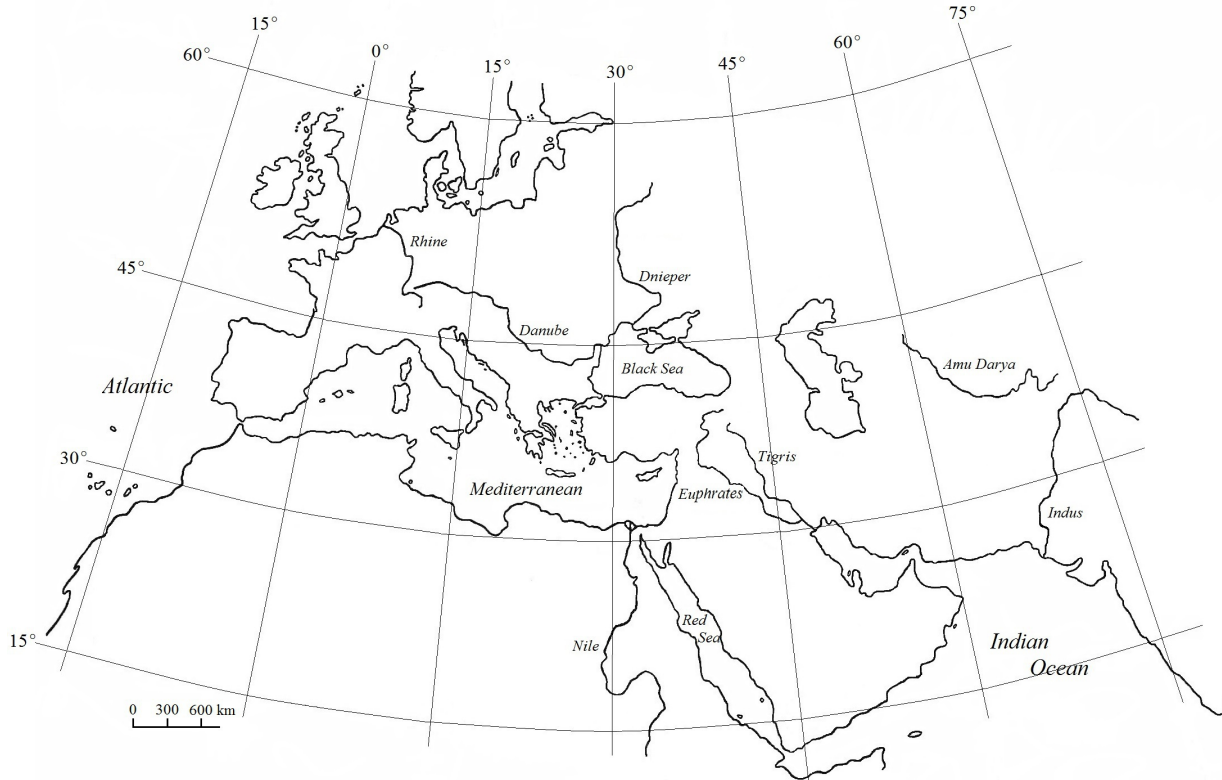
By 745 the state had developed for twenty-two and a half centuries. In these centuries it had brought under itself the domain from the source of the Euphrates in the north to the fifth cataract in the south, and from the plain of the mouth of the Nile in the west to the plain of the mouth of the two rivers in the east. 24° of latitude, 2 700 km along the meridian, 20° of longitude, 1 900 km along the parallel.

By 14^{AD}, seven and a half centuries later, the state had expanded the domain under itself from the mouth of the Rhine in the north to the southern shores of the Red Sea in the south, and from the Atlantic in the west to the Indus in the east. 41° of latitude, 4 400 km along the meridian, 74° of longitude, 6 800 km along the parallel.

The increase is by nearly an order of magnitude. These are the centuries of the greatest expansion of the domain under the state, before or after.

In the previous twenty-two and a half centuries the state had been invariably under a prince. In these centuries experimentation began. In Sparta the state was under dual kings and a council. In Athens it was under a popular assembly. In Rome it was under a senate and elected consuls.

All forms of government that have ever been tried, before or after – monarchy, aristocracy, democracy, and any combination of the three –



Lambert conic conformal projection.

were tried for the first time in these centuries.

In these centuries also the state began being built in speech. Philosophy began in these centuries. And the philosophers did not at first concern themselves with the state too much. But then they did. Two centuries into the development of philosophy – twenty-six into the development of the state – Plato noticed that all states are evil, none good. So Plato built the state better, in speech. And so the philosophers continued, to build the state better, in speech.

Thus also ever after it has remained unclear, is the state the state? the one in fact? or the state is better than the state? as, clearly, in speech is better than in fact.

For ethics begins in these centuries, too.

The investigation of the state by the philosophers also begins in these centuries, with Aristotle, even if not nearly as vigorously as the better building of the state in speech.

Thus also ever after the investigation of the state has continued, also never yet nearly as

vigorously as the better building of the state in speech.

These centuries are decisive in the development of the law. Jurisprudence begins in these centuries.

The prince had been the source of the law.

Then colonization of the sea began in Tyre.

Then the Greek cities began founding colonies, and more colonies. Some of these new cities began being founded by lawgivers. In some of the older cities lawgivers appeared. All cities, old and new, became prone to be refounded by lawgivers. In Athens every leader of the people became a lawgiver. Rome began making laws, and more laws. The study of the law began. By the time of Augustus jurisprudence had begun. Labeo, under Augustus, wrote 400 books on the law.

These centuries are decisive also in the development of religion. The first church is built in these centuries.

As the Assyrian princes destroyed Judah, Judaism was built in place of Judah. A church in

place of the state.

And the second church, more powerful than the first by many orders of magnitude, will learn from the first. And the third church, as powerful as the second, will learn from the first and the second.

In these centuries the description of the surface of the earth becomes systematic. Becomes geography.

The Assyrian princes recorded steadily more localities, steadily more explicitly in their spatial relations. The great kings inventoried in detail the countries and peoples they ruled. And with Hecataeus, the seventh philosopher, under Darius, geography began. Hecataeus determined the distances and orientation of the countries from the Aegean to the Persian Gulf, described 300+ localities, and drew the second map of the earth. Anaximander, the second philosopher, drew the first. Three centuries later, with Eratosthenes, the map of the earth became a mathematical problem explicitly. Two centuries later, under Augustus, Strabo wrote the *Geography*. In the *Geography* 6 000+ localities are described, and distances and orientations from the Atlantic in the west to the Ganges in the east and the Shetland Island in the north to Sri Lanka in the south are determined.

And in these centuries history flourishes very greatly.

The inscriptions of the Assyrian princes become better chronicles yet.

And then there is Herodotus. Later on there is Polybius. It is the time also of Thucydides, and of Livy. The time also of many hundreds, and more hundreds, of lesser historians.

Herodotus begins in the *Histories*, or *Researches*: the researches of Herodotus of Halicarnassus are here set down so that the past not be lost by the passage of time and the great and magnificent deeds of Greeks and barbarians not fail to have their renown as well as the cause why they fought one another (I, 1).

These are the decisive centuries in the development of the state, and of history.

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Below as above, the particulars are collected. The particular states which the particulars indicate are described. The development of the state

in general is described. Including the law, religion, and custom. The development of geography is described. The historians are collected and sorted out explicitly, and the development of history is described. The problem of knowledge is addressed.

Below also, however, the investigation of the state has to be collected. The states built in speech have to be collected, too.

It is back to this time as well that Bodin's enumeration of the historians reaches, and below, the collection of the historians is grounded in Bodin's enumeration, its correction, and completion.

Also, above, in part three of the investigation, where the ground has been established on which the acquisition of knowledge can be collected in its entirety, and hence the problem of knowledge formulated and solved, and how firm the ground is has been shown by the collection of the development of five problems, one of the five problems has been the best state, and with respect to this problem the development of the state in the four-odd centuries from Tiglath-pileser III to Alexander has been collected. Thus, the collection of the development of the state in those centuries below is a review and extension of its collection above.

The seven and a half centuries from Tiglath-pileser III to Augustus can be divided into three parts. The one century-odd from Tiglath-pileser III to Ashurbanipal. The three-odd centuries from Ashurbanipal to Alexander. And the not quite three and a half centuries from Alexander to Augustus.

The one century-odd from Tiglath-pileser III to Ashurbanipal

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As those seven and a half centuries are the decisive in the development of the state, and of history, so this first one century-odd is, first of all, decisive.

The particulars indicate 11 states.

Ashur, or Assyria. After seven centuries of attempts to bring all states under one and only one state, in this, the eighth century of these

attempts, the princes of Ashur, or Assyria, succeeded in bringing all states under one and only one state, very nearly.

Urtu, which the Assyrian princes destroyed. Israel, which the Assyrian princes also destroyed. Judah, which the Assyrian princes also destroyed, and as Judah was destroyed, in this one century-odd the building of Judaism in place of Judah began. Egypt, which the Assyrian princes conquered.

And in this one century-odd the attempts to build the state beyond the borders of Assyria, in the west, began to succeed. In Asia Minor, Phrygia, an abortive attempt. Further west in Asia Minor, Lydia, still very small. Further west, across the Aegean, in the Peloponnese, Sparta, Argos, and Corinth, all 3 still very small. And further west, across the Ionian Sea, in Italy, Locri, the first colony to emerge from obscurity, also an abortive attempt.

Assyria. Urtu. Israel. Judah. Egypt. Phrygia. Lydia. Sparta. Argos. Corinth. Locri.

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Assyria.

The particulars are 6,

Tiglath-pileser III prince 745-27,

Shalmaneser V prince 727-2,

Sargon II prince 722-05,

Sennacherib prince 705-680,

Esarhaddon prince 680-68,

Ashurbanipal prince 668-27.

By 745, when Tiglath-pileser III ascended, the state of the Assyrian princes had retreated to the upper valley of the Tigris around the city of Ashur.

The last great warriors, Adad-nirari II, prince 912-891, Ashur-nasirpal II, prince 884-59, and Shalmaneser III, prince 859-24, had conquered the entire valley. The state had then retreated.

With the retreat, in the south, in the lower valley, disorder once again prevailed.

In the north, in the country around the upper reaches of the two rivers, Urtu rose.

In the west, on the littoral, the small states continued.

Further west, in the valley of the Nile, disorder continued, for four-odd centuries now after the fall of the new kingdom.

Far to the east, the state had begun in the valleys of the Chang Jiang and Huang He.

Other than that, those were all states on earth in 745. There were no states further east, south, north, or west.

Thus, in 745 Tiglath-pileser III ascended. He reigned 18 years. A great warrior himself, like the great warriors his predecessors, in 18 years he conquered the entire valley of the two rivers.

His record, like that of the great warriors his predecessors, too, is massive. And his inscriptions, like theirs, are chronicles, including annals.

Tiglath-pileser III resumed the annual campaign, he campaigned every year of his reign.

He subdued the lower valley. After a couple of campaigns, he reduced it to tribute.

He fought Urtu. After several campaigns, he reduced it to tribute as well.

He subdued the littoral, reducing all the small states there to tribute as well. This also demanded several campaigns. He reached Gaza (ins. I, 815/9), on the coast in the south beyond Judah. And keeping the littoral subdued demanded more campaigns.

In the east, he crossed the mountains and reduced the Medes to tribute (ins. I, 808/14). Keeping them reduced also demanded more campaigns.

And the lower valley demanded to be subdued again, and again, and after yet another campaign, in 734, Tiglath-pileser III installed himself prince of Babylon.

Thus:

Tiglath-pileser, the great prince, the true prince, the lord of the earth, the prince of Ashur, the prince of Babylon, the prince of Sumer and Akkad, the lord of the four quarters, the valiant, who destroys with the help of Ashur all his foes, who scatters them like a flood into nothing, the prince;

at the command of Ashur, Shamash, and Marduk, the great gods, he has brought under his sway the lands from the sea of the rising sun to the sea of the setting sun, from the horizon to the zenith he has established the princeship over them (ins. I, 787/804).

And Tiglath-pileser III has, in fact, brought them all under his sway. But establishing the princeship over them has remained difficult.

In all countries he conquered Tiglath-pileser III, like his predecessors:

I burned, razed, and destroyed (*passim*).

In all countries he conquered also, also like his predecessors:

I counted them among the people of Ashur;

and I set up my governor over them (*passim*).

But they will not be counted among the people of Ashur.

Adad-nirari, Shalmaneser, and Tukulti-Ninurta had burned, razed, and destroyed. And they had failed to establish the princship over them. After Tukulti-Ninurta the princship had fallen apart.

So Tiglath-pileser had more vigorously burned, razed, and destroyed. And he had begun to count them among the people of Ashur, and to set up his governors over them. But they will not be counted among the people of Ashur. After Tiglath-pileser the princship had fallen apart.

So Adad-nirari II, Ashur-nasirpal II, and Shalmaneser III had yet more vigorously burned, razed, and destroyed, and again counted them among the people of Ashur, and set up their governors over them. But they will not be counted among the people of Ashur. The princship had again fallen apart.

So once again Tiglath-pileser III burned, razed, and destroyed. Once again he counted them among the people of Ashur, and set up his governors over them. This time, however, before counting them among the people of Ashur, he began making them live in peace. He began resettling them.

Four times in his 1st reign year alone, Tiglath-pileser III reports:

and I built the city of Kar-Ashur, and brought people from the lands I had conquered, and settled them in it; and I counted them among the people of Ashur;

and I brought them within the borders of Ashur; and I counted them among the people of Ashur;

and I took them, and settled them, and made them live in peace; and I counted them among the people of Ashur;

and I built the city of Dur-Tukulti, and brought people from the lands I had conquered, and settled them in it; and I counted them among the people of Ashur (ins. I, 762/79).

Before counting them among the people of Ashur, and in order to count them among the people of Ashur, Tiglath-pileser III began making them live in peace. Resettling them. Mixing them.

And so he did in all his 18 reign years. These are some of the larger numbers he reports:

72 950 people with all their possessions (*id.*);

30 300 people (*id.*);

12 000 people with all their possessions (*id.*);

55 000 people with all their possessions (ins. 787/804);

30 000 people with all their possessions (*id.*);

40 500 people with all their possessions (*id.*);

65 000 people with all their possessions (*id.*);

154 000 people with all their possessions (ins. 805/7).

The total of these numbers is 459 750.

The smaller numbers are itemizations. For instance:

600 people of Amlate and 5 400 of Dir I settled in cities in the land of Unki;

. . . Kuteans, 1 200 Ilileans, and 6 208 Nakabeans I settled in cities on the coast;

588 Budeans, . . . , 352 Bileans, 554 Banateans,

380 people of the city of Nergal-ilu-ina-mati,

460 Sangileans, . . . , and 457 Kuteans I settled

in the land of Tuimme;

555 Kuteans I settled in the land of Tilkarme (ins. I, 762/79).

The population of the valley – the domain which Tiglath-pileser III brought under his sway – was some eight million. It can be concluded that he resettled not less than 10 %. Making them live in peace.

As he reports everywhere, he built cities for them, too.

He does not record a number for his army. One century-odd earlier Ashur-nasirpal II fielded 50 000. Tiglath-pileser III conquered the entire valley in 18 years. He resettled many hundreds of thousands, to make them live in peace. He built cities for them, too. It can be concluded that he fielded not less than 50 000.

Tiglath-pileser III is also the next step in the advance in the description of the surface of the earth. The descriptions of his campaigns are more detailed, he lists more localities, more explicitly in their spatial relations.

And his inscriptions are chronicles, including

annals.

Shalmaneser V reigned 5 years, 727 to 722.

He once again reduced the littoral.

He is:

Shalmaneser, the great prince, the lord of the earth, the prince of Ashur, the lord of the four quarters, the ruler of Babylon, the prince of Sumer and Akkad, the foremost scion of Ashur, the seed of princship (ins. I, 829/30).

Shalmaneser V is also the last prince in the Assyrian prince list. The list was thus compiled under him.

Sargon II reigned 17 years, 722 to 705.

The index refers to the fact that there is in the long series of the Assyrian princes, eleven and a half centuries before this Sargon, an earlier Sargon. That earlier Assyrian Sargon is not important. This later Assyrian Sargon is very important, nearly as important as the earliest, the Akkadian Sargon.

The record of Sargon II is very massive, once again more abundant than the record of any of his predecessors.

He also campaigned every year of his reign. Tiglath-pileser III had campaigned annually for all the 18 years of his reign. And even if Shalmaneser V did not campaign annually for all the 5 years of his reign, Sargon II did for all the 17 years of his reign. By the end of his reign the Assyrian princes had campaigned over the valley annually for more than 35 years.

Sargon II campaigned west, northwest, north, east, southeast, and south.

In the west, he reduced the principalities on the littoral for good. He allowed Judah to continue as a tributary. All other principalities north of Judah, including Tyre and Israel, he incorporated outright into the state of Assyria under governors.

In the north, he reduced Urartu, and also incorporated it outright into the state of Assyria under governors.

In the southeast, he reduced the lower valley, including Babylon, and also incorporated it outright into the state of Assyria under governors.

Thus, Sargon II brought the entire valley, from the Mediterranean in the west to the Zagros mountains in the east and from the Taurus mountains in the north to the Persian Gulf and the

desert in the south, firmly under the state of Assyria.

And Sargon II began breaking out of the valley.

In the east, across the mountains, Tiglath-pileser III had subdued the Medes. Sargon II continued campaigning across the mountains, and reducing the Medes.

In the southeast, east of the mouth of the two rivers, he campaigned repeatedly against Elam.

In the south, he campaigned repeatedly against the Arabs in the desert.

In the west, he reduced to tribute Cyprus, in the Mediterranean.

In the west as well, he campaigned repeatedly across the mountains, in Cilicia, in southern Asia Minor.

In the northwest, across the mountains, too, he campaigned repeatedly against Phrygia, in northern Asia Minor.

Sargon II has not left behind a number for his army either. But he campaigned as vigorously as Tiglath-pileser III and further afield. And he has also left behind many numbers for the people he resettled. The people he made live in peace. The largest is 90 580. He reports also:

in the 5th year of my reign, I selected from the people I took 50 chariots, 200 cavalrymen, and 300 infantrymen for my host;

in the 13th year of my reign, I selected 150 chariots, 1 500 cavalrymen, 20 000 bowmen, and 10 000 shield-bearers, gave them to my governor, and counted them . . . (ins. II, 4/51).

Sargon II fielded more than 50 000.

The annual campaigns had continued for more than 35 years.

Hence, the pacification of the valley has begun to succeed. For the first time in nine centuries.

Hence, also, the state has begun to expand beyond the valley. For the first time.

The valley had been pacified under the great Babylon, the state of Hammurabi and his 5 successors. But that state had fallen nine centuries earlier. Two and a half centuries of great disorder had followed. Then the Assyrian princes had begun once again the attempts to unify the valley, and again, and again. And as the attempts had continued, and failed to bring the valley firmly under one state, the task of unifying the

valley had become steadily more difficult, the task of pacifying it very much more difficult. Hordes of wild men had continued to raid the valley, and more hordes. Local chieftains had continued to assert themselves, and more local chieftains, and more. Small states had established themselves firmly.

Tiglath-pileser III conquered the valley. And resettled not less than 10 % of its population. Making them live in peace.

Sargon II subdued the valley. And the beginning of success in its pacification after more than 35 years of annual campaigns, by more than 50 000, too, is indicated clearly and distinctly.

In his inscriptions there is much less:

I burned, razed, and destroyed.

There is much more:

and I made them live in peace (*passim*).

So that:

I counted them among the people of Ashur;

and I set up my governor over them (*passim*).

Sargon II also built more cities for them throughout the valley.

The final edition of his annals is inscribed in the palace in the new city of his princship which he built, Dur-Sharrukin, the Fortress of Sargon. These are the legible numbers in this final edition of the annals for the people he resettled, to make them live in peace:

his 2nd year 9 033 people;

his 4th year 7 350 people;

his 7th year 4 200 people;

4 820 people;

2 530 people;

his 8th year 6 170 people;

his 12th year 16 490 people;

7 500 people;

12 062 people;

his 13th year 90 580 people (ins. II, 4/51).

From another inscription this can be added:

his 1st year 27 290 people (ins. II, 53/75).

The total of these numbers is 187 925.

The beginning of success in the pacification of the valley is indicated by the decrease of burning, razing, and destroying. It is indicated by the decrease in the numbers, compared with those of Tiglath-pileser III, for the resettled people. It is indicated by the disappearance of the conquered small states for good. It is indicated by the ap-

pointment of governors throughout the valley, many hundreds of them. It is indicated dramatically by the selection of troops for the prince's host from the people he took – chariots, cavalrymen, infantrymen, bowmen, shield-bearers, tens of thousands of them. And it is indicated most dramatically by the beginning of expansion of the state beyond the valley. The valley has become a base for campaigns further afield.

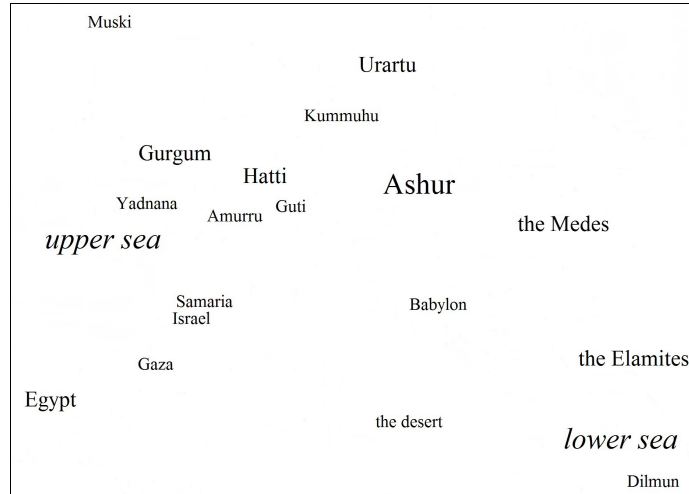
In the eleven centuries from its beginning through the great Babylon, the state had been very successful in gradually mixing a substantial part of humanity into one large tribe. One eleventh of humanity under the great Babylon. In the following nine centuries that success had been lost. That large tribe had split into small, and smaller, and hostile, tribes. At long last the Assyrian princes began reversing that. At long last they began succeeding again in mixing a substantial part of humanity into one large tribe. Whether, this time, they will be counted among the people of Ashur or not. Mixing that substantial part of humanity this time for good, too.

And the beginning of expansion of the state beyond the valley is still more important.

The greatest Sargon, the Akkadian, had conquered the entire valley, sixteen centuries earlier. The attempt to build the state in Hattusa, in Asia Minor, beyond the mountains, had not been too successful. The state had thus remained confined in the valley for sixteen centuries. In the east the Zagros rises along its entire length to peaks of 4.0 km, 4.4 km, 4.3 km, 4.1 km, 3.6 km, 3.4 km, 3.2 km. In the north the Taurus rises along its entire length to peaks of 3.8 km, 3.0 km, 3.9 km, 3.5 km. Sargon II began breaking decisively across the mountains in the east and in the north, both. And this for good, too. The domain brought under the state will not retreat again. The state will continue to expand beyond the mountains in the east and in the north, both.

Sargon II describes the state in several inscriptions. This is his most comprehensive description: Sargon, the great prince, the true prince, lord of the earth, prince of Ashur, ruler of Babylon, prince of Sumer and Akkad, lord of the four quarters, favorite of the great gods, entrusted by Ashur, Nabu, and Marduk with the princship over the earth;

I brought under my feet lands
 that had never been con-
 quered;
 I opened mountains that had
 never been traversed;
 I destroyed the Elamites;
 I destroyed the Medes;
 I destroyed Urartu;
 I made them all live in peace;
 I destroyed the princes of Hatti;
 I brought the entire land of
 Gurgum within the borders of
 Ashur;
 I conquered the lands to the bor-
 der of Egypt, which is next to
 Meluhha;
 I destroyed Samaria;
 the prince of Yadnana I drew out
 of the upper sea like a fish;
 I vanquished Midas, the prince of Muski;
 I defeated Egypt and took the city of Gaza as
 booty;
 when the prince of Babylon rose against the will
 of the gods, I conquered Babylon, divided its
 lands from one end to the other, and set up my
 governors over it;
 the prince of Dilmun, which is in the middle of
 the lower sea, heard of the might of Ashur and
 sent me his tribute;
 I brought under one rule the entire land of
 Amurru, Hatti, and Guti from Yadnana in the
 upper sea to Egypt to Muski to Kummuhu, the
 entire land of the Medes beyond the moun-
 tains, the entire land of Elam, the people of the
 desert, the entire land of Babylon north and
 south;
 I brought under one rule all lands from Israel on
 the upper sea to Dilmun in the lower sea;
 I brought them under the single rule of Ashur, I
 brought them within the borders of Ashur, I
 set up my governors over them;
 I imposed the princship on them, and they
 submitted to the princship (ins. II, 77/90).
 The theory is the same. I brought them under
 the single rule of Ashur. I brought them within
 the borders of Ashur. I imposed the princship on
 them.
 And against greater and continuing resistance
 the theory has once again begun being success-



fully implemented. I made them all live in peace.
 And they submitted to the princship.

Ashur, Nabu, and Marduk entrusted Sargon II
 with the princship over the earth.

Nabu is a son of Marduk, the scribe of the
 gods.

And entrusted with the princship over the
 earth, Sargon II also described the earth.

I brought under my feet lands that had never
 been conquered. I opened mountains that had
 never been traversed.

Sargon II did not conquer Egypt. Thus Me-
 luhha, which is next to Egypt, is the only locality
 in the general description of which it is not clear
 where it is. In inscriptions of his predecessors
 Meluhha seems to be somewhere on the far
 shores of the Persian Gulf. In his inscriptions it
 seems to be rather on the far shores of the Red
 Sea.

Of all other localities it is clear where exactly
 they are. – Gurgum, which I brought within the
 borders of Ashur, is Cilicia. Yadnana, whose
 prince I drew out of the upper sea like a fish, is
 Cyprus. Muski, whose prince Midas I van-
 quished, is Phrygia. – Moreover, the descriptions
 of his campaigns in his other inscriptions, as the
 prince advanced from one city to the next and the
 next, from one country to the next and the next,
 determine exactly the orientation of all localities
 in the general description.

And describing the state, Sargon II has, in fact,
 described also the earth. He has described the

countries in their spatial order.

He begins with the circuit of the earth. Counterclockwise – the Elamites – the Medes – Urartu – Hatti – Gurgum – Egypt. The circuit complete, he adds some detail. First in the west – Samaria – Yadanana in the upper sea – Muski – Gaza. Then in the east – Babylon – Dilmun in the middle of the lower sea. Then he overviews the earth. First the west again – the entire land of Amurru, Hatti, and Gutu from Yadanana in the upper sea to Egypt to Muski to Kummuhu. Then the east – the entire land of the Medes beyond the mountains, the entire land of Elam, the people of the desert, the entire land of Babylon. And he concludes with the most general overview, west to east again, all lands from Israel on the upper sea to Dilmun in the lower sea.

Sargon II is a major step of advance in the description of the surface of the earth.

He is the next step of the advance in history as well. His inscriptions are more detailed, more systematic, better chronicles.

Also:

I built the city of Dur-Sharrukin;

I made the circuit of its wall 16 283 cubits (*id.*).

More than 8 km. And:

I brought in it people from the four quarters, all of different tongues, from the mountains and from the valleys, and at the command of Ashur I settled them in the city, and I made them all speak the same tongue; I set scribes over them to teach them to fear the gods and the prince (*id.*).

And:

I built a park in it, and I planted in the park trees from every mountain (*id.*).

Sennacherib reigned 25 years, 705 to 680.

His record is also more abundant than the record of any of his predecessors.

Sennacherib reports fewer campaigns, not few, but fewer than Tiglath-pileser III or Sargon II. In the edition of his annals from 689, he reports 8 campaigns in the first 16 years of his reign.

Sennacherib did not expand the domain of the state. He consolidated it very firmly, however.

In the east, in his 2nd year, he campaigned across the mountains and subdued the Medes. After that the east remained subdued.

In the west, in his 3rd year, he campaigned

along the littoral. And:

I took 200 150 people (ins. II, 233/55).

It was the last massive resettlement of people, making them live in peace. After that the west as well remained subdued.

In the northwest, in his 9th year, he crushed a revolt in Cilicia (ins. II, 286/98).

After that the entire domain of the state – except the lower valley – remained subdued.

The lower valley, in the southeast, and Elam, further east, Sennacherib had to subdue again, and again, and again, and did subdue them.

He campaigned in the lower valley in his 1st year. And:

I came back to Ashur with 208 000 people (ins. II, 256/67).

It failed to make them live in peace. In his 5th year Sennacherib had to subdue the lower valley again and to campaign further in Elam. This time: I installed my eldest son Ashur-nadin-shumi prince of Babylon, I set him up over the entire land of Sumer and Akkad (*id.*).

Six years later his son was deposed. After several campaigns, in his 16th year, Sennacherib took Babylon:

and I razed Babylon; I shattered its gods to pieces; I slaughtered its people; and so that even the ground on which it stood be lost, I took it to the Euphrates, threw it in the river, and it was carried down to the sea; the people of Dilmun saw it (ins. II, 435/42).

The people of Dilmun, in the Persian Gulf, saw it.

After that the entire domain of the state remained subdued.

Sennacherib does not have a number for his army either. But there are the two numbers: I came back to Ashur with 208 000, and: I took 200 150. Once, during his campaigns in the lower valley and Elam, he reports also:

I slaughtered 150 000 (ins. II, 344/52).

There is also *Joshua*, *Judges*, *Samuel*, *Kings*, witnessing Sennacherib's campaign against Judah:

that night an angel of the lord struck down 185 000 in the Assyrian camp (*Kings*, II, 19).

Both the angel and the 185 000 *Joshua*, *Judges*, *Samuel*, *Kings* shares with *Isaiah* (37), and the prophet would be contemporary with the event and, being a prophet, perhaps also an eyewitness.

Either way, if Tiglath-pileser III fielded not less than 50 000, and Sargon II fielded more than 50 000, and by the time of Sennacherib the Assyrian princes had been building their army for 65 years, and developing the logistics to lead it from beyond the upper sea to beyond the lower sea, and again, and again, it can be concluded that Sennacherib fielded substantially more than 50 000.

Sennacherib rebuilt the old city of Nineveh, and made it the seat of princship:

the circuit of the old city of Nineveh was 9 300 cubits; I made its circuit 21 815 cubits (ins. II, 382/405).

The circuit of the old city was some 4.5 km. Sennacherib made it more than 10 km. Nineveh remained the seat of princship. And it became the greatest city. God himself notes: should I not care about Nineveh, that great city of more than 120 000 people, who do not know their right hand from their left, and of cattle without number besides (*Jonah*, 4)?

Sennacherib, too, continued the advance in the description of the surface of the earth, and in history.

He resumed work on the problem of time reckoning across centuries. He writes:

when Tiglath-pileser was the prince of Ashur, the prince of Babylon carried off to Babylon Adad and Shala, the gods of the city of Ekallatum; 418 years passed; and I brought them back to their city (ins. II, 331/43).

The dates are:

Tiglath-pileser	prince 1115-076,
Sennacherib	prince 705-680.

The problem is solved.

Sennacherib is:

Sennacherib, the great prince, the true prince, the mighty, the lord of the earth, the prince of Ashur, the lord of the four quarters, the shepherd, the favorite of the gods, the guardian of the right, the lover of justice, who aids the weak, whose deeds are pious, mighty warrior, first among all princes, fire consuming the disobedient, thunderbolt striking the evil, to whom Ashur, from the high mountain, gave no rival from the sea of the setting sun to the sea of the rising sun, and brought all peoples in submission to his feet (ins. II, 233/54).

Esarhaddon reigned 12 years, 680 to 668.

The 6 princes from Tiglath-pileser III to Ashurbanipal built the greatest state. And the decisive steps are 3, Tiglath-pileser III, Sargon II, and Esarhaddon. Tiglath-pileser III conquered the entire valley. The domain under the state became as great as it had ever been. Sargon II began campaigning beyond the valley. The domain under the state became greater than it had ever been. Esarhaddon campaigned substantially further. The domain under the state became substantially greater. Tiglath-pileser III also began making them live in peace. Under Sargon II the pacification of the entire domain began to succeed. Under Esarhaddon *pax Assyrica* flourished.

Once again the record of Esarhaddon is massive, once again more abundant than the record of any of his predecessors.

Esarhaddon, Esarhaddon reports, was a younger son of Sennacherib, but Sennacherib appointed him his successor, and his older brothers killed Sennacherib, Esarhaddon thus defeated his older brothers, and:

I entered Nineveh, the seat of princship, and I took my seat on the throne of my father (ins. II, 501/6).

Esarhaddon campaigned further than any of his predecessors.

In the northeast:

I destroyed the hordes of Manneans and Scythians, intractable savages (ins. 526/33).

This is how the Scythians enter the record. Esarhaddon has campaigned beyond lake Urmia, far beyond the Zagros mountains.

In the northwest:

Teushpa, the Cimmerian, a wild man whose land is far away, I cut down with all his men in the land of Hubushna (*id.*).

This is how the Cimmerians enter the record. Esarhaddon has campaigned in northern Asia Minor, far beyond the Taurus mountains.

In the west:

all princes from the middle of the sea prostrated themselves in my feet and brought me their tribute, from Yadanana, Javan, and as far as Nusisi (*id.*).

Yadanana is Cyprus. Javan is Ionia. This is how the Greeks enter the Assyrian record. Nusisi is

probably Knossos, on Crete. Esarhaddon has collected the tribute of the islands far into the Mediterranean.

And in the southwest Esarhaddon conquered Egypt.

Piyi, prince *c.* 729-08, unified Egypt. And after four and a half centuries of disorder, under Piyi, his successor Shabaka, and Shabaka's successor Taharqa, the state in the valley of the Nile began becoming stronger once again.

Sargon II fought Egypt south of Judah and took Gaza as booty. Sennacherib fought Egypt south of Judah (ins. II, 300/29). And Esarhaddon then reports:

when Ashur brought the four quarters under my rule, to steer them, and to destroy all foes, that land transgressed against Ashur;

the gods thus commanded me to march against it; and I took the most distant paths, across impassable mountains, across endless sands, to march against it;

Taharqa, prince of Egypt and Kush, I pursued for 15 days, I slaughtered the multitudes of his men; I defeated him five times; I inflicting on him a defeat from which there is no recovery; I besieged Memphis, the city of his princesship; I built tunnels under its walls; then I assaulted it, and I took it in one day; I destroyed it, I razed it, I burned it;

I carried off to Ashur his queen, his other wives, his heir, his other sons and daughters, his cattle, horses, and sheep, and all his other treasures;

I tore the root of Kush out of Egypt;

and I appointed over it my governors, commanders, overseers, and scribes (ins. II, 574/81).

This was in 674.

By 674 the state had developed in the valley of the Nile for twenty-three-odd centuries. It had developed in the valley of the two rivers for twenty centuries. Esarhaddon unified the two developments. For good, too.

By the end of his reign the Assyrian princes had been building their army for 77 years. Northeast to southwest, from lake Urmia to Memphis, it is 1 600 km along the great circle. Northwest to southeast, from northern Asia Minor to Elam, it is 1 600 km as well. The Assyrian princes had campaigned over this domain for nearly all of

those 77 years. They had subdued this domain, pacified it, brought it under their governors and scribes. They had resettled many hundreds of thousands. They had selected from those hundreds of thousands many tens of thousands for their army. That entire domain, under their governors and scribes, they had garrisoned. While continuing to expand the domain.

The Assyrian army under Esarhaddon was not less than 100 000.

Esarhaddon was as great a warrior as any of his predecessors.

Nevertheless, he is also the first Assyrian prince to report more building than campaigns. Less than one half of his record, and again, his record is more abundant than that of any of his predecessors, is the record of campaigns. More than one half is the record of building.

He built cities by the dozen. For instance:

I built from the foundation to the top the cities of Ashur-matsu-utir, Mannu-shanin-Ashur, Abit-Ashur-la-teni, Abit-sharri-la-teni, Mannu-lishishu, Kunush-la-kanshu, Linir-ai-imdi, . . . , . . . , Kashidsu-lilbur, Sabitsu-. . . , Lilbur-munih-Ashur, Dur-Ashur-ah-iddina, . . . , . . . -amat-shar-kishshati, Piluhma-matika-shallim, . . . -matsu-ihpi, Ashur-inar-garua, . . . -lurappish, Ashur-nirka-rappish (ins. II, 593/612).

20 cities in this instance.

And he rebuilt Babylon. In 689 Sennacherib razed Babylon. In 678 Esarhaddon rebuilt it:

at the command of Ashur, Shamash, and Marduk,

I summoned all my builders and all the people of Babylon;

in oil, honey, butter, and wine, I laid the foundation of the city; I carried the first stone on my own head;

I built it in brick, ivory, maple, boxwood, and mulberry;

I built the Esagil, the temple of the gods;

I built the inner walls of the city, and I built its outer walls with all their turrets;

I built the city great and magnificent;

I restored its gods to their temples, I adorned their shrines;

and all the people of Babylon who had been taken in servitude I gathered, I made them people of Babylon, and I counted them among my peo-

ple (ins. II, 641/6);
I restored to them all their goods; I told them to
plant, and to dig canals; I gave them a tablet to
witness their freedom;
and I established their tongue as the tongue of all
lands (ins. II, 659b-e).

Babylon became a great city with Hammurabi,
eleven centuries earlier. Through all its vicissi-
tudes after the fall of the great state of Babylon,
it remained an important city. And it became now
a great city again, next to Nineveh the second city
of the state of Assyria.

Under Hammurabi and his 5 successors Baby-
lon was the center of massive writing. Through
all its vicissitudes after their fall, whenever
writing revived, Babylon was its center. And it
became now the center of massive writing again.
Helped decisively by Esarhaddon: and I estab-
lished their tongue as the tongue of all lands.

Under Hammurabi and his 5 successors mathe-
matics flourished greatly in Babylon. Physics
began. Observation began. The Venus tablet of
Ammissaduqa is from that time. Through all its
subsequent vicissitudes, whenever mathematics,
or physics, or observation revived, very little as
they did, they did in Babylon. And they revived
now decisively. Observation, in particular, re-
vived now decisively.

Now, nine centuries after the Venus tablet of
Ammissaduqa, observation resumed, became
sustained, became accurate, reached dozens of the
heavenly bodies. Helped decisively by Esarhad-
don, too.

Above, in the course of the collection of the
problem of the earth, all early observations of the
heavenly bodies in the record have been col-
lected. They are of two kinds, accurate, which
Ptolemy collected, and cruder, which excavation
has recovered. And the following are all observa-
tions, accurate and cruder, after the Venus tablet
of Ammissaduqa through the time of these 6
Assyrian princes, through Ashurbanipal,
observation of lunar eclipses from 747 to 746,
observation of lunar eclipses from 721 to 720,
observation of lunar eclipses beginning in 703,
The plough, which records the morning risings
of three dozen stars, with a colophon in 687,
observation of Saturn from 647 to 633,
observation of lunar eclipses beginning in 647,

and *When Anu and Enlil*, which records more
stars, from the century before 627.

These are 7 predecessors of the philosophers.
1 predates the 6 Assyrian princes by a couple of
years. The other 6 are contemporary with the
Assyrian princes. 1 is from Ptolemy. The other 6
are from the palace of the Assyrian princes at
Nineveh.

These observations – with which observation
resumed, became sustained, became accurate,
reached dozens of the heavenly bodies – are an
immediate cause of the development of astron-
omy, more generally physics, and more generally
philosophy. And the cause of this cause is the
great state which the Assyrian princes built. As
the fact that the observations were made in their
palace attests. As the fact also indicates that the
princes conquered a very substantial portion of
the surface of the earth, described that portion in
some detail, and then the observation of the
heavenly bodies became sustained, accurate,
reached dozens of the heavenly bodies.

Esarhaddon himself reports:

in the 1st year of my reign, in the month of Si-
manu, the star of Marduk, which determines
the destiny of Akkad, drew near the sun,
became very bright and reddish, then reached
its station and remained in it (ins. II, 648/59).
In 680, in May, Jupiter drew near conjunction
with the sun, became very bright and reddish,
then became stationary before retrogradation. The
conqueror, the builder, Esarhaddon is an astron-
omer, too.

It is at this time as well that divination be-
comes prominent in the record. *When Anu and
Enlil* is a collection of 7 000 omens. There is
nothing remotely comparable earlier. And the
7 000 omens were collected in the palace of
Esarhaddon and Ashurbanipal.

Esarhaddon is the first prince, too, who does
everything that he does, campaign or build:
in a favorable month on an auspicious day (*pas-
sim*),
after the consultation of the appropriate omens.

Observation of the heavenly bodies and divi-
nation become prominent simultaneously. It can
be concluded that they are one another's cause
and effect. The princes observed the heavenly
bodies in order to divine. Or the other way

around, they divined in order to observe the heavenly bodies. Either way, that the two, observation of the heavenly bodies and divination, are substantially different, their substantially different development in the two descendants of the Assyrian princes, the prophets and the philosophers, shows. That the prophets are the descendants of the Assyrian princes, the prophets attest, as they prophesy nothing more than they do the destruction of Judah by the Assyrian princes. That the philosophers are the descendants of the Assyrian princes, the philosophers attest, as they collect – and Aristotle first reports collecting them, four and a half centuries before Ptolemy – the observations made in the palace of the Assyrian princes. And there is no observation of the heavenly bodies in the prophets, not one. There is no divination in the philosophers, not for some centuries after the beginning of philosophy.

Esarhaddon is:

Esarhaddon, the lord of the earth, the prince of Ashur, the son of Sennacherib, the lord of the earth, the prince of Ashur, the son of Sargon, the lord of the earth, the prince of Ashur.

Also:

Esarhaddon, the great prince, the lord of the earth, the prince of Ashur, the prince of Sumer and Akkad, the prince of Babylon, the prince of Egypt and Kush, the prince of princes.

He campaigned far beyond the mountains in the east and in the north. He conquered Egypt. He maintained an army of not less than 100 000. He built dozens of cities. – On one occasion: I called 22 princes of Hatti to bring materials for my palace in Nineveh (ins. II, 690). The 22 include the princes of Tyre, Judah, Moab, Gaza, Byblos, Cyprus. And they brought the materials. – He rebuilt Babylon. He established its tongue as the tongue of all lands. The observation of the heavenly bodies became sustained.

Each of these singly indicates, and all of them jointly indicate, the peace and prosperity of the state. *Pax Assyrica*.

And Esarhaddon's successor Ashurbanipal describes *pax Assyrica*. In one of his inscriptions Ashurbanipal describes his early years, before succeeding his father Esarhaddon. And this is how Ashurbanipal describes the state at that time, under Esarhaddon:

the wicked wishing war were subdued;
everyone was safe in his city and his home; no one took anything from his neighbor by force;
in the entire land the strong did no harm to the weak;
one traveled alone, all roads were safe; there were no robbers;
no one shed blood; no one molested anyone; the lands were at peace;
the four quarters were in perfect order, like the finest oil (ins. II, 986/90).

Esarhaddon also continued the advance in the description of the surface of the earth, and in history.

He also writes:

my ancestor Shalmaneser, the prince of Ashur, the son of Adad-nirari, the prince of Ashur, built the temple of Ashur; 586 years passed and the temple fell into ruin; I rebuilt it (ins. II, 702).

The dates are,

Shalmaneser	prince c. 1273-43,
Esarhaddon	prince 680-68.

The problem is solved conclusively.

Ashurbanipal reigned 41 years, 668 to 627.

He is:

Ashurbanipal, the great prince, the lord of the earth, the prince of Ashur, the lord of the four quarters, son of Esarhaddon, the lord of the earth, the prince of Ashur, son of Sennacherib, the lord of the earth, the prince of Ashur (ins. II, 922/8);

Ashurbanipal, the great prince, the true prince, the lord of the earth, the prince of Ashur, the lord of the four quarters, the prince of princes, the prince without rival from the upper sea to the lower sea, who made all princes from Tyre in the upper sea to Dilmun in the lower sea prostrate themselves before his feet, and pull the straps of his yoke (ins. II, 969/73).

Ashurbanipal is the culmination of the labors of the Assyrian princes of building the greatest state. Under him the domain under the state is at its greatest. And *pax Assyrica* is at its most successful.

Ashurbanipal's record as well is the culmination of the labors of the Assyrian princes of advancing history. It is once again more abundant than the record of any of his predecessors. And as

his domain was the greatest so his record unified events across his entire domain.

He reports nine campaigns.

The first two were in Egypt:

Taharqa, prince of Egypt and Kush, whom Esarhaddon, the prince of Ashur, my father, defeated and brought under his sway, forgot the power of Ashur, Ishtar, and the great gods; he slaughtered the princes and governors installed by my father and plundered all Egypt (ins. II, 765/840).

Esarhaddon had conquered Egypt down to Memphis. Ashurbanipal conquered it down to Thebes, and subdued it. He reports:

I destroyed Taharqa, the prince of Egypt and Kush, and death overtook him;

I had mercy for Necho; I gave him Sais, where my father had set him up as a prince;

Nabu-shezibanni, his son, I set up in Athribis, and showed him more favor even than my father (*id.*).

The second campaign was in 664. Nabu-shezibanni is Psamtik. And Psamtik remained prince of Egypt under Ashurbanipal. After 664 there was no commotion in Egypt.

The third campaign was along the littoral: the prince of Tyre disobeyed my command (*id.*). So Ashurbanipal displayed the power of Ashur on the littoral. There had been no commotion on the littoral since Sargon II, and there was none under Ashurbanipal.

It is in the course of this campaign that Ashurbanipal attests Lydia. He reports:

Gyges, prince of Lydia, a land beyond the sea, a distant land of which my fathers had never heard, kept sending messengers with lavish gifts to kiss my feet and beg for help against the Cimmerian hordes ravaging his land;

then he sent men to the prince of Egypt who had rebelled against me;

but then the Cimmerians descended on his land again, and again he sent messengers with gifts to kiss my feet and beg for help (*id.*).

Esarhaddon had destroyed the Cimmerians in northern Asia Minor. Lydia was in western Asia Minor, on the Aegean. Under Ashurbanipal Assyria had become the arbiter of all Asia Minor.

The fourth campaign was in the far northeast, beyond lake Urmia, against the Manneans (*id.*).

Esarhaddon had first campaigned there as well. The Medes, further south beyond the mountains, had been subdued by Sennacherib. And there was after that no commotion in the countries in the east beyond the mountains either.

The fifth, sixth, seventh, and eighth campaigns were in the southeast, in Babylon and in Elam.

Esarhaddon had appointed his younger son Ashurbanipal his successor (*id.*). At his accession, in 668, Ashurbanipal appointed his older brother Shamash-shuma-ukin prince of Babylon under himself. And at first, when Ashurbanipal implores Nabu:

may Nabu, the exalted lord, make my throne as firm as the mountains, my rule as unshakable as the heaven and the earth (ins. II, 975/7),

he adds:

may the days of Shamash-shuma-ukin, my brother, prince of Babylon, be long and prosperous (*id.*).

But then:

Shamash-shuma-ukin, my faithless brother, whom I set up prince of Babylon, to whom I gave chariots, horse, and foot, to whom I gave more cities, countries, and people than my father had ordered, plotted evil against me; he stirred Akkad, Chaldea, Aramu, and the sea lands, and brought also the prince of Elam, whom I had set up prince of Elam, all against me (ins. II, 765/840).

In the fifth and sixth campaigns Ashurbanipal defeated his faithless brother, and:

I restored the yoke of Ashur over the people of Akkad, Chaldea, Aramu, and the sea land; and I appointed my governors and overseers over them (*id.*).

In the seventh and eighth campaigns he reduced Elam:

I captured Susa, their great city, the abode of their gods;

I carried off all their treasures;

I selected bowmen and shield-bearers for my host;

and the rest of the people I divided like sheep among my cities under my governors (*id.*).

Ashurbanipal reduced Babylon in 648. Sennacherib had razed Babylon in 689. Other than the couple of years of Shamash-shuma-ukin's rebellion, there was no commotion in the lower valley

after 689. After the capture of Susa in 647 there was no commotion in Elam either.

The ninth campaign was in the south, against the Arabs in the desert (*id.*).

Sargon II had begun the attempts at expansion in the desert. There was never commotion there.

Thus, Ashurbanipal campaigned in 9 of his 41 years. In the other 32 he built.

6 of the campaigns were beyond the valley. The expansion of the state reached its greatest. Northwest to southeast, 1 700 km from central Asia Minor to Susa, northeast to southwest, 1 700 km from lake Urmia to Thebes.

The human population of the state was some ten million, one tenth of humanity.

In perfect order, like the finest oil.

As Ashurbanipal describes *pax Assyrica* under his predecessor, so it continued under him.

The wicked wishing war were subdued. Everyone was safe in his city and his home, no one took anything from his neighbor by force, in the entire land the strong did no harm to the weak. One traveled alone, all roads were safe, there were no robbers. No one shed blood, no one molested anyone, the lands were at peace.

The four quarters were in perfect order, like the finest oil.

Ashurbanipal as well continued the advance in the description of the surface of the earth, and in history.

And in the inscription in which he describes his early years, he describes also his education: Marduk, the lord of the gods, had given me a good ear and a good eye; Nabu, the scribe of the gods, had given me the wisdom to learn; Ninurta and Nergal had given me strength and vigor;

and I learned all secrets of the art of writing; I studied the heaven with the masters of divination;

I solved problems of division and multiplication; I learned to write Sumerian and Akkadian;

I read the record of all events since before the flood (ins. II, 986/90).

And after his accession Ashurbanipal collected the first library.

Ashurbanipal's library contains more than 30 000 tablets. Not less than 1 000 distinct compositions.

In a letter to an official in Borsippa, in the lower valley, the prince writes:

I have ordered the overseer of the temple and the governor to give you all tablets, they should withhold no tablet from you; and if you see a tablet which I have not mentioned, but belongs in my palace, take it as well and send it to me (*id.*).

Among the colophons in his library there is also this one:

I, Ashurbanipal, copied this tablet from texts from Ashur and Babylon, reviewed the copy, and confirmed it (*id.*).

Warriors, conquerors, builders, lords of the earth, lords of the four quarters, geographers, historians, astronomers, librarians, the Assyrian princes did build the greatest state.

cdxci

Assyria is one of the two most decisive steps in the development of the state.

The second is Rome. Rome in the eight centuries from the conquest of Veii in 396^{BC} to the end of the reign of Theodosius, prince 379-95^{AD}. And while all these eight centuries of the development of Rome are decisive, the most decisive are the not quite two and a half from the beginning of the second Punic war in 220^{BC} to the end of the reign of Augustus, prince 27^{BC}-14^{AD}.

Assyria is the first. Assyria in the seven and a half centuries from the beginning of the reign of Ashur-uballit, prince c. 1363-27, to the end of the reign of Ashurbanipal, prince 668-27. And, again, while all these seven and a half centuries of the development of Assyria are decisive, the most decisive is the one century-odd from the beginning of the reign of Tiglath-pileser III, prince 745-27, to the end of the reign of Ashurbanipal, prince 668-27.

In this one century-odd the Assyrian princes advanced the development of the state decisively, by accelerating it very greatly, and for good, in all the following ways.

Warfare.

The Assyrian princes developed an army of not less than 100 000. Counting from the first campaign of Tiglath-pileser III in 745 to the last campaign of Ashurbanipal in 645, they deployed their army in each of not less than 70 of those 101

years. Counting either from central Asia Minor to Susa or from lake Urmia to Thebes, they deployed their army across 1 700 km. On the three counts jointly – size of their army, capability of deploying it continuously, and capability of deploying it far afield – the advance over earlier forces is by at least an order of magnitude. Also, the campaigns of the Assyrian princes, like all campaigns earlier and all campaigns later, maintained themselves by plunder. But not just plunder. All three – size, continuous deployment, deployment far afield – indicate major development of logistics. And beginning not later than the reign of Sennacherib, with the increasing peace and prosperity of the state, the army can have been maintained only by administration. And in this way, in the development of logistics, the advance over earlier forces is yet greater.

The state is power. First and foremost armed. And with the Assyrian princes the power is very much greater than it has ever been.

Hence, because of their labors, building on their labors – learning from them – the great kings will advance warfare much further, Sparta will advance it much further, Athens will advance it much further, Epaminondas will discover tactics, the Macedonian princes will advance warfare very much further, Hannibal will discover strategy, the Roman consuls will advance warfare very much further.

Warfare does not begin with Assyria, at this time. Great warfare, however, and greater, and greater, begins with Assyria, at this time.

Expansion.

Tiglath-pileser III conquered the entire valley. Sargon II broke out of the valley. Esarhaddon expanded the state further. Ashurbanipal expanded it further.

Central Asia Minor to lake Urmia to Susa to Thebes, their state was the largest ever, not less than twice larger than the largest earlier state. It was the state of one tenth of humanity.

The state is power. Over countries and people. And in this way as well with the Assyrian princes the power is very much greater than it has ever been.

Hence, again, because of their labors, building on their labors – learning from them – the great kings will expand the state very much further,

Sparta will expand, Athens will expand, the Macedonian princes will expand the state very much further, Carthage will expand, the Roman consuls will expand the state very much further.

Expansion does not begin with Assyria, at this time, either. Again, however, great expansion, and greater, and greater, begins with Assyria, at this time.

Unity.

At its greatest, under Ashurbanipal, Assyria was the one and only one state on earth. Very nearly.

Far to the east, the state had appeared in the valleys of the Chang Jiang and Huang He. This side of the valleys of the Chang Jiang and Huang He, in 664, when Ashurbanipal subdued Egypt for the second time, there were but 3 states outside Ashurbanipal's domain. In western Asia Minor there was Lydia under Gyges, sending messengers to Ashurbanipal to kiss his feet and ask for help. Further west, in the Peloponnese, Sparta and Argos had just emerged from obscurity. All 3 were very small, all 3 just becoming states.

To build the one and only one state on earth the Assyrian princes had begun trying seven centuries before Ashurbanipal. They had not relented for seven centuries. They had continued trying, and again, and again, coming close to success three times before succeeding this fourth time.

Adad-nirari, Shalmaneser, and Tukulti-Ninurta had conquered the entire valley. Tiglath-pileser had conquered nearly the entire valley. Adad-nirari II, Ashur-nasirpal II, and Shalmaneser III had conquered the entire valley.

And as those earlier three times, so this fourth time the Assyrian princes had to defeat all foes of the one and only one state. And this fourth time they defeated them.

They brought all other states under the one and only one state. They destroyed Urartu. They destroyed the states on the Mediterranean littoral. They reduced the lower valley, preventing all attempts to restore an independent state there. And they conquered Egypt.

At first, all those were external foes of the state. Then, once brought under the one and only one state, they became its internal foes.

There were also external foes who remained external foes – as the state advanced, and they retreated – hordes of wild men in the east, in the north, in the west, and in the south.

And the latter, the hordes, the princes defeated by never relenting. Tiglath-pileser III pursued them, Sargon II pursued them, Sennacherib pursued them, Esarhaddon pursued them, Ashurbanipal pursued them.

And the former, the states, the princes defeated by never relenting. – Urartu and the smaller states on the littoral were the minor difficulty. Tiglath-pileser III reduced them, Shalmaneser V reduced them, Sargon II reduced them, and then they remained reduced. – The lower valley was a major difficulty. Tiglath-pileser III reduced it, then had to reduce it again, and again. He installed himself prince of Babylon. Sargon II had to reduce it again, and again. He installed himself prince of Babylon. Sennacherib had to reduce it again, and again. He installed his son prince of Babylon. Then he had to reduce it yet again, and this time to raze Babylon. Esarhaddon rebuilt Babylon. Ashurbanipal installed his brother prince of Babylon. Then he had to reduce it again. And reduced it. – Egypt Esarhaddon reduced. Ashurbanipal had to reduce it again, and again. And reduced it.

The state is one and only one.

The prince is the lord of the earth. He destroys all foes. He brings under his sway the lands from the sea of the rising sun to the sea of the setting sun. From the horizon to the zenith he establishes the princship over them.

He brings all lands under the single rule of the state. He brings them within the borders of the state. He imposes the princship on them. And they submit to the princship.

He makes them all live in peace. He makes them all speak the same tongue. He establishes one tongue as the tongue of all lands.

He is entrusted with the princship over the earth.

The theory is not new. With the Assyrian princes, however, the theory is substantially more explicitly formulated.

The successful implementation of the theory is not new either.

In the other valley, it had been successfully

implemented by the old kingdom, more successfully by the middle kingdom, more successfully by the new kingdom.

In this valley, it had been very successfully implemented by Akkad, still more successfully by Ur, still more successfully by Babylon.

Again, however, the success of the Assyrian princes in the implementation of the theory is very much greater than it has ever been.

They have not relented for seven and a half centuries.

And when successful, they have brought not only counties and peoples under the one and only one state. They have brought states under the one and only one state, and firmly established states. Against great resistance from Urartu. Against great resistance from the small, but many, states on the littoral. Against very great resistance in the lower valley. Against very great resistance in Egypt.

With the Assyrian princes the state is for the first time, in fact, an empire. It is the one state of all former states. It is the state making them all live in peace. It is the state making them all speak the same tongue. It is the state establishing one tongue as the tongue of all lands.

The state is power. Unitary power. And with the Assyrian princes the state is for the first time unambiguously – and deliberately – a unifying power as well.

Hence, once again, because of their labors, building on their labors – learning from them – the great kings will build a greater empire, Athens will build the first maritime empire, Macedon will build a greater empire, Carthage will build an empire, Rome will build a greater empire.

The state becomes an empire, and a greater empire, and greater, with Assyria, at this time.

Permanence.

After Ashurbanipal Assyria declined catastrophically. In 612 the Babylonian prince Nabopolassar and the Mede prince Cyaxares sacked Nineveh, and this was the end of Assyria.

The immediate causes are two.

Ashurbanipal was succeeded by feeble princes.

And Babylon and Media rose powerfully. Babylon, reduced continuously by the Assyrian princes for more than one century, rose. And the Medes, one of the hordes beyond the mountains

in the east reduced continuously by the Assyrian princes, rose.

To rise, both learned from the Assyrian princes. Before Nabopolassar there had not been a state of any authority in Babylon for ten centuries. Before Cyaxares there had never been a state beyond the mountains in the east.

In the wake of Assyria, Babylon and Media rose, and expanded, and Egypt and Lydia rose, and expanded. Then Cyrus and Cambyses conquered all four.

There was no disorder in the wake of Assyria. The domain which Assyria had brought under the state remained the domain of the state. In particular, most of the domain which Assyria had brought under the state remained under Babylon, the rest of it under Media.

In general, Assyria divides the development of the state into two.

Before – for two millennia – times of states and order keep alternating with times of no states and disorder. In the valley of the Nile, the old kingdom disappears in disorder, the middle kingdom disappears in disorder, the new kingdom disappears in disorder. In the valley of the two rivers, Akkad disappears in disorder, Babylon disappears in great and continuous disorder. In Asia Minor, the Hittite state appears, disappears, reappears, disappears.

Beginning with Assyria – for three millennia now – there have been no times of no states and disorder. The state has acquired permanence.

Assyria rises, declines, rises, declines, rises, declines. But it does not disappear. For six centuries. Then it rises very greatly. And all times since have been of states and order. The state has retreated from the domain it has brought under itself, now and again, here and there. But it has never retreated altogether. And it has continued, steadily, irreversibly, to bring all human populations on earth under itself.

The state is power. A fragile power. It becomes firmly established, and more firmly, and more, with Assyria, at this time.

Custom.

The Assyrian princes did not advance the law. There was much too much preparatory work to do.

The most important development in religion

began under them, in their tributary Judah. And they are the immediate cause of this development.

Most decisively, however, they transformed custom.

In order to count them among the people of Ashur, Tiglath-pileser III resettled not less than 10 % of the human population of the domain he conquered. It can confidently be presumed that one and all of those not less than 10 % disapproved, one and all strenuously.

Either way, four generations on, under Ashurbanipal, the descendants of those not less than 10 % were the one and only one people of Ashur. Very much more likely to live in peace, and speak the same tongue, too, than their ancestors. For this very reason. They had been mixed. Out of all the small and smaller tribes of their ancestors they had been made to live in peace, and speak the same tongue, too, into the one and only one very much larger tribe of the people of Ashur.

Sargon II resettled not less than 5 %.

And Sennacherib resettled not less than 5 %. After that the need for resettlement arose only incidentally. As the Elamites, for instance, Ashurbanipal had to divide like sheep among his cities under his governors. There was no need for resettlement, because under Esarhaddon and Ashurbanipal the descendants of the peoples resettled by their predecessors had become – very much more than their ancestors had ever been – one large tribe. And thus very much more likely to practice the virtues which must be practiced with respect to that one large tribe – ten million, one tenth of humanity – rather than with respect just to the small and smaller tribes of their ancestors.

Hence – yet again learning from them – the great kings will mix many more. Alexander will mix many more. Rome will mix very many more.

The mixing of peoples does not begin with Assyria, at this time, either. Again, however, the resolute – and deliberate – mixing of peoples begins with Assyria, at this time.

In these ways the Assyrian princes advanced the development of the state decisively.

The advance in warfare and in the building of the state are a great advance also in the acquisition of knowledge.

And the Assyrian princes advanced the acqui-

sition of knowledge greatly in the following ways, too.

The description of the surface of the earth.

In one of his inscriptions Tiglath-pileser III records 149 localities, not counting those, some dozens of them, whose names are lost in lacunae. In his other inscriptions he records more. Sargon II records more. Sennacherib records more. Esarhaddon records more. Ashurbanipal records more.

The spatial relations of the localities are steadily more explicit.

And above, to the plot extracted from Sargon II's general description of the state are added the features on the surface of the earth discovered by his successors at the limits of the known earth. Counterclockwise. Scythians, intractable savages. Cimmerians, wild men whose land is far away. Lydia, a land beyond the sea, a distant land of which my fathers had never heard. Javan, in the middle of the sea, whose princes prostrated themselves in my feet. Kush, whose prince – the prince of Egypt and Kush – I set up as prince.

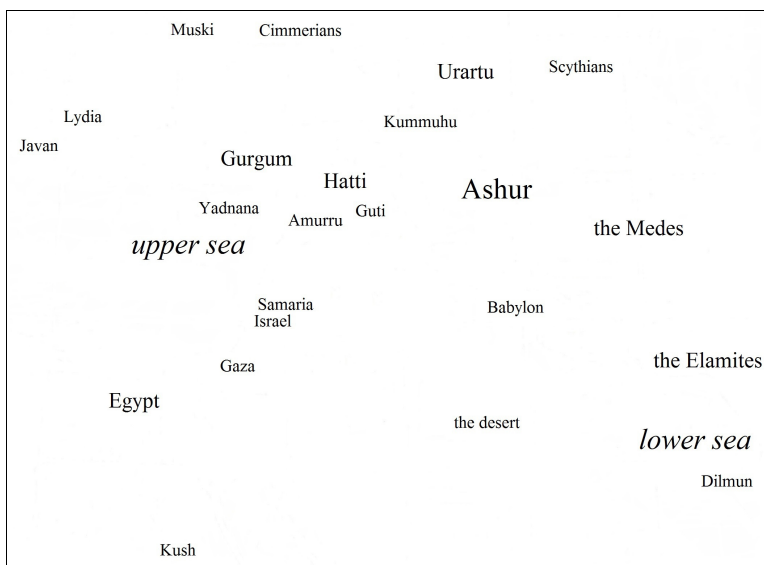
On all three counts, number of recorded localities, their spatial relations, and pressing hard against the limits of the known earth, the description of the surface of the earth is on the verge of becoming systematic – and deliberate – investigation. Becoming geography.

History.

History has been systematic – and deliberate – investigation since the Sumerian prince list.

And the Assyrian princes advanced history very greatly.

Their inscriptions become chronicles – describing events in detail, systematically, generalizing over them – with Adad-nirari, prince c. 1305-273. They become annals – year by year – with Tiglath-pileser, prince 1116-076. They become true annals – counting the years explicitly



– with Adad-nirari II, prince 912-891. By the time of Ashurbanipal, this is six and a half centuries' worth of chronicles, four and a half centuries' worth of annals, two and a half centuries' worth of true annals.

The princes begin laboring on the problem of time reckoning across centuries with Adad-nirari as well. And when Esarhaddon counts: 586 years have passed since my ancestor Shalmaneser, the son of Adad-nirari, built the temple of Ashur, 586 years have in fact passed.

The Assyrian prince list was compiled under Shalmaneser V. From Ashurbanipal back to the first prince who lived in a tent the list attests a series of 114 princes. Back to the first prince who has left his inscriptions behind – Shallim-ahhe, thirteen and a half-odd centuries before Ashurbanipal – the list attests a series of 83 princes. Back to Ashur-bel-nisheshu – seven and a half centuries before Ashurbanipal – the list attests the series of 45 princes who built the greatest state. All chronology rests on the Assyrian prince list.

The history of the seven and a half centuries from Ashur-uballit through Ashurbanipal is substantially and essentially the record of the Assyrian princes. The history of Assyria is their record exclusively. The history of Urartu in its entirety is inseparable from their record. The history of Babylon in these centuries is insepara-

ble from their record. The history of Israel and Judah in its entirety is – for all the millennia-long efforts to separate it – inseparable from their record. The history of Egypt toward the end of these centuries is inseparable from their record. The Medes emerge from obscurity in their record. Lydia emerges from obscurity in their record.

The Assyrian princes advanced history very greatly. And in this as well the advance culminates in Tiglath-pileser III, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal.

Observation.

Under these princes observation becomes sustained, becomes accurate, reaches dozens of the heavenly bodies.

Assyria, at this time, is not the first state in space and in time. Everything is in space and in time. It is not the first state which does not continue in altogether indefinite space and indefinite time either. Assyria, however, at this time, is the first state which continues in steadily more definite space and definite time, and steadily more deliberately determined definite space and definite time.

Under these princes writing is at its most massive. The princes themselves are greater writers than any of their predecessors. And their writing attests more clearly and distinctly the striving which forces us to advance from the thought and the sense to the reference and the true, and very much more of the reference and the true.

The advance in the development of the state is a principal cause of the acquisition of knowledge. In this case, as in all others, the effect is proportionate to the cause. And Assyria, at this time, is a very powerful cause.

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The particulars indicate 10 other states in the one century-odd from Tiglath-pileser III to Ashurbanipal.

4 are states which the Assyrian princes brought under their state. And this affected them differently. 2 of the 4, Urartu and Israel, disappeared. In 1 of the 4, Judah, the building of the first church in place of the ruined state began. 1 of the 4, Egypt, began reasserting itself toward the end of this time, to become, after this time, after the

fall of Assyria, a powerful state, as it had not been for many centuries.

With the other 6, later in this time, the attempts to build the state beyond the valleys of the two rivers and of the Nile, in the west, began at long last to succeed. At this time all 6 are very small. And 3 of the 6, Phrygia, Argos, and Locri, will turn out to be abortive attempts. But the other 3, Lydia, Corinth, and Sparta, will turn out, later on, after this time, to be successful attempts, 1 of them, Sparta, spectacularly successful.

cdxciii

Urartu.

At this time the particulars are 2,

Sarduri II prince *c.* 740,

Rusa prince *c.* 720.

In the couple of generations before Tiglath-pileser III, under Menua and Argishti, Urartu had risen to dominate the country north of Ashur.

Tiglath-pileser III defeated repeatedly Argishti's successor Sarduri II.

Sargon II defeated repeatedly his successor Rusa, and in his 8th year, in 714, completed the destruction of Urartu:

I brought Urartu within the borders of Ashur, I set up my governor over it; the might of Ashur overwhelmed Rusa, the prince of Urartu, and with his own dagger he stabbed himself through the heart, like a pig (ins. II, 4/51).

And this was the end of the state of Urartu. The successors of Sargon II – Esarhaddon (ins. II, 593/612), Ashurbanipal (ins. II, 842/73) – note occasionally a prince of Urartu, as they note scores of other princes under themselves. After the fall of Assyria Nabopolassar conquered Urartu (chronicle 4). After that even the memory of Urartu disappears from the record for two and a half millennia, until excavation.

Israel.

At this time the particulars are 2,

Pekah prince *c.* 739-29,

Hoshea prince *c.* 729-1.

The small states on the littoral, and Israel, in particular, had also recovered in the couple of generations before Tiglath-pileser III.

Tiglath-pileser III reduced Israel to tribute.

Shalmaneser V began its final destruction.

Sargon II in his 1st year, in 721, completed it: I conquered Samaria, and I took 27 290 of its people;
I set up my governor over it (ins. II, 53/75).

This was the end of the state of Israel. The cause was the same, in this case as in that of Urartu, the Assyrian princes.

In this case, however, unlike that of Urartu, some two centuries after the fact, *Joshua*, *Judges*, *Samuel*, *Kings* found another cause. It explains: this happened because the Israelites sinned against the lord their god;

they worshiped the gods of other peoples; they set up shrines and made sacrifices and offerings abhorrent to the lord; they followed the ways of other peoples;

the lord warned them by every prophet and every seer;

but they would not listen, they kept doing what was displeasing to the lord and vexing him; so he was angry at them, and he banished them from his presence;

the Israelites were carried away to Assyria; and the king of Assyria brought people from Babylon, Kutha, Avva, Hamath, and Sepharvaim and settled them in Samaria in place of the Israelites (*Kings*, II, 17).

Finding this other cause explains also why the memory of Israel, also unlike that of Urartu, does not disappear from the record.

Judah.

At this time the princes are 5,

Ahaz prince c. 738-26,

Hezekiah prince 726-697,

Manasseh prince 697-42,

Amon prince 642-0,

Josiah prince 640-09.

Judah as well had recovered in the couple of generations before Tiglath-pileser III. But not as much as its neighbors. As the Assyrian princes had left them to themselves, the small states on the littoral had resumed smiting one another, and Judah had had the worse of it from its neighbors.

Tiglath-pileser III reduced Judah to tribute, as he did its neighbors.

And Judah remained a tributary of his successors, a tiny part of their domain, and steadily deeper inside it, as they brought Egypt as well within their domain.

Had it not been for the development of Judaism, Judah would have been very not important, the princes of Judah would have been one and all very not important.

As it is, Judaism is very important.

Ahaz is important because he is the first prince of Judah attested independently of the Hebrew holy writings. Tiglath-pileser III reports:

I received the tribute of Ahaz of Judah (ins. I, 787/804).

All witnesses can be divided into two kinds. The lord and witnesses for the lord, on one side. All other witnesses, on the other side.

And the former, the lord and witnesses for the lord, witness Judah long before Ahaz. Judaism they witness very long before Judah.

The latter, all other witnesses, do not witness Judah before Ahaz. Judaism they do not witness very long after Judah.

This dichotomy cannot not inform the problem of how and why Judah begins fundamentally. And as Judaism is very much more important than Judah, this dichotomy cannot not inform the problem of how and why Judaism begins that much more fundamentally.

Hezekiah is attested independently as well. Sennacherib reports:

Hezekiah did not submit to my yoke; I took 200 150 people from his cities; I shut him in Jerusalem like a bird in a cage; and he gave me 30 talents of gold and 800 talents of silver; he gave me gems, antimony, and ivory; he gave me his daughters, his wives, and his musicians (ins. II, 232/54).

Josiah is not attested independently.

And if Ahaz is important, even if he did what was displeasing to the lord, Hezekiah and Josiah are important, because they did what was pleasing to the lord. Hezekiah and Josiah are important because it is under them, and with their labors, that Judaism begins.

But the princes are not nearly as important in this, the beginning and development of Judaism, as the writings which began being produced at this time, continued to be produced in the following centuries, and became at length the Hebrew holy writings.

Judaism cannot be investigated, if these, the Hebrew holy writings, are not sorted out first.

More generally, Judaism, the first church, is the most important development in religion. And this, how and why Judaism is a part of the development of religion – as distinct from having descended from heaven – cannot be investigated, if the Hebrew holy writings are not sorted out first. Most particularly, if the development of the Hebrew holy writings – and it is a development over seven centuries – is not sorted out first.

Also, the Hebrew holy writings are an important step, and not an advance, in the development of history.

Above, the Hebrew holy writings have been sorted out several times in relation to other problems.

Here, in order to continue the collection of the development of the state – as it includes the development of the law, religion, and custom – and of history, and in their dependance on one another, the beginning of Judaism has to be collected. Below, the continuing development of Judaism will have to be collected.

And in order to do so, first, here, the Hebrew holy writings have to be sorted out systematically.

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The problem is of when, and how, the Hebrew holy writings were authored.

The magnitude of the problem Josephus first indicates. The scope of the problem the wise men who set down the talmud, the amoraim, first indicate. Spinoza formulated the problem explicitly, and solved it in all its essential parts conclusively. His solution was corroborated after him, detail was added to it, and Wellhausen added the last substantial detail. After that the problem is solved. When, and how, the Hebrew holy writings were authored is clear and distinct.

The dates – *anno domini*, as in the meantime the lord had sent forth his only begotten son – are,

37 - 98	Josephus,
306	talmud,
1632 - 1677	Spinoza,
1844 - 1918	Wellhausen.

Josephus.

Josephus is in the first Christian century. *Anno domini*. But the centuries would not become

decidedly Christian for two and a half centuries after Josephus. Josephus is also in the thirty-ninth Jewish century, the thirty-ninth century from the creation of the world. *Anno mundi*. When exactly the world was created would be computed for the first time a couple of generations after Josephus, by ben Halafta. The centuries would never become decidedly Jewish, except for the Jews. Josephus is also in the ninth Roman century. *Ab urbe condita*. And decidedly Roman the centuries had been for some time by that time.

Rome had conquered the domain from the Atlantic to the Euphrates. The eastern part of this domain, including Judah, or Judea, had after the fall of Assyria been for a couple of generations under Babylon, then for a couple of centuries under the great kings, then under Alexander, then for a couple of centuries under Alexander's successors, then for a couple of centuries, by the time of Josephus, under Rome.

Judah, or Judea, had remained throughout a tiny, and sometimes unruly, part of a powerful state. It had broken out into open revolt, led by Judah Maccabee, in 168-0^{BC}.

It broke out into open revolt again in 66-70^{AD}. Josephus, a priest of the temple, was a commander in this revolt.

This revolt ended with the destruction of the temple.

Josephus ended up in Rome, a Roman citizen, writing in Greek.

He wrote *The Jewish war*, in 7 books, the *Jewish antiquities*, in 20 books, and *Against Apion, on the antiquity of the Jews*, in 2 books.

The Jewish war is the record of events since the revolt of Judah Maccabee.

The Jewish antiquities is the record of events since the creation of the world. Josephus follows closely: our books (*passim*). Our books are the books which had become by this time the holy writings of the Jews. And Josephus is not the first to write on these books. But he is the first to write on these books in their relation to other books.

Against Apion is a defense of the results obtained in the *Jewish antiquities*. Doubt had arisen whether our books are truly trustworthy, and whether they contain the record of all time. Josephus thus proves that: our books are truly trustworthy (I, 8), and: our truly trustworthy

books contain the record of all time (*id.*).

The main result of Josephus's examination of the relation of our books to other books is that our books are superior to all other books. Philosophy is the foundation, and our books are superior in this. On philosophy the law and history stand. And in the law our books are vastly superior. In history they are not just vastly superior, they are unique, they alone are truly trustworthy, and they alone contain the record of all time.

Josephus writes in the *Jewish antiquities*: some may wonder why in my book, in which I propose to write about laws and about what happened, there is so much physics; it is because Moses, our lawgiver, deemed it necessary for one who will live right and will give laws to others first to study the nature of god; and then he taught men that god is the father and lord of all things and gives happiness to those who follow him and punishes severely those who stray from the path of virtue (pr.4); this is highly philosophical (*id.*); and those who follow Moses in his reasons will see for themselves that nothing in this doctrine is incongruous with the majesty of god and his love for men, and indeed with the nature of the world (*id.*).

Philosophy had developed for six and a half centuries by Josephus's time. It had been at first physics. Then it had become also ethics. Then it had settled in the schools. Physics had continued to advance outside the schools. The schools had settled into doing nothing but ethics, teaching one how to live. The Academic way of life, the Peripatetic way of life, the Epicurean way of life, the Stoic way of life. Thus, there is much physics in Josephus's book. It is not informed by physics, that of Aristotle, or Theophrastus, or Archimedes, or Eratosthenes, or Hipparchus. Moses, our lawgiver, studied the nature of god. Then he taught men that god is the father and lord of all things. And those who follow him in his reasons will see for themselves that nothing in this doctrine is incongruous with the nature of the world. Thus physics. As to ethics, it follows, the father and lord of all things gives happiness to those who follow him and punishes severely those who stray from the path of virtue. Happiness the

philosophers at the schools had also promised amply, but they had neglected the severe punishment.

Philosophy is the foundation. The nature of the world and hence the path of virtue. On the foundation the law and history stand.

Josephus writes:
to persuade men to follow the laws, other lawgivers told them fables;
our lawgiver, after he proved that god possesses the greatest virtue, taught that men ought to strive to be part of it, and those who did not believe this ought to be severely punished (*id.*).

Jurisprudence had been flourishing for one and a half centuries by this time. But Josephus has no more use for the jurists, in order to examine the law, than he has for the physicists, in order to examine the nature of the world.

Our lawgiver studied the nature of god, god is the father and lord of all things, this doctrine is not incongruous with the nature of the world.

And where the law is concerned, our lawgiver proved that god possesses the greatest virtue. Other lawgivers told fables. In particular, they greatly advanced jurisprudence. Also, our lawgiver taught that those as well who did not believe that god possesses the greatest virtue ought to be severely punished. The jurists as well had neglected the severe punishment.

Our lawgiver proved. Other lawgivers told fables. And the same dichotomy goes through history. Our books are truly trustworthy. The historians are liars.

Josephus writes:
I exhort my readers to think hard about god and to examine carefully whether our lawgiver has done his nature justice, and thus decide whether he has told fables, as others have; for he lived 2 000 years ago, and at so remote a time he could have told many lies (pr.3).

He could have told many lies. Whether he did should be decided by thinking hard about god and examining carefully whether our lawgiver has done his nature justice. That others have told many lies needs no examination.

And when doubt in that dichotomy arose, in *Against Apion* Josephus explained why the historians are liars, provided a list of the principal

liars, and explained also why our books, unlike theirs, are truly trustworthy. He writes:

anyone can see that, when they began writing, the historians knew nothing and invented themselves their histories; they refute one another; they give contradictory accounts of the same thing;

Ephorus exposes the lies of Hellanicus;
 Timaeus exposes the lies of Ephorus;
 later writers expose the lies of Timaeus;
 everyone exposes the lies of Herodotus;
 even Thucydides, who is said to have written the most exact history of his times, is accused of lies (I, 3).

As to our books:

there are no discrepancies in our books because our books were not open to everyone to write; on the contrary, this privilege was reserved for the prophets; and the prophets received the knowledge of the remotest antiquity from god, while the events of their own times they committed to writing as the events occurred (7).

This is why our books are truly trustworthy. They were not open to everyone to write. This privilege was reserved for the prophets. The prophets received the knowledge of the remotest antiquity from god. The events of their own times they committed to writing as those occurred.

And Josephus then enumerates our books. It is the oldest enumeration of the Hebrew holy writings. He continues:

so, we do not have a myriad books contradicting one another; our truly trustworthy books are but 22, containing the record of all time;

5 are the books of Moses in which are recorded the laws and the events from the creation of man to the death of our lawgiver, a period just short of 3 000 years;

13 are the books of the prophets who followed Moses and wrote the events of their times from the death of Moses to the time of Artaxerxes;

the remaining 4 books contain hymns to god and precepts for men's conduct (8).

These are our 22 truly trustworthy books. Josephus adds:

the events from the time of Artaxerxes to our own time are also written down, but these records are not as trustworthy because the succession

of the prophets is confused (*id.*).

Artaxerxes was the great king 465-24. And the records from the time of Artaxerxes to our own time are not as trustworthy. But the records before the time of Artaxerxes back to the creation of man are truly trustworthy.

Josephus concludes:

and ages have passed but no one has dared to add or remove even one letter in our holy scriptures; and it is natural for every Jew, from the day he is born, to look on them as the teachings of god, to abide by them, and gladly to die for them if need be (*id.*).

Josephus, then, was himself a prophet of great inspiration. He foretold Vespasian's elevation to the purple, and thus became from a prisoner of the Romans their friend. Much more consequentially, he saw how the Hebrew holy writings will become – and at the hands of Christians much more than at the hands of Jews – philosophy better than philosophy, law better than the law, and history better than history.

The nature of god is studied, then men are taught that god is the father and lord of all things. Nothing in this doctrine is incongruous with the nature of the world. This is physics. Ethics follows. The father and lord of all things gives happiness to those who follow him and punishes severely those who stray from the path of virtue. The law also follows. God possesses the greatest virtue, men are taught to strive to be part of it, and those who do not believe this ought to be severely punished. And history as well follows. Examining carefully how Moses has done god's nature justice shows that Moses, although he could have told many lies, did not. The holy writings are thus truly trustworthy. The privilege to write them was reserved for the prophets, who received the knowledge of the remotest antiquity from god. The events of their own times they committed to writing as those occurred. And ages have passed but no one has dared to add or remove even one letter in the holy writings. And it is natural to look on them as the teachings of god, to abide by them, and gladly to die for them if need be.

At the time of Josephus these were still prophetic propositions. The advance of physics – the not scriptural kind – continued, culminating two

generations after Josephus in Ptolemy. Jurisprudence continued to flourish for another century and a half. Fine liars – Plutarch, Tacitus in the generation after Josephus – continued to write history.

Two and a half centuries after Josephus the propositions quit being prophetic, and became orthodoxy.

And as such, orthodoxy, the propositions indicate the magnitude of the problem of when, and how, the Hebrew holy writings were authored.

The formulation and solution of the problem had to involve the nature of god. The father and lord of all things. The nature of the world. Severe punishment for straying from the path of virtue. Severe punishment for not believing that god possesses the greatest virtue. The prophets. The privilege reserved for them. The reception of knowledge from god. Knowledge of the remotest antiquity. Not one letter added or removed for ages.

The formulation and solution of the problem had to involve all this. So it had to involve perhaps also the reexamination of the possibility that, after all, Moses, who lived 2 000 years before Josephus, at so remote a time, told many lies. Perhaps also the examination of the possibility that someone else, at not so remote a time, told many lies.

Josephus's enumeration of our 22 truly trustworthy books also indicates, in part, the scope of the problem. These are some of the books, if not all of them yet, which have to be sorted out.

They are 22.

5 are the books of Moses in which are recorded the laws and the events from the creation of man to the death of our lawgiver.

13 are the books of the prophets who followed Moses.

4 contain hymns and precepts.

With only 22 books, the enumeration is not complete. Josephus thus attests that at his time the canon of the Hebrew holy writings has not been closed yet.

Dividing the books into three kinds, however, Josephus attests that the tripartite division of the Hebrew holy writings into law, prophets, and writings – torah, neviim, and kethuvim – predates

him.

With 5 books, the enumeration of the law is complete. Josephus attests that the canon of the torah has been closed. And that the 5 books are *Genesis, Exodus, Leviticus, Numbers, and Deuteronomy*, in this order, Josephus attests when, recording events since the creation of the world in the *Jewish antiquities*, he follows them closely, in this order.

With only 13 books, the enumeration of the prophets is not complete. The canon of the neviim has not been closed yet.

With only 4 books, the enumeration of the writings is not complete either. The canon of the kethuvim has not been closed yet either.

The oldest complete enumeration of the Hebrew holy writings is in the talmud, some three centuries after Josephus.

Talmud.

The composition of the talmud falls mainly in the fourth Christian century. The forty-third Jewish century. The thirteenth Roman century. Decidedly, it was the last decidedly Roman century. For it was also the first decidedly Christian century.

Rome continued to rule the domain from the Atlantic to the Euphrates.

Judea continued at first to be an unruly part of the domain. Yet another revolt, led by the messiah Bar Kokhba, broke out in 132-5. Another of the leaders of the revolt was the tanna Akiva. It was the last revolt. It was also crushed, and after that Judea was pacified. The Jews were dispersed throughout the empire.

Their writings had become holy. They had been canonized. The canon of the law had been closed.

So commentary on the law began. These commentators are the tannaim, their commentary is the mishna. The most important tanna is Akiva. And the mishna was composed from the couple of generations before Akiva through the couple of generations after him.

The commentary was mostly oral. Ha-Nasi – the prince, the patriarch of the Jewish community, and on the authority of the talmud (*Idolatry*, 10a-b) an advisor of the emperor – collected and edited the commentary. Ha-Nasi's collection is the mishna committed to writing.

The mishna was thus also closed.

So commentary on the commentary began. These commentators are the amoraim, their commentary is the talmud. It was composed in the two communities in Judea and Babylon, the amoraim in Babylon laboring for a century longer than those in Judea. The last important amora is Ashi. And the talmud was composed from the couple of generations after ha-Nasi through the couple of generations after Ashi.

Then the talmud was also closed.

So commentary on the commentary on the commentary began.

To date it explicitly, and assign here as everywhere a date of birth for the sake of uniformity, as well as for the sake of perspicuity, ha-Nasi was born in 135, Ashi died in 427, and counting a date of birth two generations after ha-Nasi at 195, and a date of birth two generations after Ashi at 417, the year in the middle yields

306 talmud.

And the oldest complete enumeration of the Hebrew holy writings, attesting that their entire canon – of the neviim and the kethuvim as well as the torah – had been closed, is in the talmud.

The mishna is divided into sixty-three books grouped into six orders. The talmud follows the mishna.

The enumeration of the Hebrew holy writings is in the commentary on *The last gate*, the third book of the fourth order of the mishna, in the first of the ten chapters of this commentary.

The chapter is representative in how one problem leads the amoraim to another, which leads them to another, which leads them to another, and so on indefinitely.

In the passages below the amoraim note rabbi Meir, rabbi Judah, rabbi, and rabbi Johanan. Rabbi Meir is the tanna Meir. Rabbi is ha-Nasi. And Meir and ha-Nasi are important. Rabbi Johanan is the amora ben Nappaha. He is not important. Whoever of the several tannaim and amoraim whom the amoraim call rabbi Judah rabbi Judah is, he is not important either. And the sample of four is not representative. In the talmud as everywhere the not important are many more than the important, the very not important among them many more.

This, then, is how the amoraim come to make

the oldest complete enumeration of the Hebrew holy writings. The oldest complete enumeration, in particular, of the neviim and of the kethuvim.

The first chapter of the commentary on *The last gate* begins with problems of the division of property. It begins with straightforward cases like the division of a vineyard, and the division of an orchard (2a-4b).

This leads to more difficult cases, like how to divide two bondwomen, one of whom bakes and cooks, the other spins and weaves (13b).

This leads to a most difficult case:

how, and indeed whether, to divide two scrolls of the scriptures (*id.*)?

And for all the complexity of the problems of dividing baking and spinning, the amoraim now face problems of the greatest complexity, problems posed by the scriptures. So the amora reports:

rabbi Meir said that it is permissible to fasten the law, the prophets, and the writings together; rabbi Judah says that the three should be each in a separate scroll;

but rabbi said that once the law, the prophets, and the writings were all bound together, and this was fit and proper (*id.*).

So it is fit and proper to bind the law, the prophets, and the writings together. But it is fit and proper also to separate the books:

between each book of the law there should be a space of four lines, and between one prophet and another also four lines, but between two minor prophets there should be three lines (*id.*).

This leads to the problem of how much space there should be at the beginning of each scroll so that the scroll can be rolled up properly (14a).

This leads to the problem of how the ark of Moses was furnished, and this in turn to the problem of what was in the ark (14a-b).

That settled, the amora continues:

our rabbis taught that the order of the prophets is *Joshua, Judges, Samuel, Kings, Jeremiah, Ezekiel, Isaiah*, and then the twelve minor prophets;

let us examine this;

Hosea came first, for it is written in *Hosea*, god spoke first to Hosea;

but were there no prophets from Moses to Hosea?

rabbi Johanan has explained that Hosea was the first of the prophets of that time, namely Hosea, Isaiah, Amos, and Micah;

so why is *Hosea* not separated and first?

because the book is small and may be lost;

so why is then *Isaiah* not first, since Isaiah was before Jeremiah and Ezekiel?

because *Kings* ends with destruction and *Jeremiah* is about destruction, *Ezekiel* begins with destruction but ends with consolation, and *Isaiah* is full of consolation; so we put destruction next to destruction, consolation next to consolation;

the order of the writings is *Ruth*, the book of *Psalms*, *Job*, *Proverbs*, *Ecclesiastes*, *Song of songs*, *Lamentations*, *Daniel*, the scroll of *Esther*, *Ezra*, and *Chronicles*;

and who wrote the scriptures?

Moses wrote his own book and the end of *Numbers* and *Job*;

Joshua wrote *Joshua* and the end of the law;

Samuel wrote *Samuel*, *Judges*, and *Ruth*;

David wrote the book of *Psalms*, including in it psalms of his elders, Adam, Abraham, and Moses;

Jeremiah wrote *Jeremiah*, *Kings*, and *Lamentations*;

Ezekiel and his fellows wrote *Isaiah*, *Proverbs*, *Song of songs*, and *Ecclesiastes*;

the men of the great assembly wrote *Ezekiel*, the twelve, *Daniel*, and *Esther*;

Ezra wrote his book up to his time and *Chronicles*, Nehemiah finished *Ezra* (14b-5a).

Hence the problem of whether there was a Job arises, and that settled, the problem of when Job lived (15a-6a).

Hence, because god gave Job daughters, the problem of whether a daughter is a blessing arises, on which both their authorities and the amoraim themselves are divided, although they all agree that a son is a blessing (16b).

Then the first of the ten chapters of the commentary on *The last gate* ends. The second chapter begins with the problem of whether a man can dig a pit close to his neighbor's field (17a).

In the meantime the Hebrew holy writings had become the Christian old testament. In 325 the first ecumenical council of bishops gathered at Nicaea under the emperor. The bishops decreed

Christianity a dogma, the Nicene creed. In 391 the emperor decreed the closure of all pagan temples and interdiction of all pagan cults. That was the generation also of Augustine. In the next generation the doctrine was formulated explicitly: every care should be taken to hold fast to what is believed everywhere, always, by all.

If the amoraim witnessed this, none of it was allowed to interfere with the problems of how to divide baking and spinning and whether a daughter is a blessing. Let alone the problems of how much space there should be at the beginning of each scroll and how the ark of Moses was furnished.

These, then, are the Hebrew holy writings which have to be sorted out, and most particularly, whose development has to be sorted out.

In the order of the amoraim, destruction next to destruction, consolation next to consolation, and so that a small book not be lost,

the law,

Genesis,
Exodus,
Leviticus,
Numbers,
Deuteronomy,

the prophets,

Joshua,
Judges,
Samuel,
Kings,
Jeremiah,
Ezekiel,
Isaiah,
the twelve, *Hosea*,

Joel,
Amos,
Obadiah,
Jonah,
Micah,
Nahum,
Habakkuk,
Zephaniah,
Haggai,
Zechariah,
Malachi,

the writings,

Ruth,
Psalms,

Job,
Proverbs,
Ecclesiastes,
Song of songs,
Lamentations,
Daniel,
Esther,
Ezra,
Chronicles.

5 books of the law, 19 of the prophets, 11 of the writings, for a total of 35. If the end of *Ezra* is counted separately as *Nehemiah*, 36.

And who wrote them?

Moses wrote his own book and the end of *Numbers* and *Job*. Joshua wrote *Joshua* and the end of the law. Samuel wrote *Samuel*, *Judges*, and *Ruth*. David wrote the book of *Psalms*, including in it psalms of his elders, Adam, Abraham, and Moses. Jeremiah wrote *Jeremiah*, *Kings*, and *Lamentations*. Ezekiel and his fellows wrote *Isaiah*, *Proverbs*, *Song of songs*, and *Ecclesiastes*. The men of the great assembly wrote *Ezekiel*, the twelve, *Daniel*, and *Esther*. Ezra wrote his book up to his time and *Chronicles*, *Nehemiah* finished *Ezra*.

Not exactly, some thirteen centuries later Spinoza will show.

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Spinoza.

Spinoza is in the seventeenth Christian century. The centuries had by that time long continued to be decidedly Christian, even if they had in the meantime become also Muslim, and continued at that time to be decidedly Christian, even if somewhat less decidedly than they had been.

With the retreat of Rome before the barbarians the state had disappeared altogether in the west. It had at length begun being restored, slowly, haltingly. Then a few of the many new states had begun rising, and becoming stronger, and stronger. At the time of Spinoza a few of them encompassed the earth. One of them, France, under Louis XIV, was valiantly trying to become the dominant among them.

Judea had remained under Rome, as Rome had not at first retreated in the east. Then it had been conquered by the caliphs. Then the caliphate had declined, and it had been under lesser Muslim

chieftains. Then the crusaders had conquered it, and it had been under lesser Christian chieftains. Then the Muslims had reconquered it, and it had again been under Muslim chieftains, now greater now lesser. Then the Ottomans had conquered it, and it was thus at Spinoza's time once again a tiny part of a powerful state. Tiny, and long pacified. Long also depopulated. The Jews were dispersed in communities throughout the Christian and the Muslim domains. Spinoza's was one of the Jewish communities in the Netherlands.

Christianity had triumphed. So the darkest of dark ages had descended on Christendom, and had continued for seven centuries. Then it had come to an end. The acquisition of knowledge had resumed, also slowly, also haltingly. Then it had accelerated, and more, and more. And in the century of Spinoza it advanced more than at any other time, before or after. It was the century of Bacon, Galileo, Kepler, Descartes, Huygens, Spinoza, Newton, and Leibniz.

Spinoza's formulation and solution of the problem of when, and how, the Hebrew holy writings were authored has been presented in some detail above, in part two of the investigation, where the method has been presented in some detail, by showing how in that century it was followed religiously, and hence triumphantly.

The formulation and solution of the problem is in the *Theologico-political treatise*, in 1670.

Philosophy had long been more or less exclusively ethics. The philosophers had studied the nature of god. They had taught men that god is the father and lord of all things. This is the nature of the world. And the father and lord of all things gives happiness to those who follow him, those who do not are severely punished.

But the acquisition of knowledge had accelerated, and more, and more. And with Bacon, Galileo, and Kepler philosophy became once again physics. And physics and mathematics. For philosophy is written in that grandest book, the world, and the world is written in mathematics. As such, physics and mathematics, philosophy advanced greatly further in the next generation with Descartes, and greatly further in the next generation with Huygens and Spinoza.

In particular, these are the main elements of the formulation and solution of the problem:

philosophy has no end but truth, faith has no end but obedience and piety; between faith and philosophy there is no connection whatsoever, no relation whatsoever;

the method of interpretation of scripture does not differ from the method of interpretation of nature at all, but agrees with it entirely;

we try first of all to find out what is the most general, what is the basis and foundation of all scripture, what is the doctrine which all the prophets have commended as eternal and most useful for all men, that one and omnipotent god exists, who alone is to be adored and who cares for all, and especially for those who adore him and love their neighbor like themselves;

the laws revealed by god to Moses were laws only of the government of the Hebrews; they were binding on no one but the Hebrews, and not on them either after the downfall of their government;

the end of ceremonies was that men do nothing by their own decisions, act in all things by the mandate of others, and continually acknowledge with all their actions and thoughts that they are not under their own right, but under the right of others;

that Moses is the author of the pentateuch has no foundation, and is completely against reason; *Joshua* is not an autograph either;

that *Judges* was written by the judges I believe no one of sound mind can persuade himself;

Samuel was written many generations after Samuel;

Kings is extracted from books of the deeds of Solomon, and the chronicles of the kings of Judah and Israel;

we conclude that all these books, which we have received as autographs, rather ascribe their contents to antiquity;

and if we attend to the connections and the argument of all these books, we see clearly that they were all written by one and the same historian, who wanted to write down the antiquities of the Jews from their beginnings to the first destruction of the city;

the connections and order of the books indicate a historian who set himself a predetermined goal; in order to write down the origin and

development of the Hebrew nation, he set forth the occasions and times of the establishment of the laws of Moses, then deduced everything that followed from them;

who this historian was, it is hard to show; I suspect, however, that he was Ezra, and the reasons for this conjecture are not light;

the historian continues his history down to the release of Jehoiachin; it follows that he cannot be long before Ezra;

scripture testifies of no one but Ezra, in *Ezra*, 7, he applied himself to the study of the law of god and to teaching it, and he was a scribe expert in the law of Moses; we see from this testimony that Ezra applied himself not only to the study of the law of god, but also to teaching it;

in *Nehemiah*, 8, we read, they read to them the book of the law of god, explaining it, teaching its sense, and making them understand it;

and as *Deuteronomy* contains not only the book of the law of Moses, or the greater part of it, but also many insertions explaining it, I conjecture that *Deuteronomy* is the book of the law of god, written, embellished, and explained by Ezra;

a comparison of the decalogue of *Deuteronomy* with the decalogue of *Exodus*, where its history is told at length, shows a discrepancy in all things, in form, in length, and in rationale; I think that here as elsewhere the differences are due to Ezra, who explained the law of god to the people of his time, and then wrote this book of law; I conjecture that he wrote this book first, because it contains the laws of the fatherland, which the people needed first of all; this accomplished, I think Ezra next undertook to write down the complete history of the Hebrew nation from the beginning of the world to the destruction of the city, and inserted *Deuteronomy* in its place; the first five books he called by the name of Moses because his life is their principal object, for the same reason he called the next books *Joshua*, *Judges*, *Ruth*, *Samuel*, and *Kings*;

but Ezra's is not the ultimate hand of everything contained in these books; he collected his history from various writers, and he sometimes left the final examination and arrangement to

his heirs;
the prophecies contained in the prophetic books, *Isaiah*, *Jeremiah*, *Ezekiel*, and the twelve, were collected from other books and not always in the order in which they were spoken or written by the prophets;

Psalms was collected at the time of the second temple;

Proverbs was collected at the same time, or in any case not earlier than the reign of Josiah;

Chronicles was written after Ezra;

Ezra, *Nehemiah*, *Esther*, and *Daniel* are from one hand; we do not know who the writer was; but *Nehemiah*, 12, testifies that the descendants of the high priest went to meet Alexander; it follows that these books postdate Alexander; and I have no doubt that they postdate Judah Maccabee's restoration of the cult in the temple, because it was at that time that false books of *Daniel*, *Ezra*, and *Esther* were written by evildoers, who were without doubt sadducees, because, as far as I know, the pharisees never accepted these books;

finally, we can conclude that there was no canon of sacred books before the time of the Maccabees, and that these which we now have were selected from a multitude of others by the pharisees at the time of the second temple;

and I assert that the pharisees alone selected the books of the old testament and made them into a sacred canon, because in *Daniel*, 12, the resurrection of the dead is predicted, which the sadducees denied; and because in the talmud, in the treatise *Sabbath*, 2, the pharisees themselves clearly indicate this.

These are the main elements of the formulation and solution of the problem.

Philosophy has no end but truth.

The method of interpretation of scripture is the method.

The end of the doctrine which all prophets commended as eternal and most useful for all men, that one and omnipotent god exists, who alone is to be adored and who cares for all, and especially for those who adore him and love their neighbor like themselves, was political. The end was that men continually acknowledge with all their actions and thoughts that they are under the right of others.

The laws revealed by god to Moses were laws only of the government of the Hebrews.

The holy writings were authored accordingly.

The pentateuch, *Joshua*, *Judges*, *Ruth*, *Samuel*, and *Kings*, which we have received as autographs, rather ascribe their contents to antiquity.

These books were all written by one and the same historian. He set himself a predetermined goal. In order to write down the origin and development of the Hebrew nation, he set forth the occasions and times of the establishment of the laws of Moses, then deduced everything that followed from them. I suspect that he was Ezra. I conjecture that he wrote *Deuteronomy* first. He next undertook to write down the complete history of the Hebrew nation from the beginning of the world to the destruction of the city, and inserted *Deuteronomy* in its place.

But his is not the ultimate hand of everything in these books. He collected his history from various writers, and sometimes left the final examination and arrangement to his heirs.

The prophecies contained in the prophetic books were collected from other books and not always in the order in which they were spoken or written by the prophets.

Psalms was collected at the time of the second temple.

Proverbs was collected at the same time, or in any case not earlier than the reign of Josiah.

Chronicles was written after Ezra.

Ezra, *Nehemiah*, *Esther*, and *Daniel* are from one hand, and postdate Judah Maccabee's restoration of the cult in the temple.

There was no canon of sacred books before the time of the Maccabees.

The pharisees alone selected the books of the old testament and made them into a sacred canon.

And Spinoza's formulation and solution of the problem is in all its essential parts conclusive.

As it was corroborated after him, detail was added. In particular, the dates of all books were determined precisely. And the one and the same historian – who set himself the predetermined goal to deduce everything from the laws of Moses, from the beginning of the world to the destruction of the city, and inserted *Deuteronomy* in its place, collecting his history from various writers, while leaving the final examination and

arrangement to his heirs – was identified. Two centuries after Spinoza, Wellhausen added this last substantial detail to the solution.

Wellhausen.

Wellhausen is in the nineteenth Christian century. It was not as decidedly Christian as earlier centuries had been, but it was decidedly more spiritual than the previous couple of centuries had been.

Britain had defeated Louis XIV to become itself the dominant power on earth. Then it had defeated also Napoleon and the revolution, and it was at Wellhausen's time the overwhelmingly dominant power on earth. But Germany had also just been built.

Judea continued to be a part of the Ottoman empire, tiny, pacified, depopulated. The Jews were yet more widely dispersed, many now also assimilated. But the next was the generation also of Herzl.

Wellhausen's analysis of the Hebrew holy writings is in the *Prolegomena to the history of Israel*, in 1878.

The great advance of the acquisition of knowledge had continued, the development of philosophy had culminated in Hume and Kant. But the war for the restoration of spirit to the substantiality and purity of its being had also begun, and had been by Wellhausen's time conclusively won. Wellhausen is a younger contemporary of Dilthey. The spiritual sciences are an independent of the natural sciences whole, and they can break the fetters in which the older sister has held the younger since Descartes, Spinoza, and Hobbes, who imposed on these sciences their developed in mathematics and natural science methods.

They can break the fetters, and they will. But they had not altogether broken them yet. Which explains Wellhausen. Wellhausen is still fettered to the ways of Descartes, Spinoza, and Hobbes. He is thus also the last historian to solve a real problem, as distinct from spiritual.

He writes in the *Prolegomena to the history of Israel*:

criticism has since La Peyrère and Spinoza acknowledged the complex character of the pentateuch, and has since Astruc labored, not without success, at disentangling its original elements (intr.2).

La Peyrère, in the generation before Spinoza, in 1655, in the *Men before Adam, or a discourse on the 12th, 13th, and 14th verses of the 5th chapter of the epistle of the apostle Paul to the Romans*, proposed just that, that there were men before Adam, on just that ground, the epistle of the apostle Paul to the Romans. Astruc, a couple of generations after Spinoza, in 1753, in the *Conjectures concerning the original documents which Moses appears to have used in composing the book of Genesis*, first distinguished the passages in *Genesis* in which the lord is called Yahweh from those in which he is called Elohim.

Wellhausen continues:

a number of results can thus be regarded as settled;

Deuteronomy is essentially an independent book of laws;

when *Deuteronomy* is separated from the pentateuch, the most easily distinguished parts of what remains belong to the so-called fundamental text; it is distinguished by its predilection for numbers and formula, pedantic style, and phrases and expressions which occur nowhere else in the older Hebrew; strongly marked by its characteristics, it can be recognized with certainty; its base is *Leviticus* and allied parts in the adjoining books, and it contains chiefly legislation;

when this document is also separated, what remains is the Yahwistic book of history which, unlike the other two, is essentially narrative; its base is the story of the patriarchs, which belongs almost entirely to this document (*id.*).

The fundamental text, distinguished by its predilection for numbers and formula, pedantic style, and phrases and expressions which occur nowhere else in the older Hebrew, whose base is *Leviticus* and allied parts in the adjoining books, and contains chiefly legislation, Wellhausen proposes to call:

the Priestly code, as it is entitled to be called by both its content and its origin (*id.*).

And against the identification of another document, a so-called Elohist, running parallel to the Yahwistic document and the Priestly code, he objects:

the Elohist is closely akin to the Yahwist and his

document has come down to us only in extracts from the Yahwist, so there is every reason to adhere to the old division into two main documents, even if they are both the products of complex development and next to them there are many hybrid elements (*id.*).

He continues:

all are happily agreed that the Yahwistic document belongs to the period of the kings and prophets preceding the dissolution of the two Israelite kingdoms;

there is even less disagreement about the origin of *Deuteronomy*, it was composed at the time when it became the foundation of Josiah's reform;

it is only with respect to the Priestly code that opinions differ widely; unlike *Deuteronomy*, and unlike the Yahwist who does not pretend to be Mosaic law of any kind, the Priestly code tries hard to imitate the costume of the Mosaic period and to disguise its own; and it has been so successful in concealing the date of its composition that its many inconsistencies are taken to prove that this date lies beyond all known history and that its enormous antiquity can hardly be brought in connection with history;

it is the Priestly code that presents us with our problem (*id.*).

Wellhausen shows that:

according to *Deuteronomy* unity of worship did not exist before the building of the temple by Solomon, while the Priestly code considers unity of worship in one sanctuary so indispensable that the temple is present, in the form of the tabernacle, from the days of wandering before settlement, even if, in truth, the tabernacle is the copy, not the prototype, of the temple in Jerusalem (I, 2.3),

that:

in *Amos*, *Hosea*, *Isaiah*, and *Micah* there is no trace of acquaintance with the Mosaic institutions of the Priestly code (II, 1.2),

and the solution of the problem follows:

the historical series of the three strata of the pentateuch is the Yahwistic document, *Deuteronomy*, the Priestly code (IX, 2.1).

Spinoza grounds the solution of the problem of when, and how, the Hebrew holy writings were

authored in the foundation of all scripture, the doctrine that one and omnipotent god exists who alone is to be adored. The end of the doctrine was political. The laws revealed by god to Moses were laws only of the government of the Hebrews.

Wellhausen grounds the solution of the problem of disentangling the documents comprising the pentateuch, and dating the Priestly code, and of establishing the order of all Hebrew holy writings, in the solution of the more general problem of the beginning and development of Judaism, and grounds this in turn in the development of the state.

He writes:

the monarchy is the soil out of which all institutions of Israel develop; the kingdom of Yahweh is the religious expression of the fact of the kingdom founded by Saul and David (XI, 1.2);

the relation of Yahweh and Israel was natural in origin, there was at first no distance between Yahweh and his people; only when the existence of the kingdom was threatened by the Assyrians did prophets like Elijah and Amos begin to raise the deity above the people and to sever the natural bond between them (1.4).

for Isaiah the kingdom of Yahweh is identical with the kingdom of David, the tasks he sets for it are political and similar, we may say, to the tasks one would set today for the Ottoman empire (1.3);

but the tabernacle of David fell at last and no king was born to raise it again; the state suffered not a crisis but destruction; the result was that the religious hopes of the people turned away from the existing political conditions; earlier the goal had been the state as it had existed under David, now in place of the state a world empire was built in imagination; yet the extravagant hopes built on Yahweh were balanced by sober aims dictated by events; with the old community gone, the godly both had the opportunity and felt the obligation to lead the creation of a new Israel; the weaker the state grew the more powerful the priesthood became;

thus arose the sacred constitution of Judaism; in the Priestly code we see it in detail; with the

destruction of Samaria, and then of Judah, old Israel shrank to a religious congregation, public life was absorbed in the service of the sanctuary, the people became, as we read in *Exodus*, 19, the kingdom of priests and holy people (2.1);

the Mosaic theocracy is the residue of the ruined state; it is itself not a state but a church, in its nature intimately connected with the Catholic church, which is in fact its child (*id.*).

This is how Judaism began.

The relation of Yahweh and Israel was natural in origin, there was at first no distance between Yahweh and his people.

Only when the existence of the kingdom was threatened by the Assyrians did prophets like Elijah and Amos begin to raise the deity above the people and to sever the natural bond between them.

For Isaiah the kingdom of Yahweh is identical with the kingdom of David, the tasks he sets for it are political.

The state, however, suffered not a crisis, but destruction. And in place of the state a world empire was built in imagination.

The weaker the state grew the more powerful the priesthood became.

Thus arose the sacred constitution of Judaism. Old Israel shrank to a religious congregation, public life was absorbed in the service of the sanctuary. The Mosaic theocracy is the residue of the ruined state, itself not a state but a church.

And the sacred constitution of Judaism was developed in writing. In this order. Wellhausen writes:

in the 18th year of Josiah's reign, 622, *Deuteronomy* was found in the temple; in the account of its discovery and promulgation, in *Kings*, II, 22-3, it is always called the book of the law; it was accordingly the first and in its time the only book of the law;

with the appearance of the law worship was restricted to Jerusalem; there was also now an authority in religion and this was the death of prophecy; we can call Jeremiah the last prophet; in his early years he helped the introduction of the law, but in his later years he seems edified little by its effects;

those after Jeremiah were prophets only in name;

Ezekiel does not prophesy, he expounds the words of his predecessors (X, 2.1);

a priest in a prophet's mantle, Ezekiel was one of the first led in exile, and the transition to the postexilic period was effected by him; his vision of Israel's future is a vision of fantastic hopes built on Yahweh (II, 1.3);

so in *Judges*, *Samuel*, and *Kings* we are not presented with tradition in its original form; the object of these books is not the sequence of events but their religious significance; one is reminded of the Hegelian thesis, antithesis, synthesis when one hears the monotonous beat with which history advances here, rebellion, affliction, conversion, peace, rebellion, affliction, conversion, peace, the keynote being, they did evil in the eye of the lord, went whoring after strange gods; the norm here can only be that of *Deuteronomy*, not of the Priestly code (VII, 1.1);

once the temple was in ruins, worship at an end, its personnel out of employment; it is easy to see how the sacred practices became a matter of theory and writing (II, 1.3);

the theocratic ideal became the focus of all thought and effort, annihilating the sense of truth and all regard for the facts as they had been handed down; the connection with the ancient conditions had been violently and completely severed and there was nothing to hinder the partitioning of the past in thought at will (V, 2.1);

the Priestly code, worked into the pentateuch as its standard legislative element, became the definitive Mosaic law; it was promulgated as such one century after the exile;

the man who made the pentateuch the constitution of Judaism was the Babylonian priest Ezra; in 458 he came to Jerusalem at the head of a large group of zealous Jews with a mandate from the Persian king, as we read in *Ezra*, 7, to reform the congregation of the temple; in 445 Nehemiah, cupbearer of Artaxerxes, himself a Jew sympathetic to Ezra's reform, came to Judea as Persian governor; on the first day of the seventh month, we are not told the year, but it was not earlier than 444, the people assembled as one man before the water gate, Ezra was called to produce the book of the law

of Moses, and after twenty-four days of reading, celebration, and prostration, the central act was performed, eighty-five elders bound themselves in writing to the book of the law proclaimed by Ezra, and the rest of the people took the obligation to walk in the law of the lord, given by him to his servant Moses (X, 2.2).

The order of the principal writings is thus this.

The Yahwistic document belongs to the period of the kings and prophets preceding the dissolution of the two Israelite kingdoms. It does not pretend to be Mosaic law of any kind.

In *Amos*, *Hosea*, *Isaiah*, and *Micah* there is no trace of acquaintance with the Mosaic institutions of the Priestly code.

Deuteronomy was promulgated in 622. It was the first and in its time the only book of the law.

With the appearance of the law there was now an authority in religion and this was the death of prophecy. We can call Jeremiah the last prophet.

Ezekiel was one of the first led in exile, and the transition to the postexilic period was effected by him.

The object of *Judges*, *Samuel*, and *Kings* is not the sequence of events but their religious significance. The norm here can only be that of *Deuteronomy*, not of the Priestly code.

Once the temple was in ruins, the sacred practices became a matter of theory and writing. The theocratic ideal annihilated the sense of truth and all regard for the facts as they had been handed down.

The Priestly code became the definitive Mosaic law, promulgated as such one century after the exile.

The man who made the pentateuch the constitution of Judaism was the Babylonian priest Ezra. Not earlier than 444, the people assembled as one man, Ezra was called to produce the book of the law of Moses, and after twenty-four days of reading, celebration, and prostration, eighty-five elders bound themselves in writing to the book of the law proclaimed by Ezra, and the rest of the people took the obligation to walk in the law of the lord, given by him to his servant Moses.

cdxcvi

Thus, assigning dates of birth, and separating

them into important, on the left, and not important, on the right, the 36 Hebrew holy books are these 29 writings, in chronological order,

860	Yahwistic document,
810	<i>Amos,</i>
800	<i>Hosea,</i>
790	<i>Isaiah,</i>
763	<i>Micah,</i>
694	<i>Psalms,</i>
678	<i>Nahum,</i>
667	<i>Jeremiah,</i>
664	<i>Zephaniah,</i>
662	<i>Deuteronomy,</i>
647	<i>Habakkuk,</i>
633	<i>Ezekiel,</i>
628	<i>Ruth,</i>
597	<i>Joshua, Judges, Samuel, Kings,</i>
595	<i>Proverbs,</i>
577	<i>Lamentations,</i>
560	<i>Haggai,</i>
560	<i>Zechariah,</i>
529	Priestly code,
528	<i>Job,</i>
528	<i>Song of songs,</i>
505	<i>Malachi,</i>
489	<i>Obadiah,</i>
469	<i>Joel,</i>
455	<i>Esther,</i>
429	<i>Chronicles, Ezra, Nehemiah,</i>
429	<i>Jonah,</i>
309	<i>Ecclesiastes,</i>
189	<i>Daniel.</i>

The 36 books are 29 writings, as the 5 Mosaic books are 3 writings, the Yahwistic document, *Deuteronomy*, and the Priestly code, the 4 books of *Joshua*, *Judges*, *Samuel*, and *Kings* are from a single hand, the 3 books of *Chronicles*, *Ezra*, and *Nehemiah* are also from a single hand, and the remaining 24 books are its own writing each.

17 important, 12 not important.

In this enumeration belongs also the man who made the pentateuch the constitution of Judaism,

479 **Ezra.**

So 18 important, 12 not important.

And below, first the contents of the writings in general are described, in order to show what, in each case, has to be dated, as well as what, in each case, is real, or not. Next the particular grounds of the dates are presented. Finally the

seven centuries of development of the writings are divided into parts such as will lead to the better solution of difficulties. And then the argument returns to the collection of the development of the state, and of history.

The contents of the writings, then, continue to have their difficulties. As far as their dating is concerned, the fundamental is that they are one and all not autographs, and that they also one and all abound in spurious material.

This difficulty these writings share with many other writings. To note some of the most important, there are spurious treatises in Plato's corpus, Aristotle's, Theophrastus's, Plutarch's, Ptolemy's, and there is also spurious material in Plato's genuine treatises, Aristotle's, Theophrastus's, Plutarch's, Ptolemy's.

This difficulty is very greatly exacerbated in these, the Hebrew holy writings, by their holiness. The theocratic ideal annihilated the sense of truth and all regard for the facts. You shall not bear false witness, is the ninth commandment (*Deuteronomy*, 5), and for this commandment the writers who produced the Hebrew holy writings have very little use.

This they share with all other holy writings. Of the 27 books of the new testament 20 are not autographs, and the other 7 contain spurious material as well. The koran was committed to writing after the departure of the prophet, the sunnah was committed to writing two-odd centuries after his departure.

The papacy built its power on a donation of Constantine, which is not Constantine's, a sacramentary of Leo, which is not Leo's, decretals of Gelasius, which are not Gelasius's.

Nor is the difficulty confined to older writings.

Hegel died in 1831. But an Association of the friends of the immortalized came into being. It produced ten volumes of Hegel's lectures – the *Lectures on the philosophy of religion*, in 1832, the *Lectures on the proofs of the existence of god*, in 1832, the *Lectures on the history of philosophy*, in 1833-6, the *Lectures on esthetics*, in 1835, the *Lectures on the philosophy of history*, in 1840 – gathered from notes of the master as well as notes of students of varying numbers and quality. Nor did the amplification of the Hegelian corpus stop with lectures. The *Encyclopedia of the*

philosophical sciences, which Hegel had seen through three editions, the Association doubled in size with the addition of notes of students of varying numbers and quality. Wittgenstein died in 1951. But a Wittgenstein industry came into being. Other than the *Philosophical investigations*, in 1953, it produced the *Remarks on the foundations of mathematics*, in 1956, the *Preliminary studies for the Philosophical investigations*, generally known as the blue and brown books, in 1958, the *Philosophical remarks*, in 1964, the *Notes*, in 1967. And if these productions, unlike those earlier, did not pretend to be what they were not, they have yet intermingled spurious and genuine among lines as well as passages as well as books.

The difficulty is general. And as it can be resolved in all other cases, and has been, so it can be resolved in the cases of the Hebrew holy writings, and has been.

Dated has to be in each case the writing, and – with one exception – only the writing.

In some cases – three and a half centuries after Spinoza now – this has become trivial. *Psalms* has to be dated, and not David who wrote the book of *Psalms*, including in it psalms of his elders, Adam, Abraham, and Moses. *Proverbs* has to be dated, and not Ezekiel and his fellows who wrote *Proverbs*. *Job* has to be dated, and neither Moses who wrote *Job* nor Job. *Daniel* has to be dated, and not Daniel who spoke to Darius (6) and to whom Gabriel spoke (8).

This has become trivial slowly, and against great resistance. For the separation of the writing from the writer who had until then authored it has the consequence that the writer can no longer be burdened with the presumption of reality, not on the ground of having authored the writing. Nor can what the writer witnesses be burdened with the presumption of reality, not on the ground that he authored the writing. If there was, in fact, David, this is not attested by *Psalms*. Never mind David's elders. If there were Ezekiel and his fellows, this is not attested by *Proverbs*. If there was either Moses or Job, this is not attested by *Job*. And never mind burdening with the presumption of reality Daniel, on the ground of *Daniel* the great king cannot be burdened with the presumption of reality any more than the angel

can.

But it has not become trivial in all cases. It has not in the cases of the prophetic books. The supposition that *Amos* attests Amos, *Hosea* attests Hosea, *Isaiah* attests Isaiah, and so all the books, has not been abandoned. For if there were the prophets, Amos, and Hosea, and especially Isaiah, and Jeremiah, and Ezekiel, there was also what the prophets witness. But in these cases as in the others. *Amos* has to be dated, and not Amos, *Hosea* has to be dated, and not Hosea, *Isaiah* has to be dated, and not Isaiah, and so all the prophetic books. For there are all the prophetic books, but for none of the prophets is there any evidence at all.

The Assyrian princes attest the princes of Israel beginning with Omri, prince c. 881-71. The prince of Moab attests Omri and Ahab. The Assyrian princes attest the princes of Judah beginning with Ahaz, prince c. 738-26. The prince of Babylon attests Zedekiah. And very little else of what the Hebrew holy writings witness is attested independently. Some of the localities they witness in and around Israel and Judah are attested independently, and nothing else is.

And if this does not all by itself show that the testimony of these witnesses is not evidence, the following does. Josephus writes: ages have passed but no one has dared to add or remove even one letter in our holy scriptures. This proposition was established as all the letters in our holy scriptures were added and removed. Josephus writes also: the records after the time of Artaxerxes are not so trustworthy, but the records before the time of Artaxerxes are truly trustworthy. This proposition nothing but miracles could establish, and did. And the firm ground on which these propositions were established was rather general illiteracy. The princes of Israel and Judah, 41 of them over four-odd centuries, including the prince who excelled all princes on earth in wisdom, and the entire earth came to listen to the wisdom that god had given him, have not left behind between the 41 of them 1 inscription.

7 of the prophetic books are important, those recording the prophecies of Amos, Hosea, Isaiah, Micah, Jeremiah, Ezekiel, and Haggai.

Each of the 7 prophets is attested by his own

book. This is in each case evidence, of *Amos* for Amos, *Hosea* for Hosea, *Isaiah* for Isaiah, and so on, as much as *Job* is for Job, *Daniel* is for Daniel, the Yahwistic document is for Adam, Abraham, and Moses.

3 of the 7 prophets, Amos, Hosea, and Ezekiel, are attested by no other Hebrew holy book but his own book each.

The other 4 are attested by other books. And not only is in all 4 cases this additional testimony not evidence, it is in 3 of the 4 cases the opposite of evidence.

Isaiah is attested by *Kings* (II, 19-20).

Joshua, *Judges*, *Samuel*, *Kings* is the truly trustworthy witness who recorded events from the death of Moses to the fall of Judah. From the first these events are a succession of prophets. When the events reach the two Hebrew principalities the succession continues, beginning with Ahijah in the reign of Solomon already (*Kings*, I, 11), and beginning with Elijah (17-9), the prophets deserve much more detail than the princes.

And among all the prophets of *Kings* there is no Amos, no Hosea, no Micah, no Jeremiah, no Ezekiel. And composed after the fall of Judah, *Joshua*, *Judges*, *Samuel*, *Kings* was composed two-odd centuries after Amos such as *Amos* dates him, two centuries after Hosea such as *Hosea* dates him, one and a half-odd centuries after Micah such as *Micah* dates him, two generations after Jeremiah such as *Jeremiah* dates him, one generation after Ezekiel such as *Ezekiel* dates him. The testimony of *Kings* for Amos, Hosea, Micah, Jeremiah, and Ezekiel is thus evidence, negatively, for Isaiah it is evidence, affirmatively, as much as it is for Ahijah or Elijah.

Micah is attested by *Jeremiah* (26).

Jeremiah asks: did not Micah prophesy that Zion shall be a ploughed land and Jerusalem shall be a heap of ruins (*id.*)? Did not all the prophets so prophesy?

Jeremiah is attested by *Chronicles* (II, 35-6).

This witness, *Chronicles*, *Ezra*, *Nehemiah*, borrowed all events through the fall of Judah from the earlier witness, *Joshua*, *Judges*, *Samuel*, *Kings*.

Except Jeremiah. It has Jeremiah in events in which *Kings* has no Jeremiah.

Haggai is attested by *Ezra* (5-6).

After the fall of Judah this witness, *Chronicles*, *Ezra*, *Nehemiah*, recorded events without the help of the earlier witness. His are thus records after the time of Artaxerxes which are not so trustworthy.

In particular, the witness records a letter of Artaxerxes (*Ezra*, 4), the letter is then read in Jerusalem and work on the house of the lord stops (*id.*), but then in the 2nd year of Darius Haggai and Zechariah urge that the building of the house continue (4-5).

Artaxerxes was the great king 465-24, Darius was the great king 522-486.

In the few cases in which they attest one another the Hebrew holy writings provide *termini ad quem* for some books. But even this, given how they were all authored, if it is evidence, is in all these few cases feeble.

Dated has to be in each case the writing, and – with one exception – only the writing.

And dated have to be in each case the earliest contents of the writing, this has to be presumed the genuine. Judaism developed inseparably from the state. From the states of Israel and Judah, from the states which destroyed Israel and Judah, and from the states of which Judah became a tiny but unruly part. And the earlier contents indicate best where in the development of the state, in the succession of princes, in particular, each writing belongs.

As to the spurious, there is much spurious in all the books, and in many of the books the spurious is more than the genuine. In the Hebrew holy writings, however, as in all other corpora amplified by spurious writing, not only is the spurious less important than the genuine, its importance, when it has it, is derivative of the importance of the genuine. The spurious thus has to be indicated as such, spurious, if it is at issue, and otherwise ignored. In particular, it should not be elevated into writings of its own.

The end of *Ezekiel*, chapters 40-8, is spurious. So a Post-Ezekiel has been brought to life to claim authorship of the postprophetic prophecy.

A large part of *Jeremiah*, chapters 36-45, reports itself written down by Baruch. So Baruch continued writing well into the Christian centuries.

But the most dramatic are the earlier cases,

Isaiah and the Yahwistic document.

Isaiah is in 66 chapters. In chapters 1-39 *Isaiah* prophesies. In chapters 40-55, two centuries after *Isaiah* prophesied, *Isaiah* is made to prophesy some more. In chapters 56-66, a couple of generations after *Isaiah* was made to prophesy some more, he is made to prophesy still more. So a Deutero-*Isaiah* and a Trito-*Isaiah* have been brought to life to claim authorship of the post-prophetic prophecies. Not like a Deutero-Plato and a Trito-Aristotle, like a Deutero-donation of Constantine and a Trito-decretals of Gelasius.

As Moses has been robbed of the authorship of the Mosaic books, he has seldom been replaced, as he is by Wellhausen, with just the three, an Yahwist, a Deuteronomist, and a Priestly code. The Yahwist has been joined by an Elohist, and split into two Yahwists, and a Proto-Yahwist has been brought to life, so that it may be that the Mosaic books were not authored by Moses, and yet: their antiquity can hardly be brought in connection with history.

Wellhausen objects against an Elohist: the Elohist has come down to us only in extracts from the Yahwist, and there is thus every reason to adhere to division into two main documents, the Yahwistic and the Priestly code, even if they are both the products of complex development and next to them there are many hybrid elements.

The 5 Mosaic books, *Genesis*, *Exodus*, *Leviticus*, *Numbers*, and *Deuteronomy*, are the 3 writings, the Yahwistic document, *Deuteronomy*, and the Priestly code. The Yahwistic document comprises parts of *Genesis*, *Exodus*, and *Numbers*. *Deuteronomy* is *Deuteronomy*. The Priestly code comprises *Leviticus* and the rest of *Genesis*, *Exodus*, and *Numbers*. Even if all 3 – and all the other 26 writings – are the products of complex development and next to them there are in all books many hybrid elements.

The following are the grounds of the dates of the important books.

The Yahwistic document predates *Amos*. *Amos* knows in some detail of Abraham, Isaac, Jacob, and Joseph (4-5, 7). Hence, given the date of *Amos*, prophecy between c. 791 and c. 750, the date of the Yahwistic document follows, the century before c. 791/50. And that this earliest Hebrew writing should not be dated earlier fol-

lows from the fact of the rather general illiteracy of the two Hebrew principalities. The oldest inscriptions in Hebrew, as well as in the closely related neighboring languages, including Mesha's stone, are from this century.

Amos begins:

the breeder of sheep Amos prophesied about Israel in the reigns of Uzziah, king of Judah, and Jeroboam, son of Jehoash, king of Israel (1).

Given the dates of Uzziah, prince *c.* 791-50, and Jeroboam II, prince *c.* 790-56, the date of *Amos* follows, prophecy between *c.* 791 and *c.* 750.

Hosea begins:

the word of the lord came to Hosea in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah, and the reign of Jeroboam, son of Jehoash, king of Israel (1).

Isaiah begins:

Isaiah prophesied about Judah and Jerusalem in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah (1).

The reigns of the princes of Judah from Uzziah, prince *c.* 791-50, to Hezekiah, prince 726-697, span more than three generations. Isaiah, however, did not prophesy in the reign of the prince of Israel Jeroboam II, prince *c.* 790-56. *Isaiah* reports also:

in the year of the death of king Uzziah, I saw the lord, seated on a throne, high and exalted, the skirt of his robe filling the temple, six-winged seraphim standing in attendance (6).

It can be presumed that Isaiah began prophesying when he saw the lord, six-winged seraphim standing in attendance, in the year of the death of Uzziah, *c.* 750. The date of *Isaiah* follows, prophecy began *c.* 750.

To Hosea, on the other hand, the word of the lord cannot have first come later than the end of the reign of Jeroboam II, *c.* 756. And if it came to him after it came to Amos, the date of *Hosea* follows, prophecy between those of *Amos* and *Isaiah*.

The sequence *Amos*, then *Hosea*, then *Isaiah* is consistent with the growing alarm from *Amos* to *Hosea* to *Isaiah*, with which the prophets prophesy the doom of Israel, corresponding precisely to the advances of the Assyrian princes.

Micah begins:

the word of the lord came to Micah and he prophesied about Samaria and Jerusalem in the reigns of Jotham, Ahaz, and Hezekiah, kings of Judah (1).

Given the dates of Jotham, prince *c.* 750-38, and Hezekiah, prince 726-697, the date of *Micah* follows, prophecy between *c.* 750 and *c.* 697.

Psalms collects 150 psalms. The date is from the development of language and subject matter, from the time of the Yahwistic document to that of the Priestly code. The collection was edited by a single hand.

Jeremiah begins:

the word of the lord came to the priest Jeremiah in the 13th year of the reign of Josiah, king of Judah (1).

Josiah was prince 640-09. The date of *Jeremiah* follows, prophecy began in 627.

Deuteronomy is the book of the law, and the book of the law is attested by *Kings*:

in the 18th year of the reign of Josiah, during repairs in the house of the lord, the high priest Hilkiah found the book of the law; Hilkiah gave it to the scribe Shaphan, who read it; Shaphan then read it to the king; when the king heard what was in the book, he rent his clothes;

the king called the men of Judah and of Jerusalem, all the priests and all the prophets, all the people, young and old; he read the entire book to them; and he made a covenant before the lord that they will obey the lord and will keep his law (II, 22-3).

The law was thus promulgated in 622. *Deuteronomy* was the first and in its time the only book of the law. Its date follows, the law promulgated in 622.

Ezekiel begins:

in the 5th year of the exile of king Jehoiachin the word of the lord came to the priest Ezekiel (1). Jehoiachin was exiled in 598. The date of *Ezekiel* follows, prophecy began in 593.

Joshua, Judges, Samuel, Kings ends with the fall of Judah. Judah fell in 587. Moreover, the norm of *Joshua, Judges, Samuel, Kings* is that of *Deuteronomy*, not that of the Priestly code. The date follows, the two generations after 587.

The collection of *Proverbs* was also edited by a single hand. From the development of language

and subject matter the date is, between *Deuteronomy* and the Priestly code.

Haggai begins:

in the 2nd year of king Darius, on the 1st day of the 6th month, the word of the lord came to the prophet Haggai (1).

Darius was the great king 522-486. The date of *Haggai* follows, prophecy began in 520.

The Priestly code is dated from the great assembly under Ezra.

The law was promulgated in 622. It did not arrest the ruin of the state. In 587 Nebuchadnezzar conquered Jerusalem, razed the house of the lord, and exiled the Jews to Babylon. Cyrus let the Jews return to Judah in 538. The house of the lord was rebuilt, and consecrated in 515. And then Ezra, in the great assembly, founded the first church.

Ezra was a Babylonian priest. He applied himself to the study of the law of god and to teaching it. He was a scribe expert in the law of Moses. He came to Jerusalem at the head of a large group of Babylonian Jews. He assembled the people as one man before the water gate, produced the book of the law of Moses, and after twenty-four days of reading, celebration, and prostration, eighty-five elders bound themselves in writing to the book of the law proclaimed by Ezra, and the rest of the people took the obligation to walk in the law of the lord, given by him to his servant Moses.

The people became a religious congregation. Public life was absorbed in the service of the sanctuary. Judah became the kingdom of priests and holy people.

Judah was at that time a part of the empire of the great kings. The population of the empire was some 25 million, more than one fifth of humanity. In the great assembly the holy people counted itself:

the entire congregation numbered 42 360, not counting their slaves, male and female, which were 7 337; they also had 245 singers, male and female, 736 horses, 245 mules, 435 camels, and 6 720 asses (*Nehemiah*, 7).

With or without the slaves, male and female, and the singers, male and female, and the horses, mules, camels, and asses, too, less than one four hundredth of the human population of the state,

less than one two thousandths of humanity.

The great assembly is described in *Nehemiah*. The solemnity of the occasion requires witnessing the day:

on the 24th day of the 7th month the Israelites assembled, fasting, in sackcloth, with earth on their heads (9).

It does not require witnessing the year. Still, *Nehemiah*, *Nehemiah* reports, was a cupbearer of Artaxerxes who came to Judea, and:

I was governor there from the 20th to the 32nd year of king Artaxerxes (5).

Presuming that Artaxerxes is Artaxerxes, prince 465-24, rather than Artaxerxes II, prince 404-358, the year of the great assembly is 445/33.

Ezra produced the book of the law of Moses. The book of the law of Moses is the pentateuch. The Priestly code composed the book of the law of Moses, or the pentateuch. The date of the Priestly code follows, the century before 445/33.

Job is dated from language and subject matter to the century after the exile, the century after 538.

In each case dated has to be only the writing – with one exception.

Ezra is the exception. He is not attested independently of the Hebrew holy writings either. The evidence of these writings for him – the witness is *Chronicles*, *Ezra*, *Nehemiah* – is not firmer than the evidence for the other prophets. The evidence of his deeds, however, is very much firmer. Ezra did not fix the future or the past, he fixed the present. From the reality of the first church the reality of the founder of the first church has to be inferred. And no one but Ezra founded the first church.

His is the date of the foundation, great assembly in 445/33.

Chronicles, *Ezra*, *Nehemiah* is also dated from the great assembly, the century after 445/33.

Ecclesiastes, too, pretends to be what it is not: the words of the son of David, king in Jerusalem (1).

From language and subject matter the date is, between *Chronicles*, *Ezra*, *Nehemiah* and *Daniel*.

And *Daniel* pretends to be what it is not:

in the 3rd year of king Cyrus of Persia an oracle was revealed to Daniel (10).

Namely:

I heard a voice, Gabriel, make this man understand; and he came to me and said, man, understand that this oracle is about the end (8). Alexander conquered the empire of the great kings, when his successors divided the empire, Ptolemy won Egypt, Seleucus won Asia, and for the following one and a half centuries the land which god had promised to his people was a borderland over which the successors of Ptolemy and Seleucus fought. And what the heavenly messenger makes this man understand (10-2) are the tribulations of the promised land under the successors of Ptolemy and Seleucus, identifiable unambiguously through Antiochus IV, prince 175-64. Hence the date of *Daniel*, the generation after 164. The date is corroborated by the fact that it is only with *Daniel* that immortality enters the Hebrew holy writings. About the end the angel makes this man understand:

at that time, many of those who sleep in the dust of the earth will awake, some to eternal life, some to eternal abhorrence (12).

And it is at this time, as Josephus reports, that the pharisees and the sadducees began quarreling over the soul, the pharisees said it is immortal, the sadducees utterly denied this (*War*, II, 8).

The dates of the not important writings are in the same way from events noted and not noted in them, Ashurbanipal's conquest of Thebes in 664, the fall of Nineveh in 612, the beginning and end of Josiah's reign in 640 and 609, and so on, and from the development of language and subject matter. *Nahum*, prophecy between 664 and 612. *Zephaniah*, prophecy between 640 and 609. *Habakkuk*, prophecy between 627 and 587. *Ruth*, the century before 538. *Lamentations*, the century after 587. *Zechariah*, prophecy began in 520. *Song of songs*, the century after 538. *Malachi*, prophecy in the century after 515. *Obadiah*, prophecy between 587 and c. 312. *Joel*, prophecy between 515 and c. 343. *Esther*, the century after 465. *Jonah*, prophecy in the century after 445/33.

And the seven centuries of development of the Hebrew holy writings indicate three major steps in the development of Judaism.

One. The first two centuries. The important particulars are,

Yahwistic document – the century before c. 791/50,

Amos prophecy between c. 791 and c. 750,
Hosea prophecy between those of *Amos* and *Isaiah*,
Isaiah prophecy began c. 750,
Micah prophecy between c. 750 and c. 697,
Psalms from the time of the Yahwistic document to that of the Priestly code,
Jeremiah prophecy began in 627.

In general, this is the time of Assyria.

In particular, this is the time of the Yahwistic document, the prophets, and psalms. By all three god is elevated above all creation. And by the prophets, as he elevated above the Assyrian foe ruining the state, he is charged with the promise of restoration of the ruined state.

Two. The next two centuries. These are the decisive centuries in the development of Judaism. The important particulars are,

Deuteronomy the law promulgated in 622,
Ezekiel prophecy began in 593,
Joshua, Judges, Samuel, Kings – the two generations after 587,
Proverbs between *Deuteronomy* and the Priestly code,
Haggai prophecy began in 520,
Priestly code the century before 445/33,
Job the century after 538,
Ezra great assembly in 445/33.

In general, this is the time of the fall of Assyria, of the successor kingdoms, and of the empire of the great kings.

In particular, this is the time from *Deuteronomy* to *Ezra*. *Deuteronomy* is the book of the law. But not only of the law. It is the book also of the events of the lawgiving, the lord giving the law to Moses, Moses giving the lord's law to the Hebrews. *Joshua, Judges, Samuel, Kings* then relates the events following upon the Mosaic lawgiving through the fall of Judah, the lord steering them throughout. The Priestly code then relates the events preceding the Mosaic lawgiving, the lord steering them throughout beginning with creation. The Priestly code also entrusts the guardianship of the law to the priesthood. This becomes the pentateuch. And Ezra makes the

pentateuch the constitution of Judaism.

At the time of *Deuteronomy* there is still the state of Judah. Josiah promulgates the law of the state. At the time of Ezra there has been no state of the Hebrews for one and a half centuries. Ezra promulgates the law of a religious congregation. God has delivered on his promise by restoring the ruined state in a church.

Three. The last three centuries. The important particulars are,

Chronicles, Ezra, Nehemiah – the century after 445/33,
Ecclesiastes between *Chronicles, Ezra, Nehemiah* and *Daniel*,

Daniel the generation after 164.

In general, this is the time of the last great kings, of Alexander, and of Alexander's successors.

In particular, little remains to be done. *Chronicles, Ezra, Nehemiah* traces the uninterrupted proper worship of the lord, in his temple, in Jerusalem, under his priests, the Levites, back to its institution by David. *Daniel* discovers that some will awake to eternal life, some to eternal abhorrence.

And the church has continued, counting back to Ezra, for twenty-four and a half centuries now. No state has come close to achieving such a feat.

The first major step in the development of Judaism, then, the Yahwistic document, the prophets, and psalms, although beginning somewhat earlier, falls mostly in the one century-odd from Tiglath-pileser III to Ashurbanipal.

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Again, in this one century-odd, the princes of Judah are,

Ahaz prince c. 738-26,
Hezekiah prince 726-697,
Manasseh prince 697-42,
Amon prince 642-0,
Josiah prince 640-09,

and the writings, beginning somewhat earlier, are,

Yahwistic document – the century before c. 791/50,
Amos prophecy between c. 791 and c. 750,
Hosea prophecy between those

of *Amos* and *Isaiah*,
Isaiah prophecy began c. 750,
Micah prophecy between c. 750 and c. 697,
Psalms from the time of the Yahwistic document to that of the Priestly code,
Nahum prophecy between 664 and 612,
Jeremiah prophecy began in 627.

Tiglath-pileser III reports:

I received the tribute of Ahaz of Judah.

This was the fourth time the Assyrian princes conquered the valley, including the Mediterranean littoral.

Adad-nirari, prince c. 1305-273, Shalmaneser, prince c. 1273-43, and Tukulti-Ninurta, prince c. 1243-06, conquered the valley, including the littoral. At that time there were no states on the littoral. Assyria then retreated.

Tiglath-pileser, prince 1115-076, conquered the valley again, including the littoral. There were still no states on the littoral. Assyria then again retreated.

Adad-nirari II, prince 912-891, Ashur-nasirpal II, prince 884-59, and Shalmaneser III, prince 859-24, conquered the valley again, including the littoral. And there were now states on the littoral. States had in the meantime appeared on the littoral, one of them the state of David. This state had then split into the two states of Israel and Judah. The Assyrian princes reduced the states on the littoral, including Israel, to tribute. Assyria then again retreated.

Tiglath-pileser III, prince 745-27, conquered the valley again, including the littoral. The states on the littoral had in the meantime recovered. Tiglath-pileser III reduced them all, including Israel and Judah, to tribute.

In Israel and Judah, however, in the meantime, the first native compositions had also appeared.

And as the development of Israel and Judah is part of the development of the state, and most particularly part of the development of Assyria, so the development of these native Hebrew compositions is part of the development of Israel and Judah, such as it is part of the development of the state, and most particularly part of the development of Assyria.

The first of these compositions is attested by the Yahwistic document. It comprises parts of *Genesis*, *Exodus*, and *Numbers*.

It begins with creation and relates events as god steers them through Moses. God's concern to steer events is steadily more unwaveringly fixed on one narrow line of creation. Earlier events thus require less detail, later events require more detail. Creation is quick, god makes heaven and earth, and man, in a couple of verses. Events then require some detail, the tree of good and evil, Cain and Abel, the flood, the tower of Babel. After that, and after some time, the tribulations of Abraham, Isaac, Jacob, and Joseph, as they are steered by god very intimately now, require much detail. Finally, again after some time, Moses requires the most detail, as he is steered by god more intimately still, to outwit pharaoh, to lead his people out of Egypt, to defeat pharaoh, to give his people the law – the oldest Hebrew code of laws – and to lead them toward the promised land.

The important developments are four. All four continue earlier developments. All four also break new ground, one of the four very decisively.

One. The code begins:
you shall have no other gods beside me (*Exodus*, 20).

That one god is elevated above all creation is not new with the Yahwistic document. In the other valley, this is first attested fourteen and a half centuries before the Yahwistic document with the composition inscribed on the Shabaka stone. Ptah gives birth to the gods, and from him everything comes. The elevation is complete five-odd centuries before the Yahwistic document with the worship of Aten under Amenhotep IV. You alone are god, there is no one beside you, you made the earth, you alone, you made all peoples, herds, and flocks. In this valley, this is first attested by Eanatum, sixteen and a half centuries before the Yahwistic document. Enlil is the lord of heaven and earth. And seven and a half centuries before the Yahwistic document, in *When on high*, the elevation is complete. Marduk is the greatest of the great gods, his command is supreme, his word shall never be wrong, no god shall ever go beyond the limits he set, he set up heaven, he set up the stars, he set up the year.

Creation is not new with the Yahwistic document either. Nor is creation much of a concern of the Yahwistic document.

Nor is it new with the Yahwistic document that there are no other gods. And not only because Aten already, you alone are god, there is no one beside you. Among the Hebrew writings themselves the successors of the Yahwistic document, *Deuteronomy*, in particular, will first assert that there are no other gods. In the Yahwistic document not only are there other gods. It is of the essence of the injunction, you shall have no other gods beside me, that there are other gods, and because there are those other gods, you shall not have those other gods.

The code thus begins: you shall have no other gods beside me, and ends as god, upon promising the promised land to his people, enjoins them explicitly:

when I deliver the people of the land to you, and
you drive them out, you shall not worship their
gods;

you shall make no covenants with those people
and their gods;

and those people shall not remain in your land,
lest you sin against me by honoring their gods
(23).

New is the injunction.

You shall not have those other gods. You shall not worship them. You shall make no covenants with them. You shall not honor them.

The political end of the injunction is clear.

The Yahwistic document is from the time of the first assault of the Assyrian princes on the Hebrew states and its aftermath. From the time when, under that assault, the Hebrew states did just that, had those other gods, worshiped them, made covenants with them, honored them. As three centuries later *Kings* will describe it: they set up shrines to the false gods of other peoples and made sacrifices and offerings abhorrent to the lord. On *Kings*'s count, of the 17 princes of Israel through the time of Tiglath-pileser III so did 16, of the 11 princes of Judah through that time so did 5.

The state had long ministered to the gods. The gods had long reciprocated. The rise of any one state had been steered by the god of that state. The princes of Babylon had conquered with the

power of Marduk, and with the wisdom of Marduk. The princes of Ashur had been led by Ashur, Ashur had brought all princes in their feet. Taking a stand against all other gods, god is taking a stand for his own states, Israel and Judah, against all other states.

In particular, if the Assyrian princes were laboring to count the Hebrews, too, among the people of Ashur, and the Hebrews were succumbing to these labors, god is taking a stand against that.

You shall have no other gods beside me.

But all by itself this injunction could not be a very firm ground on which god's states would reassert themselves against all other states, and against Assyria, in particular. It could not be very plausible that, because god enjoins you, you shall have no other gods beside me, you will have no other gods beside him. And the less plausible this could be, if, to judge by the fact that god's states were retreating before the states of those other gods, and before the state of Ashur, in particular, god himself was retreating before those other gods, and before Ashur, in particular. Thus, by the time of Ahaz the Yahwistic document had been composed for some time, and Ahaz yet continued to do as most of his predecessors in both Israel and Judah had done, set up shrines to the false gods of other peoples and made sacrifices and offerings abhorrent to the lord.

All by itself the injunction could not be a very firm ground on which god's states would reassert themselves against all other states, and against Assyria, in particular. The injunction, however, is only the first of the laws in the code of laws. And the injunction is vigorously reinforced by the code of laws.

Two. The code of laws also continues earlier developments. And it also breaks new ground.

The law had developed for fifteen centuries. Urukagina had discovered the law fifteen centuries before the Yahwistic document. Thirteen centuries before the Yahwistic document Ur-Nammu had promulgated the first code of laws. The state of Ur, the state of the entire valley, had for one century been the first state under the law. There had then been the second code of laws, the code of Lipit-Ishtar. Then the third code of laws, the code of Dadusha. Then, nine and a half

centuries before the Yahwistic document, Hammurabi had promulgated the greatest code of laws. The state of Babylon, once again the state of the entire valley, had for one and a half centuries been the first state with a population abiding by the law, some one eleventh of humanity. Then there had been the descendants of the greatest code. The Hittite laws, promulgated by Telipinu, seven centuries before the Yahwistic document. The Assyrian laws, promulgated by Tiglath-pileser, three centuries before the Yahwistic document.

The code of the Yahwistic document is the next descendant.

It is not an advance in the development of the law.

It has some 50 laws.

It begins:

and god spoke these words,

I am the lord your god who brought you out of Egypt where you were in bondage (20).

This is the preamble. After the preamble, the first ten laws follow, the decalogue, the ten commandments:

you shall have no other gods beside me;

you shall not make images of what is in the heaven, or on the earth, or in the waters under the earth, and you shall not worship them; for I am the lord your god, and I am a vengeful god; I visit the guilt of the parents on the children in the third and the fourth generation of those who reject me, and I bestow favors to the thousandth generation on those who love me and follow my commandments;

you shall not swear falsely by the name of the lord your god;

remember the seventh day and keep it holy, for it is the day of the lord your god;

honor your father and your mother, so that you may long endure in the land that the lord your god will give you;

you shall not murder;

you shall not commit adultery;

you shall not steal;

you shall not bear false witness against your neighbor;

you shall not covet your neighbor's house, or wife, or slave, or ox, or ass, or anything else of his (*id.*).

The fundamental character of these first ten laws is then demonstrated:

all the people witnessed thunder and lightning, the blare of a horn, and smoke issuing from the mountain (*id.*).

Then the rest of the laws follow. Among them: when you buy a Hebrew slave, he shall serve you six years, in the seventh year he shall go free; when a man sells his daughter as a slave, she shall not be freed as male slaves are; if she does not please her master, he shall let her be redeemed; he shall not sell her to others, for he broke faith with her; if he gives her to his son, he shall deal with her as is done with free maidens; if he marries another, he shall not withhold from her food, or clothes, or her conjugal rights; if he fails her in these three ways, she shall go free without payment;

who kills a man shall be killed; if it was not by design, but came about by an act of god, I will assign to you a place to which he can flee (21); who hurts his father or his mother shall be killed (*id.*);

when men fight, if one of them pushes a woman with a child, and she loses the child, but there is no other damage, he shall pay what the woman's husband wants; but if there is other damage, it shall be life for life, eye for eye, tooth for tooth, hand for hand, foot for foot, burn for burn, wound for wound;

when a man strikes his slave, if the slave loses his eye, he shall let the slave go free on account of the eye; if he knocks out his tooth, he shall let him go free on account of the tooth (*id.*);

when an ox gores a man or a woman to death, the ox shall be stoned and the flesh shall not be eaten, the owner of the ox shall not be punished; but if the ox is a known gorier, and the owner did not restrain it, and it killed a man or a woman, the owner shall also be killed (*id.*);

when a man gives his ass, or ox, or sheep, or other animal to another man, and it dies, or is injured, or is carried off, and no one saw it, the two shall swear before the lord to decide whether one of them is a thief (22);

when a man seduces a virgin for whom the bride price has not been paid, he shall pay the bride price and take her for his wife; if her father will not give her to him, he shall pay the father

the bride price for virgins; you shall let no witch live; who lies with a beast shall be killed; who sacrifices to a god other than the lord your god shall be banished (*id.*);

you shall not molest the widow and the orphan; for if you do, I will hear them cry out to me, and I will send my angel to put you to the sword, and your wives and children will then be widows and orphans (*id.*);

six days you shall work, but on the seventh day you shall not, so that your ox and ass may rest, and your slave and the stranger among you may have respite (23);

you shall not offer the blood of my sacrifice with anything leavened; and the fat of my offering shall not be left lying until morning;

the first choice fruits of your soil you shall bring to the house of the lord your god;

you shall not boil a kid in its mother's milk (*id.*).

And god concludes:

and I am sending an angel to lead you to the land that I will give you; listen to him and obey him; he will not pardon your offences for my name is in him; but if you obey him and do all that I say, I will be the foe of your foes (*id.*).

In his preamble Hammurabi reports: Anu and Enlil, to bring well-being to the people, commanded Hammurabi to make justice prevail in the land. In his preamble god reports: I am the lord your god who brought you out of Egypt where you were in bondage. In his concluding exhortation Hammurabi urges: let anyone who is oppressed, let anyone who has a grievance, listen to my words, and may my words redress his grievance, may he understand the law, and may he be content. In his concluding exhortation god urges: I am sending an angel to lead you to the land that I will give you; obey him; he will not pardon your offences for my name is in him; but if you obey him and do all that I say, I will be the foe of your foes.

It is not the end of this code of laws to make justice prevail in the land. It is not its concern that he understand the law either. Hammurabi's code also begins with laws establishing procedure, and all its laws rest on procedure. In this code of laws there is no procedure. There are no witnesses, there is no proof, there are no judges,

there is no investigation, there is no verdict, there are no contracts. There is not too much discrimination in this code of laws either. You shall let no witch live. Who lies with a beast shall be killed. And the fat of my offering shall not be left lying until morning.

The code of the Yahwistic document is not an advance in the development of the law. It yet breaks new ground, too.

Many of the laws regulate much the same relations as earlier laws have regulated them, murder, theft, adultery, buying a slave, selling a daughter, losing an eye, knocking out a tooth, an ox goring someone to death, an ox who is a known gorer, lending an ass, seducing a virgin, lying with a beast, molesting the widow and the orphan. More generally, as earlier codes of laws have done, so this code of laws protects property, including the family, including the individual.

But very much more vigorously, and for the first time, this code of laws protects god. New in this code of laws is the protection of god, and very vigorous protection of god. Four of the ten commandments protect god, the first four. The blood of my sacrifice is protected. The fat of my offering is protected. And the first choice fruits of your soil you shall bring to the house of the lord your god.

New is thus also that god himself is the law-giver. At the command of Marduk, and on the authority of Anu and Enlil, yet the prince, Hammurabi, has proclaimed the law. As Ur-Nammu has earlier, and Lipit-Ishtar, and Dadusha. God himself now proclaims the law.

New is thus also that god gives the law to you. All of Hammurabi's laws are concerned with a man. As are Ur-Nammu's laws, Lipit-Ishtar's, and Dadusha's, and Tiglath-pileser's after Hammurabi's. Most of god's laws are concerned with you.

Hammurabi's laws are thus conditionals. As are Ur-Nammu's, Lipit-Ishtar's, Dadusha's, Tiglath-pileser's. If a man does such-and-such, then such-and-such should be the consequences. God's laws are injunctions. You shall not, you shall not, you shall not, you shall, you shall not, you shall not.

The punishments are somewhat sterner. I will send my angel to put you to the sword. And I

visit guilt in the third and the fourth generation. Altogether new, however, are the rewards. You are for the first time promised rewards for following the law. I bestow favors to the thousandth generation.

Nor does this code of laws indicate in any way that it is concerned to obtain your consent. It indicates in every way that it is concerned to obtain your obedience. And that it does so explicitly is also new.

The injunction, you shall have no other gods beside me, is thus vigorously reinforced by the code of laws. The law protects god, god himself proclaims the law, god gives the law directly to you, in injunctions, with rewards to the thousandth generation, demanding explicitly your obedience.

The end of the code of laws – beginning with the very fact that it is a code of laws, and ending with the promise: I will be the foe of your foes – is clearly political.

Thus, the injunction, you shall have no other gods beside me, is vigorously reinforced. And thus the ground – the code beginning with the injunction – on which god's states, Israel and Judah, would reassert themselves against all other states, and against Assyria, in particular, is firmer. And yet, still not very firm. The state had rendered its power to the law, and not the other way around. Powerful states, having smitten all their foes, had made the law powerful. The great state of Ur had made the law powerful. The great state of Babylon had made the law powerful. It could not be very plausible that, because god himself gives you the law, you, in your state smitten by its foes, will obey the law. It could not be very plausible that, not the state would render its power to the law, but the law would render its power to the state. And god's states were both feeble, smitten by their foes, and becoming feebler. Thus, not only did the princes of both Israel and Judah keep doing what was displeasing to the lord. The princes of both Israel and Judah never – until Josiah – promulgated the law, and either god's law or any other. *Kings*, eager as this witness is to witness god in everything, never witnesses god's law, or any other law, in either Israel or Judah – before Josiah.

The Yahwistic document attests the oldest

Hebrew code of laws.

Josiah is two and a half centuries after the Yahwistic document, and the law promulgated under Josiah is the law of *Deuteronomy*, the next Hebrew code of laws.

And there is no evidence that the oldest Hebrew code of laws, the code of the Yahwistic document, was ever promulgated. This oldest Hebrew code of laws is the law of a literary composition. There is no evidence that this oldest Hebrew code of laws ever was, in fact, law any more than, say, Plato's *Laws* ever were, in fact, law.

The code of laws beginning with the injunction, you shall have no other gods beside me, still could not be a very firm ground on which god's states would reassert themselves against all other states, and against Assyria, in particular. In his concluding exhortation, however, god urges: I am sending an angel to lead you to the land that I will give you; obey him; and if you obey him and do all that I say, I will be the foe of your foes. The code – and thus the ground on which god's states would reassert themselves – is vigorously further reinforced by god's promise.

Three. God adds:

I will set your borders from the sea of reeds to the sea of Philistia and from the wilderness to the Euphrates (*id.*).

The sea of reeds is the Red Sea, the sea of Philistia is the Mediterranean, the wilderness is Sinai, the Euphrates is the Euphrates. Just as three centuries later *Kings* will set the borders of Solomon.

The countries and peoples under the state had long been bestowed by the gods. In the other valley, twelve centuries before the Yahwistic document, the middle kingdom had begun with Montu leading the countries of Nubia in the prince's feet. So the middle kingdom had continued, and so throughout the new kingdom Amun had brought all lands in the prince's feet. In this valley, fifteen centuries before the Yahwistic document, Enlil had given all lands to Lugalzagesi. Then he had given them to Sargon and his successors. He then had given them to the princes of Ur. Marduk had given them to the princes of Babylon. Ashur had given them to the princes of Ashur.

New is that the promised land is promised. That god bestows it prospectively. And this twofold.

First, he bestows it prospectively with respect to the time of his own lawgiving, as the Yahwistic document relates it. He gives you the law, you obey, and his angel will then lead you to the promised land.

Second, he bestows it prospectively with respect to the time of writing. At the time of writing the borders of the two Hebrew states were set rather far from the sea of reeds, the wilderness, and the Euphrates.

The time of writing is, again, the time when the Assyrian princes Adad-nirari II, Ashur-nasir-pal II, and Shalmaneser III conquered the entire valley of the two rivers, including the Mediterranean littoral, for the third time and its aftermath. The time of writing is the time of the first assault of the Assyrian princes on the two Hebrew states and its aftermath.

The borders which god promises you are thus all by themselves a challenge most particularly to Assyria.

More daringly still, god, in fact, proposes to divide the earth into three. On one side, beyond the wilderness, Egypt. On the other side, beyond the Euphrates, Assyria. In the middle, from the wilderness to the Euphrates, god's state.

New is also that god promises to clear the promised land for you:

the Amorites, the Perizzites, the Canaanites, the Hivites, and the Jebusites I will annihilate; I will not drive them before you in a single year, lest the land became desolate, and wild beast multiplied and molested you; I will drive them out before you gradually as you increase and take over the land (*id.*).

That the end of the promise of the promised land is political cannot have been more explicit.

The ground on which god's states, Israel and Judah, would reassert themselves against all other states, and against Assyria, in particular – the injunction, you shall have no other gods beside me, reinforced by the code of laws, and reinforced further by the promise of borders from the wilderness to the Euphrates – is thus, prospectively, very firm. Indeed, if god delivers on his promise, the ground is unshakable.

Four. This is how god proposes to deliver on his promise:

I am sending an angel to lead you to the land that

I will give you;
and I will send forth my terror before you;
and I will send a plague ahead of you (*id.*).

Adad-nirari II, Ashur-nasirpal II, and Shalmaneser III campaigned from one end of the valley to the other annually for eight decades, they fielded tens of thousands for six decades, they discovered cavalry, they mustered 50 000. This is what at the time of writing delivered the land from the Euphrates to the wilderness to one state or another. Much the same had delivered that land to one state or another earlier. At the time of writing the same delivered all other lands to one state or another. Much the same had delivered all other lands to one state or another earlier.

It could not be very plausible that an angel, god's terror, and a plague would deliver the land from the wilderness to the Euphrates to you.

This is how the Yahwistic document proposes to make it plausible.

God has made heaven and earth. He has made man. He has destroyed the tower of Babel. He has sent the flood. None of this is new, gods have been doing such things for a long time.

The Yahwistic document, however, relates also the tribulations of Abraham, steered intimately by god, including also god's promise to Abraham: I will make you a great nation (*Genesis*, 12). It relates also the tribulations of Isaac, also steered intimately by god, including also god's promise to Isaac: I will make your heirs as numerous as the stars (26). It relates also the tribulations of Jacob, also steered intimately by god, including also god's promise to Jacob: kings will issue from your loins (35). It relates also the tribulations of Joseph, also steered intimately by god, including also, dramatically, god's failure to make a grand promise to Joseph. It relates also the tribulations of Moses, steered very intimately by god, to outwit pharaoh, to lead the Hebrews out of Egypt, to defeat pharaoh, to give the Hebrews the law which god gives him to give the Hebrews – this is the law which god gives you – and to lead the Hebrews toward the promised land, the angel leading him leading the Hebrews.

The Yahwistic document has provided the

injunction, you shall have no other gods beside me, reinforced by the code of laws, reinforced by the promise of the promised land, with a past. If the relation of this past is history, the Yahwistic document has provided the two Hebrew states, Israel and Judah, with their history. If the relation of this past is history, it is a new kind of history. And if the relation of this past is history, it is with this new kind of history that the Yahwistic document most decisively breaks new ground.

History had begun with the Sumerian prince list, twelve centuries before the Yahwistic document. And history had continued to advance in these twelve centuries. More prince lists had been compiled, chronicles had been written, more chronicles, better chronicles. The advance had culminated with the Assyrian princes. By the time the Yahwistic document was composed, the Assyrian princes had established the record of the past six centuries – counting from the Yahwistic document's contemporary Adad-nirari III back to Ashur-bel-nisheshu – steadily more firmly. They had established the record of these centuries in steadily greater detail, steadily more systematically researched, steadily more deliberately.

Literary compositions had also developed in these centuries. Many of these had been about the gods. Among these, at the time of the Sumerian prince list, there had been the compositions in which Gilgamesh battles the bull of heaven and goes to the netherworld. Later on, there had been the epic *Gilgamesh*, the first composition about the making of men, *When on high*. Three centuries before the Yahwistic document, there had been the *Marduk prophecy*.

And it could not be very plausible that the Yahwistic document's relation of that past steered by god is history either.

There had been all the prince lists and chronicles recording the deeds of the princes on earth. There had also been all the compositions relating the deeds of the gods in heaven. The Yahwistic document relates the deeds of god on earth. Lacking great deeds of princes, it relates great deeds of patriarchs. These are great because they are inseparable from the great deeds of god. The great deeds of the princes had been first and foremost conquest. The great deeds of the patriarchs are first and foremost being promised

conquest by god. The great deeds of god are first and foremost promising conquest.

The intense presence of god on earth is decisively new.

Decisively new is also god's concern with very little, with but one narrow line of creation, with nothing but Abraham at the time of Abraham, then nothing but Isaac at the time of Isaac, then nothing but Jacob at the time of Jacob, then nothing but Joseph at the time of Joseph, then nothing at all for some time, then nothing but Moses at the time of Moses.

It could not be very plausible that this is history.

The princes had also described the surface of the earth steadily better.

This is how the Yahwistic document describes the surface of the earth:

Cush begot Nimrod, he was the first man of might on earth, he was a mighty hunter, the mainstays of his kingdom were Babylon, Uruk, and Akkad in the land of Shinar; from that land Ashur came forth and built Nineveh, Rehoboth, Calah, and, between Nineveh and Calah, Resen, which is a great city;

Mizraim begot the Ludim, the Anamim, the Lehabim, the Naphtuhim, the Pathrusim, the Casluhim, and the Capthorim, from whom the Philistines came forth;

Canaan begot Sidon, his firstborn, Heth, the Jebusites, the Amorites, the Girgashites, the Hivites, the Arkites, the Sinites, the Arvadites, the Zemarites, and the Hamathites; after that the Canaanites spread out from Sidon to Gerar, near Gaza, and as far as Sodom, Gomorrah, Admah, and Zeboiim, near Lasha;

these are the descendants of Ham, by their languages, countries, and peoples (*Genesis*, 10);

Arpachshad begot Shelah;

Shelah begot Eber;

Eber begot two sons; the first was called Peleg, because in his days the earth was divided; his brother was called Joktan;

Joktan begot Almodad, Sheleph, Hazarmaveth, Jerah, Hadoram, Uzal, Diklah, Obal, Abimael, Sheba, Ophir, Havilah, and Jobab; their lands extended from Mesha as far as Sephar, the hill country in the east;

these are the descendants of Shem, by their lan-

guages, countries, and peoples (*id.*).

The Yahwistic document is very much more like the earlier literary compositions than it is like the earlier chronicles.

Mursili had destroyed Babylon and taken Marduk to Hatti. Tukulti-Ninurta had destroyed Babylon and taken Marduk to Ashur. Shutruk-Nahhunte had destroyed Babylon and taken Marduk to Elam. In the *Marduk prophecy*, Marduk reports:

I am Marduk, the great lord, the watcher who watches, who roams the mountains, who watches carefully, who roams from the rising sun to the setting sun, back and forth, all the lands (*id.*);

I commanded that I go to the land of Hatti;

... to the land of Ashur;

I commanded that I go to the land of Elam, I myself commanded it (*id.*).

It could not be very plausible that the Yahwistic document's relation of that past steered by god is history either.

The Yahwistic document, then, breaks new ground.

There is the injunction, you shall have no other gods beside me. The injunction is reinforced by the code of laws, proclaimed by god himself, given by god directly to you. The injunction and code are reinforced further by god's promise to set your borders from the wilderness to the Euphrates. And the injunction, code, and promise are reinforced further by the relation of their past.

That the end is political is clear.

It is clear also that the end may encounter difficulties. Political difficulties.

The injunction, even when reinforced by the code, could not be a very firm ground on which the Hebrew states would reassert themselves against all other states, and against Assyria, in particular. It could not be very plausible that you will have no other gods beside god. Not if god's states were retreating before the states of those other gods, and before the state of Ashur, in particular. It could not be very plausible that the law would render feeble states powerful. That it would render states presently smitten by their foes powerful.

God's promise is different. If god delivers on his promise, the Hebrew states will not only

reassert themselves against all other states, and against Assyria, in particular. They will reassert themselves very powerfully. Upon the annihilation of the Amorites, the Perizzites, the Canaanites, the Hivites, and the Jebusites, god's state will be one of the only three states on earth, certainly not less powerful than Assyria.

Yet, it is most of all god's promise that may encounter difficulties. Political difficulties.

Never mind the Amorites, Perizzites, Canaanites, Hivites, and Jebusites. God's angel, his terror, and his plague may encounter in the promised land the Assyrian princes. Then the Babylonian princes. Then the great kings. Then Alexander and his successors. Then Rome. Then the caliphs. Then lesser Muslim princes. Then lesser Christian princes. Then again lesser Muslim princes. Then the Ottoman empire. Then Britain.

God will not deliver on his promise. Counting back to the Yahwistic document, for twenty-eight and a half centuries now.

It will turn out, however, that the Yahwistic document's relation of that past steered by god is, after all, history. And this new kind of history will overcome all difficulties.

Against the Assyrian princes, and the Babylonian princes, and the great kings, the successors of the Yahwistic document will continue writing that new kind of history. And it will turn out to be the firmest of grounds, that new kind of history. No state will be built on it. But a church will be. Then another and very much more powerful church will be. And then yet another church, as powerful as the second, will be.

Deuteronomy will relate the events of the Mosaic legislation in more detail. *Joshua*, *Judges*, *Samuel*, *Kings* will relate the events after the Mosaic legislation. The Priestly code will relate in more detail the events before the Mosaic legislation and once again the events of the Mosaic legislation.

By the first Christian century it will not just become plausible that this is history. It will be argued that this is the only true history. Josephus, the priest of the temple, writes:

anyone can see that the historians invented themselves their histories; Ephorus exposes the lies of Hellanicus; Timaeus exposes the lies of Ephorus; later writers expose the lies of Ti-

maeus; everyone exposes the lies of Herodotus; even Thucydides is accused of lies; our truly trustworthy books contain the record of all time.

And the fathers of the church will make that history steered by god history exclusively. Eusebius in *The history of the church*. Augustine in *The city of god against the pagans*. Orosius in the *Histories against the pagans*, written, Orosius reports: at your bidding, most blessed father Augustine (I, pr.).

That history steered by god will remain history unquestionably until Spinoza, in the seventeenth Christian century. The real history, the one steered by the princes, annihilated by that history steered by god, will not be recovered until the late nineteenth Christian century.

Judaism – if Judaism is the first church – does not begin with the Yahwistic document. All by itself the Yahwistic document is but a literary composition. There is no evidence that its injunction, you shall have no other gods beside me, was obeyed. By the princes of Israel and Judah or by anyone else. There is no evidence that its code of laws was promulgated. Or that any law was promulgated in the Hebrew states before Josiah. Nor could it be plausible that the borders of the Hebrew states would be set from the wilderness to the Euphrates. Nor could it be plausible that that past steered by god is history.

Nor is there the temple in the Yahwistic document. Nor are there the priests of the temple in the Yahwistic document.

Judaism – if Judaism is the first church – the successors of the Yahwistic document built. They yet built it on the Yahwistic document. On god's injunction, god's code of laws, god's promise, and most of all that past steered by god.

And if they continued writing that past steered by god, and that past steered by god became history, and the only true history, and Judaism was built on that history, Judaism poses the fundamental problem of how and why it became plausible that that past steered by god is history, and how and why that history became the foundation on which Judaism was built.

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Ahaz, then, is contemporary with Tiglath-

pileser III.

Tiglath-pileser III reduced Judah to tribute. As he reduced also Israel.

Ahaz set up shrines to the false gods of other peoples and made sacrifices and offerings abhorrent to the lord. As his predecessors had done.

Ahaz was succeeded by Hezekiah. Hezekiah is contemporary with Shalmaneser V, Sargon II, and Sennacherib.

Shalmaneser V began the final destruction of Israel. Sargon II completed it. He reports:

I conquered Samaria, and I took 27 290 of its people; I set up my governor over it.

Judah remained the tributary of the Assyrian princes. Sennacherib reports:

Hezekiah did not submit to my yoke; I took 200 150 people from his cities; horses, mules, asses, camels, cattle, and sheep without number; I shut him in Jerusalem like a bird in a cage; and he gave me 30 talents of gold and 800 talents of silver; he gave me gems, antimony, and ivory; he gave me his daughters, his wives, and his musicians.

Kings corroborates the Assyrian prince:

Sennacherib, the king of Assyria, imposed on king Hezekiah a tribute of 300 talents of silver and 30 talents of gold (II, 18).

Kings adds also:

and Hezekiah cut down the doors and the doorposts of the temple of the lord, and gave them to the king of Assyria (*id.*).

Hezekiah, however, did not set up shrines to the false gods of other peoples or make sacrifices and offerings abhorrent to the lord. *Kings* writes: Hezekiah abolished the shrines, smashed the pillars, and cut down the sacred posts;

there was no one like him among the kings of Judah before or after; he clung to the lord; he never turned away from the lord; he kept the commandments of the lord given by him to Moses;

and the lord was always with him; he was successful in everything; he rebelled against the king of Assyria and did not serve him (*id.*).

Other than the doors and the doorposts.

In the meantime the prophecies of the first prophetic books had appeared, *Amos*, *Hosea*, *Isaiah*, *Micah*. *Amos* dates its prophecy to the time shortly before Ahaz. *Hosea* dates its proph-

ecy to the time shortly before Ahaz and through the reigns of Ahaz and Hezekiah. *Isaiah* dates its prophecy a little later in that time and also through the reigns of Ahaz and Hezekiah. *Micah* dates its prophecy a little later still in that time and also through the reigns of Ahaz and Hezekiah. By the time of Hezekiah also a substantial number of the psalms, which will be collected in *Psalms*, had been composed.

There was no one like Hezekiah among the kings of Judah before or after.

And the accumulation of these Hebrew writings can explain Hezekiah. Why there was no one like him among the kings of Judah before or after.

The oldest prophetic book is *Amos*. And *Amos* also breaks new ground, and more decisively than the Yahwistic document.

Amos was a breeder of sheep from Tekoa, *Amos* reports (1). Tekoa is 15 km south of Jerusalem. And in *Amos*, Amos, the breeder of sheep from Tekoa, roars:

the lord roars from Zion, thunders from Jerusalem (*id.*);

listen, Israelites;

because of all the peoples on earth I was concerned for you alone, I will punish you for your wickedness (3);

can misfortune befall a city if the lord did not send it (*id.*)?

And *Amos* has made this – that because, in general: can misfortune befall a city if the lord did not send it? it follows, in particular: I will punish you for your wickedness – substantially more plausible.

In *Amos* god is elevated above all creation substantially more explicitly:

he made the Pleiades and Orion,
he brightens darkness into dawn
and darkens day into night,
he summons the waters of the sea
and pours them down on the earth;
his name is the Lord;
and it is he who destroys the cities,
he who wipes them out (5).

His name is the Lord. He made the Pleiades and Orion. He brightens darkness into dawn and darkens day into night. He summons the waters of the sea and pours them down on the earth. And it is he who destroys the cities, he who wipes them

out.

This chain of events caused by him – he made the stars, he makes day and night, he makes rain from the waters of the sea, and he destroys the cities – is affirmed for the first time in *Amos*. And any of these events caused by him has to be rather more plausible because it is connected in that chain with the other events caused by him. It has to be more plausible that he makes day and night, if he made the stars. It has to be more plausible that he makes rain, if he makes day and night, and he made the stars. And most of all it has to be more plausible that he destroys the cities, if he makes rain, he makes day and night, and he made the stars.

And what most of all the lord roars about from Zion, thunders about from Jerusalem, is not the making of the stars, or the making of day and night, or the making of rain. It is the destruction of the cities. *Amos* discovered the cursing of all nations, nation after nation after nation. The lord thus roars from Zion, thunders from Jerusalem:

thus said the lord,

I will send down fire on Damascus (1);

I will send down fire on Gaza (*id.*);

I will wipe out Ashdod and Ashkelon (*id.*);

I will destroy Ekron, the Philistines will perish
to a man (*id.*);

I will send down fire on Tyre (*id.*);

I will send down fire on Teman, it will devour
Bozrah (*id.*);

I will send down fire on Rabbah (*id.*);

I will send down fire on Moab, it will devour
Kerioth (2);

I will send down fire on Judah, it will devour
Jerusalem (*id.*).

The lord's weapon of choice is fire. The Assyrian princes, for their part, have burned, razed, and destroyed. And if, burning, razing, and destroying, the Assyrian princes have conquered all those cities, Damascus, Gaza, Ashdod, Ashkelon, Ekron, the Philistines, Tyre, Teman, Bozrah, Rabbah, Moab, Kerioth, Judah, and Jerusalem – and they have, and Tiglath-pileser III does list explicitly, among some hundreds of other cities: Moab, . . . , Ashkelon, Judah, Edom, . . . , Gaza, . . . , Tyre – it has to be rather plausible that all those cities will be conquered again.

Moreover, when *Amos* prophesies, in particu-

lar:

thus said the lord,

an enemy will fall upon your land, will strip you
of your strength, will plunder your palaces (3),
an enemy had already fallen upon your land,
stripped you of your strength, and plundered your
palaces.

One millennium later, the amoraim will put destruction next to destruction, consolation next to consolation. And *Amos* first puts consolation after the destruction. *Amos* concludes:

thus said the lord,

and I will set up again the fallen house of David,

I will repair the walls, I will raise it up again,

I will built it firm as it was in the days of old (9).

And the fallen house of David is in *Amos* also: the house of Isaac (7), and: the house of Jacob (3), and: the house of Joseph (5).

Amos has thus also first connected in a single chain the nearer past of the states of Israel and Judah and the remoter past related by the Yahwistic document.

Thus, there is no law in *Amos*.

However, you shall have no other gods beside me – and *Amos* has elevated him above all creation substantially more explicitly. I will set your borders from the wilderness to the Euphrates – and *Amos* has reaffirmed the promise, more cautiously, yet once again rather more plausibly: I will build the fallen house of David firm as it was in the days of old.

Most important, that past steered by god *Amos* has connected explicitly to the state of David. The means of god's steering have also become the more common means of the princes, the destruction of cities. Hence *Amos* has discovered also the cause of the destruction of cities, in general, and thus also of the present ruin of Israel and Judah, in particular: can a misfortune befall a city if the lord did not send it? Hence also, still more particularly, *Amos* has discovered the immediate cause of the present ruin of Israel and Judah: your wickedness.

That past steered by god has begun acquiring its political coherence.

Hosea, next, lacks the generality of *Amos*. It yet adds particularity.

Hosea begins with consolation:

the people of Israel shall be like the sand which

cannot be measured or counted;
the people of Judah shall assemble together under
one head over them (1).

Beginning to end, however, *Hosea* is most of
all about destruction. Beginning to end the lord
condemns you for your wickedness and tells you
that he is punishing you accordingly:

hear the lord, Israelites;

the lord has set himself against you because there
is no honesty and no goodness among you;
lies, murder, theft, adultery follow on one
another; crime follows on crime;

and because of this you will stumble by day, your
children will stumble by night; I will destroy
your kin;

you are destroyed because of your disobedience;
I reject you because you have rejected the
teachings of the lord your god; and the more
your children increase, the more will I reject
them, because they will continue to sin against
me (4).

And the means of your destruction are the
Assyrian princes. The Assyrian princes are not
noted explicitly in *Amos*, but the Assyrian princes
are everywhere in *Hosea*. Clearly, Tiglath-pileser
III has in the meantime descended on you.

Hosea thus prophesies:

they shall eat unclean food in Assyria (9);
they shall be taken to Assyria, tribute to its king
(10);

the people shall be taken to Assyria, tribute to its
great king (11).

Thus, most important, in *Hosea* Assyria has
become the means of god's wrath at your wicked-
ness. *Amos* has discovered the general cause: can
a misfortune befall a city if the lord did not send
it? – and in *Hosea* Assyria has become the means
of that general cause. *Amos* has discovered also
the immediate cause of the ruin of Israel and
Judah: your wickedness – and in *Hosea* that
immediate cause is connected explicitly to the
general cause, and through its means:
the Assyrian shall be their king because they did
not repent (*id.*).

With *Hosea* begins the rediscovery, or inde-
pendent discovery, of what the *Marduk prophecy*
has first discovered. Marduk was taken as booty
to Hatti, to Ashur, to Elam. Not so. Marduk had
commanded it. Marduk, the great lord, the

watcher who watches, who roams the mountains,
who watches carefully, who roams from the rising
sun to the setting sun, back and forth, all the
lands, himself had commanded it.

Assyria, too, is now assimilated into that past
steered by god.

And if Tiglath-pileser III is the means of god's
wrath at your wickedness, clearly so will be
Shalmaneser V, and Sargon II, and Sennacherib,
and as long as god's wrath at your wickedness
continues.

Isaiah, next, has both the generality of *Amos*
and the particularity of *Hosea*.

Isaiah is massive. Other than the collection of
Psalms, it is the largest of the writings collected
in the Hebrew holy scriptures. And its importance
is indicated not only by its bulk. It is indicated
also by its repeated amplification. It is in 66
chapters. The earlier are chapters 1-39. Some two
centuries after the composition of those – or most
of them – it was amplified with chapters 40-55.
Some two generations after the composition of
those, it was amplified with chapters 56-66.

Isaiah begins:

hear, oh heaven! hear, oh earth!

for the lord has spoken;

I reared children and brought them up,

and they have rebelled against me;

an ox knows its master, an ass knows its master,

Israel does not know his;

oh sinful nation! oh wicked people!

oh brood of sinners! oh depraved children!

they have forsaken the lord,

they have rejected the holy one of Israel,

they have turned their backs on him (1).

The lamentation continues at some length, its
focus unwaveringly on the causal relation estab-
lished by *Amos*, more explicitly by *Hosea*, and
most explicitly now by *Isaiah*:

Judah has fallen because by word and by deed
they have insulted the lord (3).

The authenticity of the prophecy is then wit-
nessed:

in the year of the death of king Uzziah, I saw the
lord, seated on a throne, high and exalted, the
skirt of his robe filling the temple, six-winged
seraphim standing in attendance (6).

High and exalted, six-winged seraphim standing
in attendance. He is then exalted further:

holy! holy! holy!
 the lord of hosts!
 his presence fills the earth (*id.*).

His presence fills the earth.

Much more important, he is now the lord of hosts. In particular, he is not only the lord of the Israelite host, he is the lord of the Assyrian host.

Because, and just as important, the lord of hosts has a plan. The plan is in two steps. And to the first step essential is the Assyrian host. To the second step essential is the Israelite host.

First:

the lord will bring against you the king of Assyria
 and his multitude, he will overflow your land,
 he will sweep over you like a flood (8).

As the lord already has, brought against you the king of Assyria and his multitude, and the king of Assyria and his multitude already has, overflowed your land, and swept over you like a flood.

Second, however:

these are the words of the lord of hosts;
 the mighty god has a plan;
 the eternal father is planning grace;
 a king will be born, great in battle,
 and great will be again the domain,
 boundless the peace, of the throne of David (9).

This is the plan of the lord of hosts. First, he will bring against you the king of Assyria and his multitude. Then, second, a king will be born, great in battle, and great will be again the domain of the throne of David.

The lord reaffirms:

Assyria is the rod of my anger;
 it is I who sends her forth against the peoples
 who displease me to take them as booty and
 seize their treasures (10).

In general:

all kings are my captains (*id.*),
 hence once again in particular:

as I have taken all kingdoms whose gods are
 greater than those of Jerusalem and Samaria,
 will I not take Jerusalem and her false gods as
 I took Samaria and her false gods (*id.*)?

Which also dates this part of the prophecy after the fall of Samaria. And again:

but the lord has a plan;

when he has carried out his plan for mt Zion and
 Jerusalem, he will punish the arrogance of the
 king of Assyria;

for the king of Assyria thought, I am very clever,
 by my own hand, he thought, I have erased all
 borders, plundered all countries, carried off all
 peoples;

but can an ax boast against the hand that wields
 the ax?

assuredly the lord of hosts will waste him away;
 have no fear of the Assyrian;

very soon my wrath at you will have spent itself
 and will turn against him (*id.*);

and again a shoot will grow out of the stump of
 Jesse (11).

Jesse was the father of David. And:

the spirit of the lord will be with him;

he will assemble the banished of Israel;

he will gather the dispersed of Judah (*id.*).

This is the plan.

Isaiah then turns to the cursing of all nations,
 nation after nation after nation, and the cursing is
 not only much more elaborate than it is in *Amos*,
 it reaches much further in space. First Babylon,
 inclusive of Assyria:

I will destroy the name of Babylon and its ram-
 parts, her offspring and posterity;

I will break Assyria in my land; I will crush the
 Assyrian on my mountain (14).

Babylon, inclusive of Assyria, demands a couple
 of chapters. Then Moab:

all Moab will howl (16).

Moab also demands a couple of chapters. Then
 Damascus:

Damascus will be a city no longer, she will be a
 heap of ruins (17).

Also a couple of chapters. Then Egypt:

riding on a cloud, the lord will descend on Egypt
 (19).

Egypt demands a single chapter. *Isaiah* then
 curses more generally: the desert (21), the steppe
 (*id.*), the valley (22), then again more particu-
 larly: Tyre and the other Phoenician cities (24),
 then again most generally:

the lord will strip the earth, will lay it waste, will
 turn it upside down, will scatter all the people;

the earth is breaking, breaking,

the earth is crumbling, crumbling,

the earth is tottering, tottering,

the earth is staggering like a drunkard (*id.*).

Destruction is again followed by consolation:
 but on that day a song will be sung in the land of

Judah;

ours is a mighty city,
and he will make its walls victorious again;
trust in the lord for ever and ever;
for in the lord you have an everlasting rock (26).

Again in general:

the lord will come from his place and punish all
the dwellers of the earth for their wickedness
(*id.*),

and in particular:

thus said the lord;

behold; I will built in Zion, stone by stone, a
tower exceedingly firm, a tower of precious
cornerstones (28).

The plan is then connected explicitly to the
remoter past related by the Yahwistic document:
thus said the lord who redeemed Abraham;

no more will Jacob be shamed;
men will hallow the holy one of Jacob, they will
stand in awe of the god of Israel (29).

And again:

assuredly Assyria, the rod of the lord, will be
cowed by the voice of the lord (30).

And again:

the Assyrian will fall not by the sword of a man,
a not human sword will devour him (31).

And again:

behold; a king will reign again in righteousness,
will govern again in justice (32).

And again:

listen oh nations! pay heed oh peoples!
for the lord is angry at all nations, he is incensed
at all their hosts;

he has condemned them all, he has consigned
them all to slaughter;

the heaven will be rolled up like a scroll; and all
their hosts will wither like the leaves on a vine
(34).

And yet again in conclusion:

be strong, fear not, behold your god;
he is coming himself to give you the victory;
the ransomed of the lord will come back to Zion
in triumph (35).

That its end is political *Isaiah* cannot have
affirmed more explicitly.

Thus there is no law in *Isaiah* either.

God, however, is elevated very much further.
He is now the lord of hosts. In particular, he is
the lord not just of the Israelite host, he is the lord

of the Assyrian host. And it is a very much
further elevation. He is the lord of the host which,
as god himself describes it: has erased all borders,
plundered all countries, carried off all peoples.
God's promise also, such as it is in *Amos*, I will
build the fallen house of David firm as it was in
the days of old, is not only reaffirmed, it is reaf-
firmed, and again, and again, and again, and
again.

And hence, and most important, the past
steered by god is now his plan. The nearer past of
Israel and Judah is again connected explicitly to
the remoter past related by the Yahwistic docu-
ment, and all the way back to Abraham now.
More important, the immediate past of Israel and
Judah, including the fall of Israel, is now his plan.
And Assyria is relentlessly assimilated into that
plan. Assyria is the rod of his anger. It is he who
sends her forth against the peoples who displease
him. The king of Assyria thinks that he is very
clever, he thinks that by his own hand he has
erased all borders, plundered all countries, carried
off all peoples. But can an ax boast against the
hand that wields the ax?

And book after book after book, it has to be
becoming more plausible, if only because the
books keep accumulating, that Assyria is the rod
of his anger, he sends her forth against the peo-
ples who displease him. The king of Assyria is an
ax boasting against the hand that wields the ax.
More generally, book after book after book, it has
to be becoming more plausible that all kings are
his captains.

The book of *Isaiah* attests also this develop-
ment.

Chapters 1-39 are the earlier. They yet abound
in later material. And chapters 36-9 are all a later
addition. They were copied from *Kings*, omitting
one passage. *Kings* postdates *Isaiah* by two
centuries.

First, then, Sennacherib reports: I shut Heze-
kiah in Jerusalem like a bird in a cage; and he
gave me 30 talents of gold and 800 talents of
silver.

Next, *Kings* reports: Sennacherib, the king of
Assyria, imposed on king Hezekiah a tribute of
300 talents of silver and 30 talents of gold. But
Kings reports also: Hezekiah prayed to the lord,
Isaiah told Hezekiah that the lord had heard his

prayer; and that night an angel of the lord struck down 185 000 in the Assyrian camp (II, 19).

Next, the chapters of *Kings* involving Isaiah and Hezekiah are copied in *Isaiah*. Omitting one passage, the one about the tribute. Hezekiah thus no longer pays tribute to Sennacherib. But the angel of the lord continues to strike down 185 000 in the Assyrian camp. A six-winged seraph, presumably.

The importance of *Micah*, next, is in that it is yet another book reaffirming the same. The lord has a plan:

thus said the lord,
assuredly I have a plan (2).
Namely:

for the transgressions of Jacob and the sins of the house of Israel I will turn Samaria into a ruin (1).

His rod is Assyria. Have no fear of Assyria, however:

when the Assyrian comes and tramples on our fortresses, we will raise seven shepherds and eight princes, and they will shepherd the Assyrian by the sword (5).

The seven shepherds and eight princes have not yet shepherded the Assyrian by the sword. When they do, however:

he will take us back into his love again; he will redeem our wickedness;

you will hurl our sins into the sea; you will keep your faith with Jacob; you will be true to Abraham as you promised to our fathers in the days of old (7).

In the meantime many psalms had also been composed. Their importance is threefold.

First, they, too, reaffirm the same. There is no law in them either. But they continue his elevation, they forcefully reassert his promise, and they yet more explicitly connect the state of David to the past related by the Yahwistic document.

Here is a sample.

From psalm 104:

bless the lord, my soul!
oh lord! my god! how very great are you (*id.*)!
you spread the heavens like a tent (*id.*);
he makes the clouds his chariot (*id.*);
he makes the winds his messengers (*id.*);
he made the earth firm so that it never totters

(*id.*);

you made the deep cover the earth like a robe

(*id.*);

you made the springs (*id.*);

you made the grass grow for the cattle (*id.*);

he made the moon and the seasons

so that the sun knows when to set (*id.*);

you bring on darkness so that it is night (*id.*);

how many are the things you made, oh lord (*id.*)!

This is the psalm anticipated, some seven centuries earlier, by the great hymn of Aten.

From psalm 105:

he is the lord, our god,
his is the judgment of the entire earth,
and he is always mindful of his covenant,
his promise to the thousandth generation,
which he made to Abraham,
swore to Isaac,
confirmed to Jacob,
his eternal covenant,
I will give you the land of Canaan, your allotted heritage (*id.*).

From psalm 78:

listen, my people,
I will tell you the lessons of the past,
the things our fathers have told us (*id.*);
he established a law in Jacob,
he ordained a teaching in Israel,
charging our fathers to teach their children,
and their children to teach their children,
to trust in the lord,
never forget his deeds,
and obey his commandments (*id.*);
but they went on sinning against him (*id.*);
and they went on sinning against him (*id.*);
and he utterly rejected Israel (*id.*);
he let his people go into captivity (*id.*);
he gave his people to the sword (*id.*);
the lord, the warrior, rejected Joseph (*id.*);
he chose Judah, he loved mt Zion (*id.*);
he chose David (*id.*).

It is David, too, who sings the psalms.

And from psalm 35:

oh lord!
destroy my enemies! give battle to my foes (*id.*)!
let them be chaff in the wind (*id.*)!
let them flee in the dark pursued by your angel
(*id.*)!
let calamities overtake them in their sleep (*id.*)!

and then I will exult in the lord,
then I will rejoice in his deliverance (*id.*).

Second, as the sample shows as well – oh lord! my god! oh lord! destroy my enemies! – the psalms have begun making him the object of devotion. They have thus begun preparing the ground, when his law is promulgated, for obedience to the law.

Third, and most important, the psalms are many. 150 will be collected eventually in the book of *Psalms*, to make it substantially the largest book of the holy scriptures.

Thus, Hezekiah did not set up shrines to the false gods of other peoples or make sacrifices and offerings abhorrent to the lord.

Hezekiah abolished the shrines, smashed the pillars, and cut down the sacred posts.

There was no one like him among the kings of Judah before or after. He clung to the lord. He never turned away from the lord. He kept the commandments of the lord given by him to Moses.

And the accumulation of the Hebrew writings can explain Hezekiah.

If Hezekiah did what was pleasing to the lord because of the books – and *Kings* and then also *Isaiah* associate him with Isaiah – and the books had urged, and again, and again, and again, clinging to the lord, never turning away from the lord, and keeping the commandments of the lord given by him to Moses, the books were not just literary compositions any longer. The books had become effectual. Their political end had become the ground of political action. The books had told Hezekiah what to do, and Hezekiah had done it.

And if so, Hezekiah is the beginning of Judaism. His is the first attempt to build the state on what the books have been relentlessly affirming, god elevated above all creation, his commandments, his promise, and that past steered by him.

The cause are the Assyrian princes.

They are the cause – and on god's authority, too, they are the rod of his anger – of the ruin of the Hebrew states. They are the cause – and the prophetic books can hardly have been more explicit – of the response of the books to the ruin.

Hence they are the cause of his transformation into the lord of hosts. He is now the lord, the warrior. The means of his steering the past is now

the destruction of cities. And he has a plan. First, Assyria is the rod of his anger. Then, second, he will build the fallen house of David firm as it was in the days of old.

And hence they are the cause of the first attempt to respond effectually to the ruin of the Hebrew states. While god's plan was still in its first step, Hezekiah's is the first attempt to usher in the second step of the plan.

It is only the first attempt, however, and not a successful attempt.

His wrath at you had not spent itself. His rod kept coming. After Sennacherib Esarhaddon, after Esarhaddon Ashurbanipal.

Hezekiah's successors Manasseh and Amon reverted to doing what was displeasing to the lord.

But then there was Josiah. Josiah's is the next attempt to usher in the second step of the plan.

In the meantime more prophetic books had appeared. *Nahum* again rehearses briefly god's elevation, his plan, his rod, his promise, the past steered by him. *Jeremiah* is more important. It rehearses it all in detail, and again, and again, at great length – it is the third largest book in the holy scriptures – as well as very picturesquely. Its importance, however, is not so much in its bulk or in its pictures. It is in that it is the first book ascribing itself to a priest. It begins:

the word of the lord came to the priest Jeremiah in the 13th year of the reign of Josiah, king of Judah (1).

It is to the priest Jeremiah also that this word of the lord first came:

this day I appoint you over the nations and over the kingdoms, to pull down and to uproot, to overwhelm and to destroy, to build up and to plant (*id.*).

This day he appoints the priest over the nations and over the kingdoms. *Jeremiah* is the first book also in which the priests are part of his promise. Once again:

thus said the lord of hosts,
I will bless again Israel and Judah;
I will make a righteous branch of David spring up again;
and there will be no end on the throne of Israel to the successors of David (33),
but this time the lord of hosts also adds:

and there will be no end to the line of the levitical priests before me, to bring burnt offerings and perform sacrifices (*id.*).

The very important book, and in many ways the most important, is the next, *Deuteronomy*. *Deuteronomy* is the book that will tell Josiah what to do, and Josiah will do it.

But this is after Ashurbanipal.

And first the remaining states in the one century-odd from Tiglath-pileser III to Ashurbanipal have to be collected.

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Egypt.

The new kingdom, the most powerful state on earth at its peak, its domain reaching from the Euphrates to the fifth cataract, had continued for four centuries. After Ramesses III, prince *c.* 1191-59, it had fallen apart. There had then been no state in the valley of the Nile for four-odd centuries. Hordes of wild men and petty local chieftains had had the valley to themselves. Not quite two and a half centuries after Ramesses III, Sheshonq, prince *c.* 928-07, had conquered the valley. Then disorder had again prevailed for two more centuries.

Then, Piye, prince *c.* 729-08, conquered the valley again, and this time the state was restored.

The successors of Piye through the time of Ashurbanipal are,

Shabaka	prince <i>c.</i> 708-693,
Shebitku	prince <i>c.</i> 693-90,
Taharqa	prince 690-64,
Psamtik	prince 664-10.

From his base at Napata, at the fourth cataract, Piye extended his authority north to Thebes, and then, in his 20th year, conquered Memphis, 1 200 km north of Napata along the meridian.

The Napata stele concludes:

oh mighty lord, oh mighty lord, Piye,
 you have taken lower Egypt,
 you have made the bulls into women;
 the mother who bore you rejoices,
 the father who begot you rejoices;
 upper Egypt, the cow that bore the bull, worships
 you;

you are forever, your might abides,
 you are the lord, beloved of Thebes.

Piye established his authority over the entire

valley. And his successors Shabaka and Taharqa maintained their authority over the entire valley.

The direct evidence is scanty. Other than once again their tombs, Shabaka and Taharqa have left behind but a couple of fragmentary inscriptions. An inscription at Karnak reports:

Shabaka, given life forever, brought gold with his victories for his father Amun (*id.*).

A stele from Tanis reports:

Isis saw her son Horus set up Taharqa on the throne . . . all countries;

Taharqa, prince of upper Egypt and lower Egypt, given life forever (*id.*).

That Shabaka and Taharqa maintained their authority over the entire valley, over lower Egypt as well as upper Egypt, is nevertheless attested by the Assyrian princes who first fought them at the border of lower Egypt, and thus attest Shabaka implicitly, then conquered Egypt, and thus attest Taharqa explicitly.

Sargon II reports:

I defeated Egypt and took the city of Gaza as booty.

Then Sennacherib reports:

I defeated Egypt.

Then Esarhaddon conquered Egypt. He reports:

Taharqa, prince of Egypt and Kush, I pursued for 15 days, I slaughtered the multitudes of his men; I defeated him five times;

I besieged Memphis, the city of his princeship; and I took it; I destroyed it, I razed it, I burned it;

and I appointed over it my governors, commanders, overseers, and scribes.

Esarhaddon also styles himself:

Esarhaddon, the great prince, the lord of the earth, the prince of Ashur, the prince of Sumer and Akkad, the prince of Babylon, the prince of Egypt and Kush, the prince of princes.

Ashurbanipal had to subdue Egypt again. He reports:

Taharqa, prince of Egypt and Kush, whom Esarhaddon, the prince of Ashur, my father, defeated and brought under his sway, forgot the power of Ashur; he slaughtered the princes and governors installed by my father and plundered all Egypt;

I destroyed Taharqa, the prince of Egypt and

Kush, and death overtook him;
I set up Nabu-shezibanni in Athribis.

Nabu-shezibanni is Psamtik.

This was in 664. And until the end of the reign of Ashurbanipal in 627 Egypt remained subdued.

After the fall of Assyria, Egypt under Psamtik and his successors will rise to become one of the four kingdoms vying to become the dominant power on earth.

Psamtik is attested by Ashurbanipal, and he is attested also by Herodotus (II, 151-7). Which is one of the many facts indicating the continuity from his predecessors, the Assyrian princes, to the father of history.

Phrygia.

There is 1 particular,

Midas prince c. 710.

Phrygia is in central Asia Minor.

Sargon II reports:

I vanquished Midas, the prince of Muski.

Muski is Phrygia.

Herodotus reports:

Midas, son of Gordias, prince of Phrygia, was the first barbarian to send gifts to Delphi; he dedicated to the god the throne on which he sat in judgment, and it is a marvel to see (I, 14).

And that is that.

Midas thus also attests the continuity from the Assyrian princes to Herodotus.

And he attests an abortive attempt of the state to begin. No prince of Phrygia succeeded him.

The state had begun beyond the valley of the two rivers in the north, beyond the Taurus mountains, with Hattusa, in central Asia Minor. Hattusa had risen, declined, disappeared, risen again, declined, and after Tudhaliya IV, prince c. 1245-15, again disappeared. Four centuries later, the state of Urartu had asserted itself in eastern Asia Minor. After Sarduri II, prince c. 740, Sargon II had destroyed Urartu. And only one generation later now, Phrygia is the next attempt to build the state in Asia Minor, further west. And only one generation later again, Lydia is the next attempt, still further west, in western Asia Minor, and a very successful attempt.

Lydia.

At this time the particulars are 2,

Gyges prince c. 680-45,

Ardys prince c. 635.

Once again Ashurbanipal:

Gyges, prince of Lydia, a land beyond the sea, a distant land of which my fathers had never heard, kept sending messengers with lavish gifts to kiss my feet and beg for help against the Cimmerian hordes ravaging his land; then he sent men to the prince of Egypt who had rebelled against me;

but then the Cimmerians descended on his land again, and again he sent messengers with gifts to kiss my feet and beg for help.

And Gyges is also attested by Herodotus as well. The *Histories*, in fact, begins with the Lydian princes: Gyges, Ardys, Sadyattes, Alyattes, and Croesus (I, 7-91).

Herodotus traces the princes of Lydia back to Heracles: son succeeding father on the throne for 22 generations, or 505 years (7). He has also a piquant story of how Gyges won the throne (8-13). Ignoring both the sons succeeding fathers for 22 generations and the story, Herodotus reports: Gyges was the first barbarian after Midas to send gifts to Delphi (14);

when he became king, he plundered the countries of Miletus and Smyrna, and captured the city of Colophon; and he did no other great deeds (15).

He did no other great deeds. But he sent messengers to Ashurbanipal to kiss his feet and beg for help. He sent men to Taharqa. He again sent messengers to Ashurbanipal to kiss his feet and beg for help. He sent gifts to Delphi.

And he plundered the countries of the Greek cities on the Aegean coast of Asia Minor and captured one of them.

The state of Lydia, beginning with Gyges, also begins with smiting.

And under his successors, after the fall of Assyria, Lydia will rise to become one of the four kingdoms vying to become the dominant power on earth.

The state of Lydia, beginning with Gyges, is the bridge between the state in the east and the state in the west.

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And at this time, the one century-odd from Tiglath-pileser III to Ashurbanipal, the state

begins further west, among the Greek cities. The particulars indicate 4 attempts of the state to begin among the Greek cities at this time.

Sparta.

The city of Sparta is in the Peloponnese.

After this time, after the one century-odd from Tiglath-pileser III to Ashurbanipal, Sparta will become a great state. And its beginning, like the beginnings of all great states, will be appropriately elevated. Posing the problem of what is real, what is not.

And first, Lycurgus is not real. The rise of Sparta will be ascribed to its constitution, and its constitution will be ascribed to Lycurgus. And while its constitution is real, Lycurgus is not.

This is the evidence.

Tyrtaeus is one of the earliest poets. His and Herodotus's dates are,

688 Tyrtaeus,
484 - 425 Herodotus.

And Tyrtaeus, singing of: our king Theopompus, under whom the fathers of our fathers for nineteen years incessantly fought, sings also of this:

having heard the voice of Apollo,
they brought home the oracles of the god;
council should come from the kings
and the elders; according to their decrees,
the people should say and do what is right;
victory and power will then attend the people;
this is what Apollo said to the city (fr. 4).

At the time of Tyrtaeus, the laws of Sparta came from Apollo.

Herodotus reports:

the Spartans say that their laws were very bad at first; but then Lycurgus brought a new constitution from Crete; this was at the time when Leobotes was king, Lycurgus became his guardian, and changed all the laws; this is how their laws became good (I, 65-6).

This is how Lycurgus enters the record. Two centuries after Tyrtaeus. Not quite three centuries after Theopompus, at whose time, having heard the voice of Apollo, they brought home the oracles of the god. Four centuries after Leobotes, whose guardian Lycurgus became, such as the Spartan prince list would date Leobotes.

This is what the Spartans said. The philosophers appreciated it. Xenophon writes: I won-

dered why Sparta, although the least populous, is the most powerful of all Greek states; then I considered its constitution, and I wondered no longer; for Lycurgus gave the Spartans their laws, and he was the wisest. Plato writes: Sparta is governed well because of the laws of Lycurgus; and the Spartans have the best education in philosophy, to be a Spartan is to be a philosopher. Plutarch writes: for those who doubt that it is possible, Lycurgus showed that a whole city can practice philosophy.

Also, as Apollo said to the city: council should come from the kings, so Sparta had dual kings, the Agiads and the Eurypontids. And Herodotus has the prince lists of both the Agiads (VII, 204) and the Eurypontids (VIII, 131), and traces them both back to Heracles.

As the Lydian princes were the descendants of Heracles so the Spartan princes were, or the other way around, as the Spartan princes were the descendants of Heracles so the Lydian princes were. Either way, elsewhere Herodotus calculates: Heracles was 900 years before my time (II, 145), and this is consistent with the 505 years of Lydian princes before Gyges. It is also, as Herodotus also notes: 100 years before the Trojan war (*id.*).

Ignoring, then, all earlier descendants of Heracles, and beginning with Theopompus, these are the Eurypontids and the Agiads at this time,

Theopompus	prince c. 710,
Alcamenes	prince c. 690,
Anaxandridas	prince c. 685,
Polydorus	prince c. 665,
Archidamus	prince c. 660,
Eurycrates	prince c. 640,
Anaxilas	prince c. 635.

Tyrtaeus sings:

our king Theopompus, dear to the gods, won
Messenia,
Messenia good for ploughing, good for planting,
for Messenia nineteen years incessantly fought
the fathers of our fathers (fr. 5).

With the conquest of Messenia good for ploughing, good for planting, its people became helots. The helots were, as Aristotle describes them: the producers of the Spartans (*Politics*, II, 9), or: the slaves of the Spartans (10).

As Apollo said to the city: council should

come from the kings and the elders, so it came from the two kings and five ephors. And Aristotle reports: Theopompus established the ephorate (V, 11).

The state of Sparta, beginning with Theopompus, also begins with smiting. Very dedicated smiting. Nineteen years incessantly fought the fathers of our fathers.

The great rise of Sparta, however, will begin one and a half centuries after Theopompus. At this time, even with the conquest of Messenia, Sparta remained small.

Argos.

The city of Argos is also in the Peloponnese, 60 km northeast of Sparta.

There is 1 particular,

Pheidon prince c. 669.

Strabo reports:

Pheidon harassed all cities captured by the descendants of Heracles (VIII, 3.33).

And Pausanias of Magnesia:

in 669 the Argives defeated the Spartans at Hysiae (II, 24.7).

Hence, Pheidon defeated the Spartans at Hysiae.

Herodotus also reports:

Pheidon, the king of Argos, established the weights and measures of the Peloponnesians; he also showed the greatest insolence when he took the Olympic games from the Eleans and set them up himself (VI, 127).

Argos is prominent in the *Iliad*. The king of Argos, Agamemnon, leads the Achaean army. The Achaeans are synonymously Argives.

In fact, Pheidon's is an abortive attempt to establish the state in Argos. There is after him no Argive of any importance in the record.

Corinth.

Corinth is on the isthmus connecting the Peloponnese to the mainland, 40 km northeast of Argos.

At this time the particular is 1,

Cypselus tyrant c. 658-28.

Herodotus reports:

Cypselus went to Delphi to consult the oracle, and the oracle greeted him, Cypselus, king of famous Corinth;

so, full of confidence, Cypselus attacked Corinth and captured it;

and he established himself firmly in the city;

many he exiled, of many he took the property, of many more he took the lives; he ruled the city for 30 years in good fortune, and was succeeded by his son Periander (V, 92).

Aristotle reports:

Cypselus was a leader of the people, Periander was a warrior (*Politics*, V, 12).

At this time Corinth also remained small. After this time, however, under the successor of Cypselus, Periander, Corinth will be the first attempt of the state to become the dominant power among the Greek cities.

Locri.

The city of Locri is further west, across the Ionian sea, in Calabria, on its eastern coast.

There is again but 1 particular,

Zaleucus laws in 663.

Strabo reports:

the first city to have written laws is believed to have been Locri; Ephorus reports that Zaleucus wrote its laws; before him judges decided the penalties in each case, Zaleucus first defined the penalties in the laws (VI, 1.8).

Polybius reports a case decided on a law of Zaleucus: the quarrel of two young men over a slave (XII, 16).

And that is that about the laws of Zaleucus in the record. Ignoring the report that: Zaleucus was a student of Pythagoras (Siculus, XII, 20) – during one of his transmigrations before he became Pythagoras, apparently – as well as the preamble with which the laws were equipped when Zaleucus became a student of Pythagoras: all citizens should believe that the gods exist (*id.*).

The state of Locri, beginning with Zaleucus, would begin with lawgiving.

Locri was a colony, one of the many established by the older Greek cities by this time. After this time, more of these new cities will begin with lawgivers. And all cities will eventually become prone to begin, or to have begun, or to be said to have begun, with lawgivers.

Zaleucus's, however, is also an abortive attempt to establish the state in Locri. There is after him no Locrian of any importance in the record either.

These, then, are the first Greek states.

Thus, the state begins among the Greek cities

much as it has begun two millennia earlier among the Sumerian cities. It begins in quick succession in several cities, and begins with smiting.

It begins in Sparta with Theopompus who conquers Messenia. It attempts to begin in Argos with Pheidon who defeats the Spartans. It begins in Corinth with Cypselus who captures the city.

But the state begins among the Greek cities also differently.

Theopompus establishes the ephorate. Pheidon establishes the weights and measures of the Peloponnesians. Cypselus is a leader of the people. And the state attempts to begin in Locri with Zaleucus who writes the laws of the city.

And this time, the one century-odd from Tiglath-pileser III to Ashurbanipal, is the time also when the first and largest wave of colonization by sea accelerates greatly.

It is the time also of Homer and Hesiod.

And these, both, the first and largest wave of colonization by sea and the oldest and in many ways the greatest Greek writings, have affected substantially the beginning and development of the state among the Greek cities, in particular, and the beginning and development of the state, in general.

di

By this time, counting from Theopompus back to Narmer, the state has developed for twenty-three centuries.

And when, at this time, the development of the state reaches western Asia Minor, crosses the Aegean, and begins in Greece, the state begins in a country substantially different from the countries in which it has begun and developed until this time.

The Aegean coast of Asia Minor is very long and very indented, divided into many small peninsulas. The Aegean is a small sea of many islands and very many smaller islands. And on the other side of the Aegean, Greece is rugged, divided by mountains into small valleys, and again with a very long and very indented coastline, dividing it into many small peninsulas, bordered on all sides by many small islands.

In this country the state will begin as several small states.

And as the country is defined substantially by

the sea, by its coastline, peninsulas, and islands, so its human population is, at this time, defined substantially by the sea. The human population has spread across the sea, and now straddles the sea. The population is Dorians in the south, in southern Greece, on the southern Aegean islands, and on the southern Aegean coast of Asia Minor, Ionians in the middle, in middle Greece, on the middle Aegean islands, and on the middle Aegean coast of Asia Minor, Aeolians in the north, in northern Greece, on the northern Aegean islands, and on the northern Aegean coast of Asia Minor, and Aetolians in the west, in western Greece, and on the islands in the Ionian sea. All of them – Dorians, Ionians, Aeolians, and Aetolians – Greeks. As later on, during the Persian wars, the Ionian Athenians will tell the Dorian Spartans: we and you are Greeks, the same in blood and the same in language, our shrines to the gods and our sacrifices are shared, and our way of life is common (Herodotus, VIII, 144).

And when at this time the development of the state reaches this population, this population will learn from the state the alphabet, and will learn very eagerly colonization by sea. The state has just become seagoing, it has just begun colonization by sea, this is the first population defined substantially by the sea which the development of the state reaches, and this population will accelerate greatly colonization by sea.

The state became seagoing in Tyre, in the one century-odd beginning with Hiram, prince *c.* 969-35.

Before that one century-odd there is no record of a sea voyage beyond Crete. The distance from the Phoenician cities to Crete is 800 km.

Tyre founded Carthage in 814.

The distance from Tyre to Carthage is 2 300 km.

In the Aegean and Greece Herodotus found Phoenician foundations on Thera, north of Crete, on Cythera, northwest of Crete, on Thasos in the northern Aegean, and in Boeotia, on the mainland. On the last he writes: the Phoenicians who came to Boeotia brought with them much learning, and in particular the alphabet, which, I think, the Greeks did not know before that.

And a couple of generations after the foundation of Carthage, the Greek cities had joined the

Phoenician in sending out colonies.

About Sicily, in the west, Thucydides reports: Gela was founded 45 years after the foundation of Syracuse; and to the best of our reckoning Acragas was founded 108 years after the foundation of Gela;

the first Greeks to come to Sicily founded Naxos; the following year Corinthians came and founded Syracuse; 5 years after that Catana was founded; at the same time colonists from Megara came and founded Megara Hyblaea; they lived there for 245 years, until Gelon drove them out (VI, 3-4).

Gelon seized Syracuse in 485, and defeated Carthage at Himera in 480. He captured Megara Hyblaea and drove out its citizens in the years in between.

This yields the dates, Syracuse was founded *c.* 735, Catana was founded *c.* 730, Megara Hyblaea was founded at the same time, Gela was founded *c.* 690, Acragas was founded *c.* 580.

The Phoenician cities continued sending out colonies, the Greek cities continued sending out many more colonies, the Phoenician cities continued sending out colonies, the Greek cities continued sending out many more colonies, the colonies began sending out colonies, and the colonies of the colonies began sending out colonies. The Phoenician cities planted eventually some dozens of colonies, the Greek cities planted eventually some hundreds of colonies. Colonized were the entire littoral of the Mediterranean and the entire littoral of the Black Sea. 4 100 km along the great circle from the Tyrian colony of Gades beyond the strait of Gibraltar in the west to the Milesian colony of Phasis on the eastern shore of the Black Sea in the east. Plato writes: we live around the sea from Phasis to the strait of Gibraltar like ants or frogs around a swamp.

It was the first of the two largest waves of colonization by sea. Counting from the foundation of Carthage in 814^{BC}, it continued for four and a half centuries.

The second wave began twenty-three centuries after the first. Exploration of the surface of the earth resumed with prince Henry and the rounding of cape Bojador by Eanes in 1434. In 1492 Columbus crossed the Atlantic. And then the second wave began. Counting from the crossing

of the Atlantic in 1492^{AD}, it continued for four-odd centuries.

The second wave was preceded by exploration. Conquest followed exploration immediately, and by powerful states, Portugal, Spain, then also France, Britain, the Netherlands. The movement of populations followed conquest. And for a long time, until the middle of the eighteenth Christian century, the movement of populations remained small. The movement of populations began accelerating in the following century, and accelerated greatly only in the late nineteenth Christian century, when, with the scramble for Africa, the division of the surface of the earth was completed. And then the wave stopped.

The first wave was not preceded by exploration. It was not preceded by conquest by powerful states either. The movement of populations was first, exploration and conquest followed, and not for some time. The movement of populations also became large early, as soon as the Greek cities began sending out colonies, and the movement of populations continued to grow and to accelerate for two and a half centuries. Then powerful states, Athens in the east, Carthage in the west, began claiming the sea, and the wave began to abate.

And relative to population, the first wave was the larger of the two. In 500^{BC}, three centuries after its beginning, when the first wave was at its peak, the human population of the earth was some 115 million. Not less than 2 million were the descendants of colonists. In 1750^{AD}, two and a half centuries after its beginning, when the second wave was yet to accelerate, the human population of the earth was some 800 million. Not more than 5 million, nearly all of them in America, were the descendants of colonists.

And the consequences of the first wave were larger, too.

One. Greece, the Aegean, the coast of Asia Minor – small valleys, long indented coastline, many small peninsulas, many islands – was the country of many small cities. When the state began, it began in quick succession in several of these cities.

And colonization made the entire Mediterranean and Black Sea littorals a country of small cities. The outcome of colonization was a very

large number of small cities, distributed over a vast area, most of them separated by large distances from one another, most of them connected only tenuously with one another. When the state began, all these new cities became, or tried to become, its own state each. Hence, if all the old cities had not already become, or tried to become, its own state each, they all also became, or tried to become, its own state each.

At the time when the wave had already abated, Aristotle collected the constitutions of 158 of these cities, or states. Fragments from 67 of the 158 survive. West to east, the following 67.

11 are colonies in the west:

Massalia, Acragas, Himera, Neapolis, Gela, Syracuse, Rhegium, Locri, Sybaris, Croton, Tarentum.

1 is a colony in the south:

Cyrene.

50 are older cities in the Ionian sea, in Greece, in the Aegean, and on the Aegean coast of Asia Minor:

Corcyra, Epirus, Leucas, Ithaca, Ambracia, Acarnania, Elis, Aetolia, Achaea, Arcadia, Thessaly, Bottieia, Sparta, Tegea, Delphi, Pellene, Methone, Sicyon, Argos, Corinth, Cythera, Orchomenus, Opus, Epidaurus, Thebes, Megara, Troezen, Aegina, Chalcis, Athens, Ceos, Cythnos, Melos, Crete, Tenos, Delos, Naxos, Samothrace, Chios, Tenedos, Phocaea, Samos, Antandrus, Adramyttium, Cyme, Parium, Colophon, Miletus, Iasus, Rhodes.

5 are colonies in the east:

Lycia, Chalcedon, Cyprus, Soli, Sinope.

The collection of the particulars indicates 4 of these as states, Syracuse, Sparta, Corinth, and Athens. It indicates 8 more as attempts to build the state, Acragas, Locri, Sicyon, Argos, Thebes, Megara, Samos, and Miletus. It indicates the remaining 55 as not states.

Nevertheless, they were all 67 states, unquestionably in that they all had its own constitution each for Aristotle to collect.

Two. Political philosophy does not begin with the investigation of the state. It begins with Plato, and the building of the best state, twice, in the *Republic*, and then also in the *Laws*. It continues with Aristotle, and the main concern of the

Politics is the same, the building of the best state. And so political philosophy has continued. As Hegel writes: we must not look at particular states, we must look at the idea of the state.

And colonization can go some way to explain the predilection of political philosophy for the building – and hence for continuing the building – of its own new state. By the time of Plato Greek colonization had continued for three and a half centuries, hundreds of new cities had been planted on the littoral of the sea around which we lived like ants or frogs around a swamp. It can be concluded that the prospect of a new beginning which a colony offered, or seemed to offer, had not lost its allure. Plato writes in the *Laws*: our mandate is to frame the laws of a new colony. In the *Politics* Aristotle not only frames the laws of the state, he chooses a site for it, and a population for it, and builds its houses, and adorns them. The best state is thus also appropriately small. The best state of the *Republic* would have: 1 000 men to fight for it. The best state of the *Laws* would have: 5 040 guardians, and this number should not be increased even by 1. Aristotle's best state would be: small enough for the citizens to know one another so as to be able to choose their magistrates well; the limits should be the smallest number sufficient for life and the largest number that can be encompassed in a glance.

Three. By the century when the state began among the Greek cities, not less than 60 of the 67 cities in the enumeration above had been established. 60 cities – and these are only the cities whose constitutions Aristotle collected from which fragments survive – are many cities. 60 cities which would be its own state each are all too many states.

The state begins in the valley of the Nile, and with smiting. But the state begins as one large state, it has no foes, and there is then in the old kingdom very little smiting.

In the valley of the two rivers the state begins with smiting as well. It begins here as several small states, however. And there is more smiting, and more, and more.

Among Greek cities the state begins with smiting as well. It begins as several small states as well. And there will be more smiting, and more, and more as well.

Of the cities in the enumeration 50 are older cities in Greece, on the islands, and in Asia Minor.

24 are in mainland Greece – Epirus, Ambracia, Acarnania, Elis, Aetolia, Achaea, Arcadia, Thesaly, Bottieia, Sparta, Tegea, Delphi, Pellene, Methone, Sicyon, Argos, Corinth, Orchomenus, Opus, Epidaurus, Thebes, Megara, Troezen, and Athens. They are all confined from Epirus to Athens west to east and from Bottieia to Methone north to south within some 300 km west to east and some 450 km north to south, and the large majority of them are confined within only the southern half of that country.

There will be more smiting, and more, more vigorous smiting, and more, and steadily more. And the Greek states will be a very major advance in the development of warfare.

The remaining 26 are on the sea. 3 are on islands in the Ionian sea – Corcyra, Leucas, and Ithaca. 15 are on islands in the Aegean – Cythera, Aegina, Chalcis, Ceos, Cythnos, Melos, Crete, Tenos, Delos, Naxos, Samothrace, Chios, Tenedos, Samos, and Rhodes. 8 are on the Aegean coast of Asia Minor – Phocaea, Antandrus, Adramyttium, Cyme, Parium, Colophon, Miletus, and Iasus. The Ionian islands hug the coast. Most of the Aegean islands also hug the coast. The Aegean is in any case not more than 600 km north to south at its longest and 300 km west to east at its widest.

17 of the 67 are colonies, all 17 also on the sea. The latest, Acragas, was founded *c.* 580. Most of the 17 were founded early in the first century of the wave.

Colonization greatly accelerated the development of boats and navigation.

There will be more smiting, and more, more vigorous smiting, and more, and steadily more. And the Greek states will discover warfare on the sea, and will very greatly advance it.

The Greek states will be a very major advance in the development of warfare on both land and sea.

Four. And the Greek states will discover all forms of government, aristocracy and democracy next to monarchy, and any combination of the three. And colonization is a main cause of this development as well.

Colonization explains why the laws of the cities began being written down. The laws of a colony were first written down – the laws of a new city founded by an older city.

Once the precedent of writing down the laws of a city is established, the cities will learn from this experience as well.

Colonization spread many small cities, which would be its own state each, over a vast area, most of them with only tenuous connections with one another.

More of the new cities will be founded by lawgivers. Lawgivers will appear in the older cities. All cities will become prone to be refounded by lawgivers. In every city every leader of the people will become prone to be a lawgiver.

The state had been invariably under a prince, invariably a monarchy.

In the Greek cities experimentation will begin with new forms of government.

Of the predilection of political philosophy for not real states colonization is a cause, but not a main cause. The main cause is ethics.

Of the proliferation of many small and smaller cities, which would be its own state each, colonization is a main cause. Of the discovery and development of naval warfare colonization is a main cause as well. And of the discovery and development of forms of government other than monarchy colonization is a main cause as well.

The proliferation of many small and smaller cities, which would be its own state each, is not very important. It is not substantially different from the proliferation of many petty and pettier chieftains, who would be his own prince each, which had been part of the development of the state since its beginning in the valley of the two rivers.

The discovery and development of naval warfare is very important. Two and a half millennia after the beginning of the state, the discovery and development of naval warfare accelerated greatly the development of the state.

And the discovery and development of forms of government other than monarchy is also very important. Two and a half millennia after the beginning of the state, the discovery and development of forms of government other than monarchy also accelerated greatly the development of

the state.

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Homer and Hesiod are the oldest and in many ways the greatest Greek writings.

And to begin with, Homer, too, is he real?

He is.

Homer is the *Iliad* and *Odyssey*, and the *Iliad* and *Odyssey* are real enough to count. The *Iliad* is 15 691 lines, the *Odyssey* 12 110 lines.

But of course the question has rather been, as it always is, but who authored the Homeric epics? The answer had long been, for some millennia, the poet. The poet authored the *Iliad* and *Odyssey*. Then, recently, in the last century, the poet has quit authoring the Homeric epics. Nothing is allowed to be elevated any longer, and the poet is not allowed to have authored the Homeric epics any longer. The supposition has established itself that the Homeric epics are the outcome of an oral tradition. This was first argued on analogy with other oral traditions, nay, South Slav oral traditions. It should have been asked, who exactly is the South Slav Homer? Ossian, who fooled Gibbon, Herder, Goethe, and Schopenhauer still, is a better analogy, and Ossian was produced by no oral tradition. One way or another, the muse has to be more likely to have composed the *Iliad* and *Odyssey* than an oral tradition.

The poet, in fact, describes himself, if poetically, as the poet would. In the *Odyssey*, in book I, a rhapsode, Phemius, entertains Penelope's suitors. In book VIII, another rhapsode, Demodocus, entertains the feast of king Alcinous. Phemius and Demodocus both sing of the heroes of the Trojan war.

Like all great corpora, the Homeric corpus began being amplified with spurious writings in the first century after the composition of the *Iliad* and *Odyssey* already. A series of Homeric hymns was composed. In the third Homeric hymn the poet sings:

remember me, maidens, and when a man
born on earth comes, a stranger
who has seen and suffered much,
and asks, who is the sweetest singer?
with one voice, maidens, reply,
he is a blind man dwelling in rocky Chios,
forever are supreme his songs (166-73).

The sweetest singer authored the *Iliad* and *Odyssey*. Forever are supreme his songs.

As to Hesiod, he has not been bedeviled by the question, but is he real? Either way, he is also real enough to count. Hesiod is the *Theogony* and *Work and days*, and the *Theogony* is 1 020 lines, the *Work and days* 828 lines.

And who authored these?

One day the muses taught Hesiod a beautiful

song;

he was tending his sheep, and they said,
savage shepherd, stupid oaf, nothing but a belly,
we know how to tell many lies as if they were

true,

but we know also how to tell the truth when we
want to.

The savage shepherd, stupid oaf, nothing but a belly, authored the *Theogony* and *Work and days*.

It may be noted, also, that sheep, who have long been prominent in the record being carried off as booty, become prominent at this time differently more generally. As the muses teach Hesiod, tending his sheep, a beautiful song, so the lord has recently begun roaring from Zion, thundering from Jerusalem, to Amos, the breeder of sheep from Tekoa.

Homer is the *Iliad* and *Odyssey*. Hesiod is the *Theogony* and *Work and days*. And Homer and Hesiod are, each and both, extraordinary.

Not, however, in that they are, each and both, a sudden major development. Not only is a sudden major development not extraordinary, this is how major development has always been, sudden. The Sumerian prince list. The Venus tablet of Ammisaduqa. *When on high*. The Yahwistic document. Thales, Anaximander, and Anaximenes, each and all three. Herodotus. Plato. Aristotle. Euclid. Polybius. Ptolemy. Augustine. Muhammad. Prince Henry. Bacon, Galileo, and Kepler, each and all three. Descartes. Spinoza. Newton and Leibniz, each and both. Hume and Kant, each and both. Darwin. Frege.

Sin-liqe-unninni. Aeschylus. Aristophanes. Virgil. Cervantes. Bach. Mozart. Goethe. Wagner. Baudelaire.

By just being major, major development will be sudden. And those are one and all, a single-handed major development each.

Nor are Homer and Hesiod extraordinary in that they are early. They are very early with respect to the Greek record, but they are not early at all with respect to the record in general. The state has developed for twenty-three centuries by their time. Writing has been accumulating for all these twenty-three centuries. Massive compositions have developed. *When on high*, for one. Very fine poetry has developed. Sin-liqe-uninni, for one. The acquisition of knowledge has advanced greatly. Just recently, the Assyrian princes have continued to advance greatly the description of the surface of the earth, and to advance greatly history. This is the time also when the observation of the heavenly bodies becomes sustained, becomes accurate, reaches dozens of the heavenly bodies. And continuity from these earlier developments to Homer and Hesiod is indicated powerfully. Learning from experience is indicated powerfully. The Phoenicians who came to Boeotia brought with them much learning, and in particular the alphabet, which, I think, the Greeks did not know before that. The Greeks learned the alphabet. The Greek cities learned colonization. That Hesiod learned from *When on high*, directly or indirectly, is indicated by the contents of the *Theogony*. It is indicated also by the fact that *When on high* is attested in copies as numerous and widely disseminated as any Akkadian composition, and in particular in the century before Hesiod.

Homer and Hesiod, each and both, are extraordinary in that they are the beginning of the Greek record. The Greek record does not begin with a few lines, and it does not accumulate gradually. It explodes with the sweetest singer and the stupid oaf to whom the muses, who know how to tell many lies, tell the truth.

In particular, Homer and Hesiod precede the beginning of the state among the Greek cities. Even the Hebrew record, which alone of earlier records, like the Greek, does not begin with a few lines, and does not accumulate gradually, but rather explodes with the Yahwistic document and the prophetic books, yet follows a couple of centuries of development of the Hebrew states.

Homer and Hesiod precede the development of the state among the Greek cities. And the songs of the sweetest singer and of the stupid oaf to

whom the muses tell the truth have affected substantially the beginning and development of the state among the Greek cities, in particular, and the beginning and development of the state, in general.

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First, then, to date them explicitly, and thus show that Homer and Hesiod are the beginning of the Greek record, and precede the beginning of the state among the Greek cities.

Herodotus first researched Homer and Hesiod, as he did so much else, and he fixed the dates of Homer and Hesiod, and rather conclusively, as he did so many other dates.

The *Histories*, or *Researches*, are Herodotus's researches first and foremost into the great kings, Cyrus, Cambyses, Darius, and Xerxes. And it is in the course of researching the great kings that Herodotus describes 1 012 localities and 804 predecessors of his. Thus, Cyrus conquered all counties from the Aegean in the west to the Amu Darya in the east, and it is while researching the conquests of Cyrus that Herodotus researches also the countries which Cyrus conquered. Cyrus was succeeded by Cambyses, Cambyses conquered Egypt, and so Herodotus researches also Egypt. And Egypt demands so much research, Herodotus devotes to it one of the nine books of the *Histories*. One major area of research for which Egypt turns out to be the right place are the gods. Because, Herodotus is told by the Egyptian priests:

the Greeks learned about the gods from the Egyptians (II, 3-4).

Herodotus thus examines the matter in detail, and reaches the conclusion that, indeed:

the Greeks learned about nearly all the gods from the Egyptians (50).

And hence, more generally still, he concludes:

but whence the gods came, or whether they are forever, and what they look like, these things were not known, as it were, until the day before yesterday;

for I think that Homer and Hesiod were 400 years before my time and no more, and it is they who created for the Greeks their theogony, they distinguished the gods according to their descent from each other and described their

honors, arts, and appearances (53).

Another major area of research for which Egypt is the right place are the Egyptian princes. One of the princes of whom the Egyptian priests have great deeds to tell is:

the prince whose name in Greek is Proteus (112). And since Herodotus has heard that Helen stayed with Proteus in Egypt:

I asked the priests about that, and they told me what happened; Paris carried off Helen from Sparta, but adverse winds took him to Egypt, and Proteus, on learning that Paris had violated the laws of hospitality by stealing Helen from Menelaus, punished him by taking her from him (113-5);

and I think that Homer knew this, but chose another story because it was more suitable for poetry (116).

And in order to show that Homer knew this – that Paris was taken to Egypt, and Helen stayed in Egypt, and never went to Troy – Herodotus quotes 4 lines from the *Iliad* and 6 lines from the *Odyssey* (*id.*). In particular, he quotes the *Iliad*, book VI, lines 289-92, and the *Odyssey*, book IV, lines 227-30 and 351-2.

These are 2 of the 8 places in the *Histories* where Herodotus notes Homer explicitly.

Homer and Hesiod were 400 years before my time and no more.

His time is,

484 - 425 Herodotus.

The date of his birth is recorded by Gellius (XV, 23), the date of his death is inferred from the fact that the latest event recorded in the *Histories* occurred in 430 (VII, 137).

Thus, ignoring Hesiod for now, these are Homer's *termini post quem* and *ad quem*. *Post quem* – c. 830 and not earlier. *Ad quem* – c. 430.

And most particularly, the 10 lines which Herodotus quotes, 4 from the *Iliad* and 6 from the *Odyssey*, agree to the letter with the *Iliad* and *Odyssey* as the two poems still are. Herodotus provides a *terminus ad quem* of the letter of Homer. By c. 430 the texts of the *Iliad* and *Odyssey* have been fixed to the letter.

And the texts of the *Iliad* and *Odyssey* have been fixed much earlier.

Athens celebrated its mistress Athena at the Panathenaea lavishly, including with the public

recitation of Homer. As Lycurgus, leader of the people in the years after 338, tells the Athenians: your forefathers made it a law that at the Panathenaea Homer alone be recited (*Leocrates*, 102).

And when their forefathers made this a law, there are three reports in the record.

One of the spurious dialogues in the Platonic corpus reports:

Hipparchus first brought Homer to our lands and made the rhapsodes at the Panathenaea recite his poems in fixed order, as they still do ([*Hipparchus*], 228b).

Hipparchus was the brother of Hippias, who succeeded their father Pisistratus as a tyrant of Athens from 527 to 510. Hipparchus was assassinated in 514.

On this account, the law is from the years between 527 and 514.

Cicero reports:

Pisistratus first arranged the books of Homer, which were until that time confused, in the order in which we now have them (*On the orator*, III, 137).

Pisistratus set himself up as a tyrant in 560, was expelled, returned, was expelled again, and returned again to remain a tyrant until his death in 527.

On this account, the law is from the years between 560 and 527.

And Laertius reports:

Solon ordered the public recitations of Homer to follow a fixed order, the second rhapsode to begin where the first stopped, the third to begin where the second stopped, and so on (I, 57).

Solon was archon in 594, appointed to change the laws of the city.

On this account, the law is from 594.

And with Laertius, pace the spurious Platonic dialogue and Cicero, the law is from 594.

Hence this is also the *terminus ad quem* of the fixed order of Homer, 594.

And Solon in 594, rather than Pisistratus or Hipparchus between 560 and 514, for two reasons.

Because in this case, as in so many others, Laertius is the better authority. He is the better authority in this case, as in so many others, because he quotes his authority. In this case his

authority is the historian Dieuchidas who, under Alexander, prince 336-23, wrote a *Megarian history*. And in this, Laertius quotes, Dieuchidas wrote:

Solon did more to throw light on Homer than Pisistratus (*id.*).

And because, and decisively, Solon falsified the *Iliad*.

Solon was a general in the war of the Athenians with the Megarians over Salamis. The general, and lawgiver, was a fine poet, too. He sings:

let us go to Salamis,

let us fight for the lovely island (fr. 3).

The war failed to decide who will have the lovely island. The Athenians and the Megarians thus submitted their quarrel to the arbitration of the Spartans. Aristotle reports:

in the proceedings, Solon produced as evidence two Homeric lines showing that Salamis had always belonged to the Athenians (*Rhetoric*, I, 15).

In particular, Solon produced the lines:

Ajax brought twelve ships from Salamis

and beached them next to the Athenian ships

(*Iliad*, II, 557-8).

And on the authority of the two Homeric lines the Spartans awarded the lovely island to the Athenians.

Strabo writes:

the critics think that Solon himself inserted the second of these lines in the poem; for why is Ajax everywhere else in the *Iliad* with the Thessalians, and not with the Athenians (IX, 1.10)?

Plutarch concurs:

most writers think that Solon inserted these two lines in the *Iliad*; even if the Athenians say that this is a malicious lie, because Solon proved to the arbitrators that the sons of Ajax settled in Athens and became Athenians, and one way or another, Apollo at Delphi also pronounced for the Athenians (*Solon*, 10).

Two generations after Solon, the fifth philosopher, Xenophanes, sings:

all learned from Homer from the first.

One generation later, the eighth philosopher, Heraclitus, writes:

Homer was wiser than all Greeks.

One generation-odd later, these are 2 more of the 8 places where Herodotus notes Homer explicitly.

In Athens the fall of the tyranny of Hippias was followed by the legislation of Cleisthenes. Writing about Cleisthenes, Herodotus notes:

he emulated his grandfather, the tyrant of Sicyon Cleisthenes (V, 67),

and adds:

this Cleisthenes had made war on Argos and had banned the contests of the rhapsodes in Sicyon, because they sang verses of Homer and the verses of Homer celebrate most of all Argos and the Argives (*id.*).

And preparing to meet the expedition of Xerxes, Sparta and Athens sent envoys to Syracuse to solicit the help of Gelon against the great king. Gelon consented, but asked to lead the army himself. The Spartan was incensed:

loud indeed would be the lamentation of Agamemnon, scion of Pelops, if he heard that the command of the army has been taken away from the Spartans (VII, 159)!

That was that. Gelon asked to lead the navy then.

Now the Athenian was incensed:

Homer himself said that at Troy ours was the best man to order the host (161)!

And that was that.

Homer was wiser than all Greeks. All learned from Homer from the first. Homer fought with the Argives in their war against the Sicyonians. Homer decided who will lead the Greek army and the Greek navy against Xerxes. All this in the century after Solon.

At the time of Solon, Homer awarded a Megarian island to the Athenians on the judgment of the Spartans.

It has to be concluded that Solon was the last to insert a line or two in the Homeric epics. It has to be concluded that Megarians, Spartans, Argives, Sicyonians, and Syracusans, as well as Athenians, all watched the integrity of the Homeric epics vigorously enough to make sure no one inserted another line in the Homeric epics.

594, then, is the *terminus ad quem* of the fixed order of the *Iliad* and *Odyssey*.

And the *Iliad* and *Odyssey* were composed much earlier.

Terpander is the earliest poet of whom the

record affirms explicitly:

Terpander sang Homeric verses (Plutarch, [*Musica*], 3).

He is dated by the record explicitly:

Terpander won a citharodic contest during the celebration of Apollo at the Carnea in Sparta in the 26th olympiad (Athenaeus, XIV, 635e). The 26th olympiad is 676/3.

And hence the date of the composition of the *Iliad* and *Odyssey*. The *Iliad* and *Odyssey* were composed in the century before 676/3.

There is another bit about Terpander in the record:

Terpander first increased the number of the strings of the lyre from four to seven (Strabo, XIII, 2.4).

And Terpander is, in fact, after Homer – and Hesiod – the earliest Greek poet.

Next are Callinus, Archilochus, and Tyrtaeus.

All four, Terpander, Callinus, Archilochus, and Tyrtaeus, show similarities to Homer in subject matter, dialect, diction, and meter. And that these are not just similarities, that all four poets emulate Homer in subject matter, in dialect, in diction, and in meter, the Alexandrian grammarians already established in detail.

Archilochus sings of a solar eclipse which occurred in 648. Of Callinus and Tyrtaeus no dates are recorded. Strabo shows, however, on the ground of subject matter, that Callinus was earlier than Archilochus (XIV, 1.40). And Tyrtaeus, who sings of Theopompus two generations after the king, cannot be earlier than Archilochus.

Of Hesiod, finally, the fifth philosopher already, Xenophanes, said:

Homer was older than Hesiod.

That Hesiod emulates Homer in dialect, diction, and meter the Alexandrian grammarians established in detail as well. And that Terpander, Callinus, Archilochus, and Tyrtaeus emulate Hesiod as well as Homer in dialect and diction the Alexandrian grammarians established in detail as well.

And hence the date of Hesiod. Hesiod is one generation after Homer.

Assigning dates of birth – counting 40 years back from the eclipse in 648 with respect to Archilochus, assigning the same year to Tyrtaeus, counting 40 years back from the middle of the

generation before Archilochus with respect to Callinus, counting 40 years back from 676/3 with respect to Terpander, counting 40 years back from the middle of the century before 676/3 with respect to Homer, and counting 30 years after Homer with respect to Hesiod – here as everywhere for the sake of uniformity as well as for the sake of perspicuity, this yields for the earliest Greek poets,

764	Homer,
734	Hesiod,
714	Terpander,
703	Callinus,
688	Archilochus,
688	Tyrtaeus.

The oldest Greek inscription – the Dipylon inscription, unearthed in Athens in 1871 – is dated c. 740.

Homer and Hesiod are the beginning of the Greek record.

The dates of the 3 princes and 1 lawgiver with whom the state begins among the Greek cities are,

750	Theopompus,
709	Pheidon,
703	Zaleucus,
698 - 628	Cypselus.

And Homer and Hesiod precede the beginning of the state among the Greek cities.

div

To clear away the matter of the spurious in this case, too.

The corpora of Homer and Hesiod as well have been amplified greatly with spurious writing, quite proportionately to their importance, but little of this has to be, or deserves to be, noted.

There are the 32 Homeric hymns, celebrating the Olympians. These alone among all the amplifications are themselves fine poetry.

There is *The battle of the frogs and mice*. The mice won the battle.

There is the epic cycle, supplying the events of the Homeric epics with their antecedents and consequents. Among these poems are the *Cypria* and *Epigones*, of which Herodotus already, in 2 more of the 8 places where he notes Homer, first said that they are not by Homer (II, 117; IV, 32).

There is the *Catalogue of women*, continuing

the *Theogony*, after the genealogy of the gods, with the genealogy of the women visited by the gods and the resultant offspring.

There is *On Homer and Hesiod and their origin and contest*. Hesiod won the contest. Homer sings of war, Hesiod sings of farming, and farming is better than war.

More important than any of that, book X of the *Iliad* and books XI and XXIV of the *Odyssey* are later additions.

The fourth and the sixth heads of the Alexandrian library, and the last important scholars among the heads of the library, are,

256 - 179 Aristophanes of Byzantium,

216 - 144 Aristarchus of Samothrace.

Aristarchus of Samothrace divided the *Iliad* and the *Odyssey* into 24 books each.

Aristophanes of Byzantium first argued that the proper end of the *Odyssey* is – as it became with its division by Aristarchus of Samothrace – line 296 of book XXIII.

Most of the Homeric hymns are from the first century after Homer.

And by the time Solon inserted those line or two in the *Iliad*, book X had been integrated into the *Iliad* and books XI and XXIV had been integrated into the *Odyssey*.

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Less than three centuries after Homer and Hesiod, then, the father of history writes:

Homer and Hesiod created for the Greeks their theogony, they distinguished the gods according to their descent from each other and described their honors, arts, and appearances.

And how extraordinary this judgment of the father of history of the gods created by Homer and Hesiod is, can be judged by comparison. The judgment that the Yahwistic document and the prophetic books created for the Hebrews their theogony, they distinguished god according to his descent from nothing and described his honors, arts, and appearance, is still – twenty-eight and a half centuries after the Yahwistic document – liable to be studiously avoided. The judgment that st Paul created for the Christians their theogony, he distinguished god according to his descent from himself and described his honors, arts, and appearance, is still – twenty centuries

after st Paul – liable to be very studiously avoided. The judgment that Muhammad created for the Muslims their theogony, he distinguished the prophet of god according to his descent from the angel of god and described his honors, arts, and appearance, is still – fourteen centuries after Muhammad – liable to be most studiously avoided.

And the cause of that judgment of the father of history of the gods created by Homer and Hesiod are Homer and Hesiod. Homer and Hesiod created for the Greeks their theogony, distinguished the gods according to their descent, and described their honors, arts, and appearances, differently, substantially unlike the ways in which the gods had been created, distinguished, and described earlier, and especially the ways in which the gods were to be created, distinguished, and described later.

And this, that Homer and Hesiod are the cause of that judgment, and by creating theogony, distinguishing the gods, and describing them differently, the fact alone dramatically shows that that judgment of the father of history of the gods created by Homer and Hesiod is extraordinary when compared with judgments of the god created by the Yahwistic document and the prophetic books, and with judgments of the god created by st Paul, and with judgments of the god created by Muhammad. But it is not extraordinary at all when compared with other judgments of the gods created by Homer and Hesiod.

In fact, by the time of the father of history, the philosophers had made such judgments rather routine.

Less than two centuries after Homer and Hesiod, three generations before the father of history, the fifth philosopher, the first to leave his own words behind, and the first to concern himself with his predecessors, Xenophanes, concerns himself most of all with Homer and Hesiod, and singing like Homer and Hesiod, sings of Homer and Hesiod:

Homer and Hesiod ascribe to the gods
everything shameful among men,
stealing, cheating, lying to one another.

Still less than three centuries after Homer and Hesiod, Protagoras, an older contemporary of the father of history, writes:

of the gods I cannot know either that they are or that they are not, for many are the barriers hindering knowledge, including the obscurity of the matter and the brevity of man's life.

And still less than three centuries after Homer and Hesiod, Hippo, a younger contemporary of the father of history, was an atheist. The first of many among the philosophers.

More than two millennia later, in 1670^{AD}, Spinoza writes:

religion has become a collection of absurdities and arcana, and it is those who outright despise reason, who reject the intellect and are the open enemies of its corrupt nature, who are believed to be in possession of the divine light; faith has become nothing but a collection of credulity and prejudices; and what prejudices? such as make men from rational beings into beasts, such as make them completely incapable of using their free judgment to distinguish true from false, such as appear to be, indeed, carefully designed to extinguish the light of reason altogether;

philosophy has no end but truth, faith has no end but obedience and piety; between faith and philosophy there is no connection whatsoever, no relation whatsoever;

whatever is contrary to nature is contrary to reason; whatever is contrary to reason is absurd, and therefore to be rejected.

Religion such as Spinoza observes it in 1670 is the outcome of a long development, twenty-five centuries counting back to the Yahwistic document. Nevertheless, all of it – absurdities and arcana, despising reason, rejecting the intellect, belief in the possession of the divine light, credulity, making men from rational beings into beasts, making them completely incapable of using their free judgment to distinguish true from false, indeed, designed to extinguish the light of reason altogether – all of it implicitly if not explicitly, and much of it explicitly rather than implicitly, is there from the first, from the Yahwistic document and the prophetic books.

Philosophy such as Spinoza describes it in 1670 has just been restored, two generations before Spinoza, by Bacon, Galileo, and Kepler. Philosophy has no end but truth. Between faith and philosophy there is no connection whatso-

ever, no relation whatsoever. Whatever is contrary to nature is contrary to reason, whatever is contrary to reason is absurd, and therefore to be rejected.

Philosophy such as Spinoza describes it is philosophy.

And this is how philosophy has begun. Implicitly if not explicitly, and in many ways explicitly rather than implicitly. No end but truth. No faith. Nature. Reason. As the fifth philosopher, the first agnostic, the father of history, and the first atheist suffice to show.

And Homer and Hesiod are a fundamental cause of this. Of the beginning of philosophy.

The philosophers are clear about this.

Xenophanes concerns himself most of all with Homer and Hesiod. He sings:

all learned from Homer from the first,

also:

Homer and Hesiod ascribe to the gods
everything shameful among men.

Heraclitus concerns himself most of all with Homer and Hesiod. He writes:

Homer was wiser than all Greeks;
Hesiod is the teacher of most men,

also:

Homer should have been thrown out of the contests and flogged;

much learning does not teach sense, otherwise it would have taught Hesiod.

Plato quotes Homer more often than any of his predecessors, by far. He writes:

Homer taught all Greece,

also:

is any city governed well because of the laws
which Homer gave it? no;

was any war won because of Homer's generalship
or advice? no;

is Homer famous for useful discoveries? no;

did Homer have any followers whom he taught a
distinct way of life? no.

And Aristotle still quotes Homer more often than any of his predecessors, if not by far, and in appreciation of the poetry, not so much to adopt the sound and avoid the erroneous in what Homer has said. Yet he traces the beginning of the problem of the elements of all things back to a Homeric proposition. And the beginning of the problem of the causes of all things, and the

beginning of the problem of space, too, he traces back to Hesiod.

Homer and Hesiod are a fundamental cause of the beginning of philosophy.

And in two fundamental ways.

First, in how they, each and both, created the gods.

Second, in that they are, each and both, a great advance in the acquisition of knowledge.

The creation for the Greeks of their theogony, distinction of the gods according to their descent, and description of their honors, arts, and appearances, begins with Homer, with the *Iliad* and *Odyssey*.

And in both the *Iliad* and *Odyssey* the gods are very prominent, throughout, beginning to end. This is how and why their theogony is created, they are distinguished according to their descent, and their honors, arts, and appearances are described.

The gods are very prominent in both the *Iliad* and *Odyssey*, throughout, beginning to end, and yet they are not the primary concern at all of either the *Iliad* or *Odyssey*. They are very much secondary.

They are very much secondary to the poetry. Homer is the poet. Not the prophet. His successors, beginning with Hesiod, are poets. His successors are also the philosophers. No prophets, not for a long time.

The *Iliad* is 15 691 lines, the *Odyssey* is 12 110 lines. Altogether 27 801 lines of the sweetest hexameter. The gods, and everything else, cannot help being a means of the poetry, not the other way around.

The gods are very much secondary to the poetry, and they are very much secondary to Achilles and Odysseus, the greatest warrior and the greatest voyager.

The *Iliad* begins:

the wrath sing, goddess, of Peleus's son Achilles.

These are then the main events in book I.

The Achaeans are fighting the Trojans. Agamemnon, their chief, offends the priest of Apollo. The priest prays to Apollo to avenge him. Apollo sends a plague on the Achaeans. Achilles, the greatest warrior among the Achaeans, calls an assembly to deal with the plague. Agamemnon placates the priest, but offends Achilles. Achilles

calls Thetis, his mother, from the depths of the sea, and asks her to ask Zeus, the greatest among the gods, to avenge him. Thetis asks Zeus, and Zeus nods assent.

Zeus is the greatest among the gods. And the rest of the poem, like book I, is not at all about the greatest among the gods, or the other gods. It is all about the wrath of Achilles. How he is avenged, how without him the Achaeans are defeated by the Trojans, and how then he destroys Hector, the Trojan warrior, and thus the Trojans.

While elevating Achilles, the poem has elevated also some scores of other heroes, Hector, Agamemnon, Menelaus, Nestor, Ajax, Odysseus, Patroclus, Idomeneus, Paris, Helen, Priam, Hecuba, Andromache. Next to – and indeed above – the gods, including the greatest among the gods.

The *Odyssey* begins:

of the man tell me, muse, of many ways.

These are then the main events in book I.

Odysseus, the lord of Ithaca, has not returned from Troy for twenty years. He has offended Poseidon, and the god will not let him come home. Athena asks Zeus, the greatest among the gods, to let Odysseus come home, and Zeus assents. Athena goes to Ithaca. Suitors have besieged Odysseus's wife, Penelope, his home, and his son, Telemachus. Athena advises Telemachus to go to Sparta in search of news of his father.

Zeus is the greatest among the gods. And the rest of the poem, like book I, is not at all about the greatest among the gods, or the other gods. It is all about the voyages of the man of many ways, his homecoming, and his vengeance.

While elevating Odysseus, the poem has elevated also his wife, his son, his swineherd, his old nurse, and his dog, too. Next to – and indeed above – the gods, including the greatest among the gods.

And indeed above, for the greatest among the gods, his sister and wife Hera, his brother Poseidon, his children Apollo, Athena, Ares, Aphrodite, Hephaestus, Hermes, all serve Achilles and the rest of the Achaean and Trojan heroes and Odysseus and his family, rather than the other way around.

That the gods are secondary to the poetry and that they are secondary to the heroes is striking. But, less strikingly, yet more consequentially, the gods are very much secondary also in wisdom.

The *Iliad* and *Odyssey* are a repository of wisdom. To this the fact that all learned from Homer from the first, and quite a few still do, sufficiently attests.

And the poet, being a poet, not yet a philosopher, never lets himself deliver the wisdom. He always has a god or a hero deliver the wisdom. And the heroes deliver very much more of the wisdom than the gods.

Here is a sample.

From the gods.

Zeus:

of all the things that move and breathe nothing is more miserable than man (*Iliad*, XVII, 446-7);

Poseidon:

even poor fighters have strength in numbers (XIII, 237);

Apollo:

in no way are gods and men alike (V, 441-2);

Athena:

few sons are like their fathers, most are worse (*Odyssey*, II, 276-7);

even the gods cannot save men from death (III, 236-8);

from caring for her clothes comes a bride's reputation (VI, 26-30);

a woman likes to care for her husband's household, but forgets him when he is dead (XV, 20-4).

From the heroes.

Nestor:

from the chariot it is better to fight with the spear (*Iliad*, IV, 306-7);

the gods do not give a man everything at the same time (320);

men cannot fight Zeus, he is much stronger (VIII, 143-4);

skill, not strength, makes the better woodcutter, helmsman, and charioteer (XXIII, 315-8);

Achilles:

the gods listen to the man who obeys them (I, 218);

the good man loves his wife and cares for her

(IX, 341-2);

there are no oaths between men and lions, wolves and lambs (XXII, 262-4);

we live in pain, only the gods have no sorrows (XXIV, 526);

Odysseus:

mob rule is not good (II, 204);

no man can fight without food all day (XIX, 162-3);

men quickly tire of fighting (221);

whoever kills a man goes into exile (XXIII, 118-20);

one man may be ugly and speak beautifully, another may look like the gods and not know how to speak (*Odyssey*, VIII, 169-77);

nothing is sweeter than one's country and parents (IX, 34-5);

temperance is better (256);

the gods can do anything (X, 306);

it is bad to speak empty words (XI, 464);

different men enjoy different things (XIV, 228);

of all the things that move and breathe nothing is feebler than man (XVIII, 130-1);

every woman mourns the husband to whom she has born children (XIX, 265-6);

Menelaus:

the young are rash, the old consider carefully (*Iliad*, III, 108-10);

once a thing is done even the fool understands it (XVII, 32);

moderation in all things (*Odyssey*, XV, 71);

Glaucus:

like the leaves of trees, one generation of men springs up, another dies (*Iliad*, VI, 146-51);

Hecuba:

wine gives strength to the tired man (261);

Hector:

no man can escape his fate (488-9);

Polydamas:

to different men the gods give different gifts (XIII, 730-4);

Telemachus:

no one finds out by himself who his father is (*Odyssey*, I, 216);

Eumaeus:

slaves do not work well when their master is away (XVII, 320-1);

Penelope:

men do not live long (XIX, 328);
no one can go on without sleep forever (591-2).

The sample is representative of the quality of the wisdom. In fact, it may well have collected, qualitatively, all the wisdom. More important, here, the sample is representative quantitatively. This is very much the distribution of the wisdom between the gods and the heroes, as well as among the gods, as well as among the heroes.

Among the gods the wisest is not the greatest among the gods. His daughter Athena is the wisest, and she is much wiser than her father, too. Among the heroes Odysseus is the wisest, by far. And with all due respect to the daughter of the greatest among the gods, not only is the man of many ways much wiser than her. The old man Nestor is not less wise. Nor is the warrior Achilles less wise.

Homer, then, created for the Greeks their theogony, distinguished the gods according to their descent and described their honors, arts, and appearances.

And, on the one hand, the gods are, as the gods always have been, the greatest.

On the other hand, the gods are, as the gods never have been, secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom.

This tension will trouble the philosophers, beginning with the fifth. For, by the time of the fifth philosopher, this tension has already decisively encouraged, as Spinoza describes it, truth, no faith, nature, reason.

Thus Homer. And Hesiod greatly increased this tension.

The gods are not a secondary concern of the *Theogony*. They are very much its primary concern.

Hesiod, however, begins with the question:
how did gods and the earth first come to be,
and rivers, and the boundless raging sea,
and the shining stars, and the heaven wide above?

He also answers the question.

First of all Chaos comes into being, then Earth, Tartarus, and Love.

From Chaos come Darkness and Night. Night lays with Darkness and bears Aether and Day.

Earth bears Heaven, Mountains, and Sea.

Earth lays with Heaven and bears 12 titans.

Cronus, the last-born titan, lays with Rhea, the seventh-born titan, and their last-born is Zeus. Zeus wages war on his father, vanquishes him, and becomes the king of mortals and immortals.

In the course of answering the question also Hesiod enumerates, counting only the named, 335 immortals.

Thus, Hesiod is also a poet. Not a prophet. And if not the supreme – Homer's songs forever are supreme – yet quite supreme.

And the gods are now the answer to a question. How did they first come to be? And the tension has increased greatly not only because they are now the answer to a question. They are only a part of the question. How did gods and the earth come to be, and rivers, and the sea, and the stars, and the heaven? They are only a part of the question, and they are only a part of the answer. As the question only implies, but the answer – the *Theogony* – cannot have been more unambiguous, these are all, gods, the earth, rivers, the sea, the stars, and the heaven, the same, immortals. Zeus, Hera, Poseidon, Apollo, Athena, Ares, Aphrodite, Hephaestus, Hermes are now a single chain of generation with Chaos, Earth, Tartarus, Love, Darkness, Night, Aether, Day, Heaven, Mountains, Sea.

Zeus is the greatest among the gods. So he is in the *Theogony* also the king of mortals and immortals, and the father of gods and men.

But he is in the *Theogony* also a descendent of Earth. And Earth is the foundation of all immortals. She bears Heaven, Mountains, and Sea. She bears the titans, including the father of the father of gods and men.

Moreover, first of all Chaos came into being.

And Hesiod is a poet. But he is also very close to being a philosopher. Counting only the named, the immortals are 335. They are a single chain of generation. Beginning with Earth uniformly by procreation. All connected in a chain of inferences. All by enumerations so complete as to omit nothing.

Hesiod, then, continued the creation for the Greeks of their theogony, distinction of the gods according to their descent, and description of their honors, arts, and appearances.

And, on the one hand, the gods continue to be

the greatest.

On the other hand, they are now the answer to a question. They are a part of the question. They are a part of the answer. They are the object of enumeration.

Hesiod is a major further step toward truth, no faith, nature, reason. And he is concerned with truth explicitly. The muses know how to tell many lies as if they were true, but they know also how to tell the truth when they want to. And he is concerned with nature more explicitly, very much more, than anyone before him.

So it is very much Hesiod's question, when he said that water is the principle of all things, and the earth floats on water, like wood, that the first philosopher answers.

Homer and Hesiod are a fundamental cause of the beginning of philosophy, and in two fundamental ways.

In how they created the gods.

And in that they are a great advance in the acquisition of knowledge.

They are a great advance in the description of the surface of the earth.

In the catalogue of the Achaeans and the Trojans alone Homer enumerates 241 localities, not less than 200 of them real. The localities are distributed from the Parthenius which issues into the Black Sea in the north to Crete in the Mediterranean in the south across 7° of latitude along the meridian, 800 km along the great circle, and from the island of Cephallenia in the Ionian Sea in the west to the Parthenius in the east across 12° of longitude along the parallel, 1 100 km along the great circle.

Among the progeny of Ocean and Tethys alone Hesiod enumerates 25 rivers, 23 of them real. The rivers are distributed from the mouth of the Danube in the Black Sea in the north to the mouth of the Nile in the Mediterranean in the south across 14° of latitude along the meridian, 1 600 km along the great circle, and from the mouth of the Achelous in the Ionian Sea in the west to the mouth of the Rioni in the Black Sea in the east across 20° of longitude along the parallel, 1 800 km along the great circle.

The advance in the description of the surface of the earth with Homer and Hesiod is comparable to that with the Assyrian princes.

Big-bosomed Earth is the foundation of all immortals. Big-bosomed Earth has become also the object, not yet of observation, but already of meticulous description.

And the seventh philosopher, Hecataeus, is the first geographer.

Earth bore starry Heaven, equal to herself, then she lay with him and bore twelve titans. And this son and mate of hers, equal to herself, and father of the titans has become also the object, not yet of observation, and not yet of meticulous description, but already of careful looking and deliberate seeing.

On the shield of Achilles the god draws: the tireless sun, the waxing moon, and all the constellations that adorn the heaven, the Pleiades and the Hyades and Orion and the Great Bear who looks at Orion and who alone never bathes in the Ocean.

The last bit, who alone never bathes in the Ocean, attests the poet's careful looking and deliberate seeing over some time, too. Elsewhere the poet sings also of:

the morning star which is the brightest (*Odyssey*, XIII, 93-4);

the evening star which is the fairest (*Iliad*, XXII, 318);

the star of harvest time which shines the brightest (V, 5).

And in these half a dozen verses of the poet's more heavenly bodies are noted than in the Hebrew, Christian, and Muslim holy scriptures combined.

Hesiod's other poem is the *Work and days*. In the *Work and days* Hesiod offers advice. To his brother:

to you, foolish Perses (286).

However:

you princes listen, too, for the gods are always
near,

watching those molesting their fellows
with their crooked judgments (248-51).

The advice is on three main matters, when and why to plant and harvest (383-617), when and why to sail (618-94), and when and why to marry (695-705). Here and there more general matters are addressed. For instance:

listen to justice and shun pride (217),

or:

avoid the anger of the gods;
do not make your friend the equal of your
brother;
but if you do, do not wrong him first;
but if he wrongs you first, repay him double
(706-11).

Here and there more particular matters are also addressed. For instance:

do not stand up against the sun when making
water,
but do so when the sun sets or rises;
do not make water as you go either,
and either on the road or off the road (727-30).

With his advice to his foolish brother, and you princes listen, too, Hesiod anticipates ethics.

As in the *Theogony* the gods are arranged in their series and order, according to their descent from each other, however, so in the *Work and days* the advice is arranged in its series and order, according to the days favorable for planting and harvesting, sailing, and marriage. And with the days Hesiod anticipates physics. The days are: when the Pleiades are rising (383-4); when Sirius is overhead (415); at winter solstice (479); when night and day are of equal length (562); 60 days after winter solstice (564-5); when Arcturus first rises (567); when Orion first appears (598); when Orion and Sirius come in mid heaven and dawn sees Arcturus (609-10); when the Pleiades, the Hyades, and Orion begin to set (615); 50 days after summer solstice (662-3).

And the first philosopher, and the second, and the third, and for some time all philosophers are physicists.

History, finally, Homer and Hesiod did not advance.

They created for the Greeks their theogony, distinguished the gods, and described them.

And so the events related in the *Iliad*, if not so much those related in the *Odyssey*, came to be taken by the philosophers, including the historians, and came to be taken very vigorously by the cities, as their past. All cities traced their past back to the heroes of the Trojan war. As at length Rome did, too.

Herodotus first dated both the poet and the

Trojan war. He writes:

Homer and Hesiod were 400 years before my time and no more,
and:

Dionysus the son of Semele, the daughter of Cadmus, was 1 600 years before my time, Heracles, the son of Alcmene, was 900 years before my time,
and Pan, the son of Penelope and Hermes, was after the time of the Trojan war and about 800 years before my time (II, 145).

Homer has since been dated better, and closer to his time. The Trojan war has not been dated better, nor ever will be. And the twin facts, that there is no record, not one word, of the events of the Trojan war before the poet, and that the poet would be some five centuries after those events, precludes the possibility of burdening the events with the presumption of reality, or the poet with the presumption that his relation of the events is history.

Homer is in this like the Yahwistic document, not like the Assyrian princes.

And in taking him to be history his successors are like the successors of the Yahwistic document. Herodotus explicitly takes him to be history. Thucydides also explicitly takes him to be history. Even Aristotle begins in *The constitution of Athens*, no questions asked, with Homeric heroes.

The great difference is that his successors, unlike those of the Yahwistic document, became historians, *par excellence*, and greatly advanced history.

In this, too, the relation of the past, Hesiod is closer to the philosophers. Not indeed to the historians among them, such as will appear two and a half centuries later, yet to the philosophers of history, such as will appear twenty-two and a half centuries later. In the *Work and days*, before turning to planting and harvesting, sailing, and marriage, and the appropriate more general and more particular matters, Hesiod describes the development of humanity.

In its later descriptions the development of humanity has tended to be an amelioration. In this its first description it is, lamentably, a degeneration. There have been five races of men, and they have been each worse than the previous:

first there was a golden race of men,
made by the immortals in the time of Cronus
(109-11);
then a second race the Olympians made,
of silver, much worse than the first (127-8);
father Zeus then made a third race of mortals,
of bronze, not at all like silver (143-4);
then yet another, a fourth race, Zeus
the son of Cronus made, of godlike heroes;
these went to Troy in ships over the deep
to fight for Helen of the beautiful hair (157-65);
and I wish I were not of the fifth race now,
I wish I had died earlier or were born later,
for it is a race of iron, never ceases
their labor, never ceases their pain (174-6);
and this race of men, too, Zeus will destroy (180).

Homer and Hesiod are a fundamental cause of the beginning of philosophy. Truth, no faith, nature, reason.

And Homer and Hesiod have affected substantially the beginning and development of the state among the Greek cities, in particular, and the beginning and development of the state, in general. And in the same two ways. In how they created the gods. And in that they are a great advance in the acquisition of knowledge.

The state begins among the Greek cities as it begins everywhere, with smiting.

Theopompus conquers Messenia. Pheidon defeats the Spartans. Cypselus captures Corinth.

But it begins among the Greek cities also as it does not begin elsewhere.

Theopompus establishes the ephorate. Pheidon establishes the weights and measures of the Peloponnesians. Cypselus is a leader of the people.

And Zaleucus writes the laws of Locri.

On the one hand, Homer and Hesiod have created for the Greeks their theogony, distinguished the gods according to their descent and described their honors, arts, and appearances. And that Homer and Hesiod have – never mind the judgment of the philosophers – the fact of Homer's public veneration powerfully attests. At the Carneia in Sparta, at the Panathenaea in Athens, at the Olympic games, and these are but three of the more lavish public celebrations of the Olympians.

On the other hand, Homer and Hesiod are

poets. Homer sings of the greatest warrior and the greatest voyager. Hesiod sings of Chaos, Earth, Night, Day, Heaven, Mountains, Sea. Homer is a repository of wisdom, and some of the wisdom, not much, is delivered by the gods, but most of the wisdom is delivered by the voyager, by an old man, by the warrior, some of it by a swineherd, too. Hesiod, stupid oaf, advises his foolish brother, but you princes listen, too.

The tension will trouble the philosophers. Because it will have decisively encouraged the beginning of philosophy in the first place, truth, no faith, nature, reason.

It will not trouble the politicians, the politicians being politicians. Because it will have encouraged the state to begin differently. It will have encouraged, next to incessantly fighting for nineteen years, the establishment of a council. Next to fighting the neighboring city, the establishment of weights and measures. Next to taking the property of many and of many more the lives, leading the people.

Most of all it will have encouraged the law. And there will be more lawgivers, and more – there will be very little religion – and the law rather than religion will shape custom, too.

In general, the state begins among the Greek cities wiser, and so the state will continue to develop, more wisely.

And if this is indicated by Theopompus, Pheidon, Zaleucus, and Cypselus more remotely, it is indicated by their successors in the next century already very directly and very powerfully.

The next century will be the time of the seven wise men. The seven wise men will be the wisest. And among the wisest will be the tyrant Pericles, the tyrant Pittacus, the lawgiver Solon, the tyrant Pisistratus, and the ephor Chilon.

The next century will be the time also of the rise of Athens. Later on, after that century, Athens will become the city of the philosophers. In that century, before it becomes the city of the philosophers, Athens will become the state of the lawgivers. In the first one century-odd of its development Athens will produce three great lawgivers, Draco, Solon, and Cleisthenes, more lawgivers, and more consequential lawgivers, than the development of the state has produced in the eleven and a half centuries since Hammurabi.

The state begins among the Greek cities wiser, and the state will continue to develop more wisely.

Homer and Hesiod are a main cause.

All learned from Homer from the first. Hesiod is the teacher of most men.

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And the following conclusions can be drawn from the development of the state, and of history, in the one century-odd from Tiglath-pileser III to Ashurbanipal.

This one century-odd is decisive in the development of the state.

The Assyrian princes build the most powerful state on earth. It is more powerful than any earlier state by orders of magnitude. It becomes the state of one tenth of humanity. After twenty-three and a half centuries of independent development of the valley of the Nile and the valley of the two rivers, this state unifies the two valleys. After twenty-three and a half centuries in which times of states keep alternating with times of no states, with this state the state acquires permanence, there have since been times when the state has retreated, but there have been no times of no states.

Within the domain of this state the building of Judaism, of the first church, begins. And of this the Assyrian princes are a main and proximate cause.

Outside the domain of this state the building of the state among the Greek cities begins differently. And of this as well the Assyrian princes are a main cause, if more remote in this case.

And the advance in the development of the state is a principal cause of the acquisition of knowledge, and this one century-odd is decisive in the advance in the description of the surface of the earth and in history, too.

Once again the foundation is smiting.

When Tiglath-pileser III, prince 745-27, conquers the entire valley of the two rivers, it is the fourth time the Assyrian princes have conquered the entire valley of the two rivers.

Adad-nirari, prince c. 1305-273, Shalmaneser, prince c. 1273-43, and Tukulti-Ninurta, prince c. 1243-06, have conquered the entire valley. Assyria has then retreated. Tiglath-pileser, prince

1115-076, has conquered nearly the entire valley again. Assyria has then again retreated. Adad-nirari II, prince 912-891, Ashur-nasirpal II, prince 884-59, and Shalmaneser III, prince 859-24, have conquered the entire valley again. Assyria has then again retreated.

And when Tiglath-pileser III conquers the entire valley again, in the following century through Ashurbanipal, prince 668-27, Assyria does not retreat, it continues to expand.

From Adad-nirari through Ashurbanipal, this is six and a half centuries of continuing, if not continuous, advance of warfare.

And from Tiglath-pileser III through Ashurbanipal, it is one century-odd of continuous, and the greatest, advance of warfare.

These princes develop an army of not less than 100 000. Counting their recorded campaigns, from the first of Tiglath-pileser III in 745 to the last of Ashurbanipal in 645, they deploy their army in each of not less than 70 of these 101 years. They deploy their army from central Asia Minor in the northwest to Susa in the southeast across 1 700 km and from lake Urmia in the northeast to Thebes in the southwest across 1 700 km as well. On the three counts jointly – size of the army, capability of deploying it continuously, and capability of deploying it far afield – the advance over earlier forces is by at least an order of magnitude. All three – the size of the army, its continuous deployment, and its deployment far afield – indicate major development of logistics. With the increasing peace and prosperity of the state under the later of these princes also, the army can only have been maintained by administration. And in this way, the development of logistics, the advance over earlier forces is yet greater.

These princes accelerate greatly the development of warfare, and accelerate it for good. With them begin seven and a half centuries of continuous, and the greatest, advance of warfare. The great kings, Cyrus, Cambyses, and Darius. The Spartan generals and the Athenian generals. Epaminondas and the discovery of tactics. Philip and Alexander. Hannibal and the discovery of strategy. The scores of steadily greater Roman generals from Fabius Maximus, Marcellus, and Scipio through Caesar and Augustus.

Warfare does not begin with Assyria, at this time. Great warfare, greater, and greater, does.

Tiglath-pileser III conquers the entire valley. Shalmaneser V consolidates the conquered domain. Sargon II begins expansion beyond the valley, in the north, in Asia Minor, in the east, beyond the Zagros, and in the south, in the desert. Sennacherib consolidates the conquered domain. Esarhaddon continues the expansion, in the east, further beyond the Zagros, in the north, further in Asia Minor, on the sea in the west, in the Mediterranean, and in the valley of the Nile, in the south. Ashurbanipal continues the expansion in the valley of the Nile, in the south.

Central Asia Minor to lake Urmia to Susa to Thebes, Assyria is the largest state ever, not less than twice larger than the largest earlier state. It is the state of one tenth of humanity.

These princes accelerate greatly the expansion of the state, and again for good. With them begin seven and a half centuries of continuous, and the greatest, expansion of the state. The great kings. Sparta and Athens. Macedon. Carthage. Rome. And expansion continues for one century after Augustus, through Trajan.

Again, expansion does not begin with Assyria, at this time. And again, great expansion, greater, and greater, does.

The state is power. And with Assyria, at this time, the power is substantially greater than it has ever been. Extensively.

And intensively.

The state is one.

And at its greatest, under Ashurbanipal, Assyria is very nearly the one and only one state on earth.

To achieve this feat the princes have defeated the foes of the state, external and internal. They have not relented.

To begin with, external foes are all other states. Conquered, these become internal foes of the state.

External foes who remain external foes are the hordes of wild men in the east, north, west, and south. The princes defeat these. Tiglath-pileser III pursues them, Sargon II pursues them, Sennacherib pursues them, Esarhaddon pursues them, Ashurbanipal pursues them. The state advances, and the hordes retreat.

And the princes defeat all other states, the external foes become internal. Tiglath-pileser III reduces Urartu and the states on the littoral. Shalmaneser V reduces them again. Sargon II reduces them again, and then they remain reduced. Tiglath-pileser III reduces the lower valley, then has to reduce it again, and again. He installs himself prince of Babylon. Sargon II has to reduce it again, and again. He installs himself prince of Babylon. Sennacherib has to reduce it again, and again. He installs his son prince of Babylon. Then he has to reduce it yet again, and to raze Babylon. Esarhaddon rebuilds Babylon. Ashurbanipal installs his brother prince of Babylon. Then he has to reduce it again. And reduces it. Esarhaddon reduces Egypt. Ashurbanipal has to reduce it again, and again. And reduces it.

Thus, the prince is the lord of the earth. He destroys all foes. He brings under his sway the lands from the sea of the rising sun to the sea of the setting sun. From the horizon to the zenith he establishes the princship over them.

He brings all lands under the single rule of Ashur. He brings them within the borders of Ashur. He imposes the princship on all lands. And all lands submit to the princship.

He makes all peoples live in peace. He counts them among the people of Ashur. He makes them all speak the same tongue. He establishes one tongue as the tongue of all lands.

He is entrusted with the princship over the earth.

The theory is not new. But the theory is substantially more explicitly formulated than it has ever been. Success in the implementation of the theory is not new either. But success in the implementation of the theory is substantially greater than it has ever been as well.

Extensively. Assyria has become the largest state ever. It has become an empire, the one state of all former states.

And intensively.

Tiglath-pileser III reports:

I took them, and settled them, and made them live in peace; and I counted them among the people of Ashur.

In order to make them live in peace, and count them among the people of Ashur, Tiglath-pileser III resettles not less than 10 % of the human

population of the domain he conquers. Sargon II resettles not less than 5 %. Sennacherib resettles not less than 5 %.

After that the need for resettlement arises only incidentally.

Success in the pacification of the state is indicated by the decrease of burning, razing, and destroying. By the decrease of the number of the resettled. By the disappearance of the conquered states. By the appointment of governors throughout the valley. By the selection of troops for the prince's host from the people he takes. By the expansion of the state beyond the valley.

And Sargon II reports:

I brought people from the four quarters, all of different tongues, from the mountains and from the valleys, and I settled them, and I made them all speak the same tongue; I set scribes over them to teach them to fear the gods and the prince.

Esarhaddon rebuilds Babylon. And reports:

the people of Babylon who had been taken in servitude I gathered, I made them people of Babylon, and I counted them among my people; I restored to them all their goods; I told them to plant, and to dig canals; I gave them a tablet to witness their freedom; and I established their tongue as the tongue of all lands.

Under Esarhaddon and Ashurbanipal the descendants of the peoples conquered by their predecessors, including most particularly the resettled, have become substantially more likely to be the one people of Ashur. Substantially more likely to live in peace, and speak the same tongue, too. They have been mixed. Out of all the tribes of their ancestors the princes have made them into the one people of Ashur.

This is how Ashurbanipal describes *pax Assyrica*:

the wicked wishing war are subdued; everyone is safe in his city and his home; no one takes anything from his neighbor by force; in the entire land the strong do no harm to the weak; one travels alone, all roads are safe; there are no robbers; no one sheds blood; no one molests anyone; the lands are at peace; the four quarters are in perfect order, like the finest oil.

These princes accelerate greatly the mixing of peoples, and once again for good. The great kings

will continue the mixing, and will mix many more. Sparta and Athens will be more reluctant to mix. But Alexander will continue the mixing, and his successors will mix many more. Rome will continue the mixing, and will mix very many more.

The mixing of peoples does not begin with Assyria, at this time, either. Yet again, the resolute mixing of peoples – and deliberate mixing – does.

These princes greatly accelerate the development of warfare, they greatly accelerate the expansion of the state, they build an empire, bringing all former states under their one and only one state, they formulate the theory of the state more explicitly than ever, they implement the theory better than ever, they mix for one century-odd one tenth of humanity. They advance greatly the acquisition of knowledge, too. Assyria is the greatest state.

Urartu disappears.

Israel disappears.

In Judah the building of Judaism begins.

First there is the Yahwistic document. You shall have no other gods beside me. A code of laws enjoins you, you shall not, you shall not, you shall, you shall not, some fifty times. If you obey the lord and do all that he says, he will set your borders from the wilderness to the Euphrates. And your past is related, through Abraham, Isaac, Jacob, and Joseph, through the Mosaic legislation, steered by the lord. Then there is the first prophetic book, *Amos*. The lord is elevated further. Can a misfortune befall a city if the lord did not send it? His promise is reaffirmed. He will build the fallen house of David firm as it was in the days of old. And the past steered by him is now connected to the state of David. Then there is *Hosea*. Assyria now becomes the means of his wrath at your wickedness. And *Isaiah*. He is now the lord of hosts. And he has a plan. First, he will bring against you the king of Assyria and his multitude. Second, a king will be born, great in battle, and great will be again the domain of the throne of David. The past steered by him is now his plan. More generally, all kings are now his captains. There is also *Micah*. There are also the psalms.

In the meantime Tiglath-pileser III has reduced

Israel and Judah. Shalmaneser V has reduced Israel and Judah. Sargon II has destroyed Israel and reduced Judah.

So the princes of Israel and Judah worship the gods of other peoples, they set up shrines and make sacrifices and offerings abhorrent to the lord, they follow the ways of other peoples.

And then Hezekiah does not.

Sennacherib reduces Judah. He shuts Hezekiah in Jerusalem like a bird in a cage. He takes 200 150 people from the cities of Hezekiah. Hezekiah gives him 30 talents of gold and 800 talents of silver. Hezekiah cuts down the doors and the doorposts of the temple of the lord and gives them to him.

Hezekiah also, however, abolishes the shrines, smashes the pillars, and cuts down the sacred posts. There is no one like him among the kings of Judah before or after. He clings to the lord. He never turns away from the lord. He keeps the commandments of the lord given by him to Moses. He rebels against the king of Assyria and does not serve him.

And if Hezekiah does this because of the books, as the books have urged, and again, and again, and again, cling to the lord, never turn away from the lord, keep the commandments of the lord given by him to Moses, the books have become effectual. Their political end has become the ground of political action. The books have told Hezekiah what to do, and he has done it.

Hezekiah is thus the beginning of Judaism. He is the first attempt to build the state on what the books have been relentlessly affirming. The first attempt, while god's plan is still in its first step, to usher in its second step.

The cause are the Assyrian princes.

The Assyrian princes are the cause – on the lord's authority, they are the rod of his anger – of the ruin of the Hebrew states.

The Assyrian princes are the cause – and *Hosea* and *Isaiah* can hardly have been more explicit – of the response of the books to the ruin.

The Assyrian princes, in particular, and the princes, in general, are the cause of what the books relentlessly affirm.

His name is the Lord, and it is he who destroys the cities, he who wipes them out. This is from the princes. He will send fire on Damascus, Gaza,

Ashdod, Ashkelon, Ekron, the Philistines, Tyre, Teman, Bozrah, Rabbah, Moab, Kerioth, Judah, and Jerusalem. This is also from the princes. Isaiah sees him seated on a throne, high and exalted. This is also from the princes. Isaiah sees him attended by six-winged seraphim as well, and this is not from the princes. But holy! holy! holy! the lord of hosts! is also very much from the princes.

It is he who sends Assyria forth against the peoples who displease him to take them as booty and seize their treasures. This is from the princes and the *Marduk prophecy* jointly. As he has taken all kingdoms whose gods are greater than those of Jerusalem and Samaria, will he not take Jerusalem and her false gods as he has taken Samaria and her false gods? This is also from the princes and the *Marduk prophecy* jointly. All kings are his captains. And this is also from the princes and the *Marduk prophecy* jointly.

The code is from the earlier codes, and these are from the princes.

And the division of the earth, beyond the wilderness Egypt, beyond the Euphrates Assyria, from the wilderness to the Euphrates the lord's state, is very much from the princes, in general, and the Assyrian princes, in particular.

That the Assyrian princes are the cause is indicated by the fact as well that the Yahwistic document predates Tiglath-pileser III and the beginning of the final assault of the Assyrian princes on Israel and Judah, and there is no evidence that the Yahwistic document, when it is composed, is but a literary composition. There is no evidence that its injunction, you shall have no other gods beside me, is obeyed by the princes of Israel and Judah or anyone else. There is no evidence that its code of laws is promulgated or that any law is promulgated in the Hebrew states. Nor are the borders of the Hebrew states set from the wilderness to the Euphrates. Nor is the lord himself in evidence in the Hebrew states worshipping the gods of other peoples and following the ways of other peoples. It is with the successors of the Yahwistic document, the prophetic books and their accumulation under the assault of the Assyrian princes, that the books become effectual. That their political end becomes the ground of political action.

Thus, the first attempt to build the state on what the books have been affirming is not successful. Hezekiah's successors revert to doing what is displeasing to the lord.

But that the writings have become effectual at all is a major new development.

In religion.

Religion is older than the state. In both valleys, however, as soon as it begins, the state takes over religion. The prince ministers to the gods, he builds their temples, the priests are his officials. Religion becomes inseparable from the state. And in both valleys religion remains inseparable from the state for some time. But then in both valleys religion begins to separate itself from the state, and in both valleys eventually separates itself completely from the state. In both valleys when the state becomes more powerful religion becomes more powerful, and when the state ceases to become more powerful religion continues to become more powerful. In both valleys with the increase of the power of the prince one god is elevated steadily higher. The power of the prince is transferred to one god. But then the one god is elevated high above the prince, too, and his power is now very much greater than the power of the prince.

In the valley of the Nile, the old kingdom has no external foes, no internal foes. And religion is very much the main concern of the state. The first five and a half centuries are a time of vigor. The prince is great god. And nothing is greater. But then the vigor wanes. Re begins to predominate among the gods. From this time are the pyramid texts. The prince begins going to Re in heaven. The middle kingdom has foes, and smiting becomes a main concern of the state. Next to religion. Religion remains its main concern. The elevation of one god continues. From this time are also the coffin texts. Every lesser official begins going to Re in heaven. The new kingdom has more foes, and for some time smiting becomes its main concern. Again, next to religion. Religion remains the main concern of the state. Then religion becomes its only concern. The elevation of one god culminates in Aten, elevated above all creation. When the old religion is restored, Re is elevated above all creation. From this time is also *The book of the dead*. And when

everyone begins going to Re in heaven the separation of religion from the state is complete. Religion is the power, with or without the state, reducing the wills of men unto one will.

In the valley of the two rivers, it is more difficult to build the state. Smiting becomes the main concern of the state. The state has more external foes and more internal foes. Smiting is the main concern of the state, and hence the development of administration, and hence the development of the law. Religion is inseparable from the state, but it is not its main concern. For eleven centuries the state prevails decisively against its foes. The state is fundamentally Akkad – Ur – Babylon. The advance in the law is entirely in these centuries. And the elevation of one god is inseparable from the increase of the power of the prince. This culminates in the elevation of Marduk above Enlil and Anu. The prince of Babylon is victorious for the god of Babylon, so the lord of heaven and earth and the lord of the gods allot the supreme command to the god of Babylon. In the following eight and a half centuries the state does not prevail decisively against its foes. The state is at first well-nigh annihilated. Then the state is fundamentally Assyria, as Assyria keeps laboring to unify the valley. There is no advance in the law in these centuries. And in these centuries the one god is elevated high above the prince. Not in Assyria. In two literary compositions. In *When on high* Marduk is elevated above all creation. And in the *Marduk prophecy* he is elevated above the past, too. The prince has carried off the god as booty. Not so. The god has commanded it. The separation is now complete. Still only in words, yet the one god is now more powerful than the prince. Under the prince, the state is a power reducing the wills of men unto one will. Still only in words, yet under the one god, religion is now ready to be itself a power reducing the wills of men unto one will, with or without the state.

The state has failed to assimilate religion. When it has become more powerful, it has given its power to religion, and when it has ceased to become more powerful, the power of religion has continued to increase.

This culminates in the Hebrew writings.

And the writings have become effectual. These

are the first substantially effectual writings. These are the first writings whose political end has become, in fact, the ground of political action.

And the writings will triumph over the greatest state. The greatest state has proposed to count the Hebrews, too, among the people of Ashur, to mix them with all other peoples into the one and only people of the one and only state. The writings have proposed to exclude the Hebrews from the mixing. And the writings will succeed. Long after the greatest state is gone, the Hebrews will continue to exclude themselves from the mixing, and on the ground affirmed by the writings.

The writings will also not deliver the promised state. But they will deliver a church.

So in *Jeremiah*, next, the lord appoints the priest over the nations and over the kingdoms. And there will be no end to the line of the levitical priests before him.

Egypt, after four-odd centuries of disorder, is unified by Piye and his successors. Then Esarhaddon and Ashurbanipal bring Egypt, too, within the domain of Assyria.

The development of the state in the valley of the Nile and the development of the state in the valley of the two rivers, independent of one another for twenty-three and a half centuries, becomes one joint development.

And outside the domain of Assyria the development of the state reaches Asia Minor, crosses the Aegean, and begins in Greece.

Phrygia, in central Asia Minor, is an abortive attempt to build the state.

Lydia, in western Asia Minor, is a successful attempt. Gyges sends messengers to Ashurbanipal, sends men to Taharqa, sends gifts to Delphi, plunders the countries of the Greek cities on the Aegean coast and captures one of them. And under his successors Lydia will continue to rise.

Across the Aegean the first attempts to build the state among the Greek cities are Sparta, then Argos, then Corinth.

Argos is an abortive attempt.

Corinth is a successful attempt. Cypselus attacks the city, captures it, and rules it for 30 years in good fortune. He is a leader of the people. And under his successor Corinth will first attempt to become the dominant power among the Greek cities.

Sparta is a successful attempt as well. Our king Theopompus, dear to the gods, wins Messenia, good for ploughing, good for planting. He establishes the ephorate. And under his successors Sparta will become the dominant power among the Greek cities.

Further west, across the Ionian Sea, Locri is the first colony to emerge from obscurity. Zaleucus writes the laws of the city. But this attempt of the state to begin is abortive as well.

The Greek cities have learned the alphabet from the Phoenicians.

They have learned from the Phoenicians also colonization by sea.

Colonization greatly accelerates the development of boats and navigation. And the Greek cities will greatly advance warfare on the sea as well as on land.

From the first, colonization spreads many small cities over a vast area, most with tenuous connections with one another. The laws of a colony are first written down, the laws of a new city founded by an older city. All cities, new and old, will become prone to be founded, and refounded, by lawgivers. All cities, old and new, would be its own state each. Experimentation with new forms of government will begin.

And Homer and Hesiod precede the beginning of the state among the Greek cities.

And Homer and Hesiod are substantially effectual writings as well.

If the *Iliad*, or the *Odyssey*, or the *Theogony* has a political end, this is in each case implicit, not explicit. The *Work and days* is more explicit: you princes listen, too, for the gods are always near, watching those molesting their fellows with their crooked judgments. None of the four poems, however, is nearly as explicit as any of the Hebrew writings. None of the four promises a state, none of the four has a plan.

Nevertheless, if Homer and Hesiod have created for the Greeks their gods – and that they have the fact of Homer's public veneration sufficiently attests – Homer and Hesiod have become the ground of political action.

And the gods Homer and Hesiod have created for the Greeks are, on the one hand, as the gods always have been, the greatest. On the other hand, they are, as the gods never have been, secondary

to poetry. Secondary also to a warrior and his battles and a voyager and his family. Secondary also in wisdom. They are also the answer to a question, a part of the question, a part of the answer, and the object of enumeration, too.

Homer and Hesiod will powerfully encourage truth, no faith, nature, reason.

The state begins among the Greek cities wiser. And it is Homer and Hesiod who will have encouraged the establishment of a council, the establishment of weights and measures, writing the laws of a city, and leading the people.

And the state will continue to develop more wisely. There will be much smiting. But there will also be much law. And there will be little religion.

The beginning of the state among the Greek cities poses the fundamental problem of the continuity in the development of the state from Assyria to the Greek cities.

Contiguity is attested strongly.

Spatially.

From Assyria – to Phrygia – to Lydia – and the Greek cities.

Colonization is also a very strong link from the development of state in the east to its development further west. But it is a weak link between the state of Assyria, in particular, and the Greek cities, in particular. Even as the Phoenician cities are firmly in their domain – and even as they first attest the whale, too – the Assyrian princes never take to the sea.

Contiguity is attested strongly also temporally.

Esarhaddon reports:

all princes from the middle of the sea prostrated themselves in my feet and brought me their tribute, from Yadnana, Javan, and as far as Nusisi.

Yadnana is Cyprus. Javan is Ionia. Nusisi is probably Knossos, on Crete.

Sargon II attests Midas, and Ashurbanipal attests Gyges.

Herodotus attests both Midas and Gyges. He attests also Semiramis. And he promises to report on many princes in his Assyrian book, even as his Assyrian book remains unwritten.

The Assyrian princes and the father of history attest the temporal contiguity from Assyria to the Greek cities.

And to draw the conclusion that the relation is not just contiguity, but continuity, there is the fact of the enlightenment of the Assyrian princes.

The greatest state is a state also of writing more massive than ever. The princes themselves are greater writers than any of their predecessors.

Tiglath-pileser III, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal are each a step of advance in the description of the surface of the earth and in history. Sargon II, Esarhaddon, and Ashurbanipal a major step of advance each.

Under Esarhaddon and Ashurbanipal also the advance in the acquisition of knowledge broadens substantially further.

Esarhaddon rebuilds Babylon, and Babylon becomes once again the center of writing. Helped decisively by Esarhaddon: I established their tongue as the tongue of all lands.

Observation resumes, becomes sustained, becomes accurate, reaches dozens of the heavenly bodies. Again helped decisively by Esarhaddon. In May 680 Jupiter draws near conjunction with the sun, becomes very bright and reddish, then becomes stationary before retrogradation – Esarhaddon reports.

Esarhaddon is the first prince who does everything:

in a favorable month on an auspicious day.

The auspicious and inauspicious days are collected in *When Anu and Enlil*. 7 000 of them.

Ashurbanipal reports:

I learned all secrets of the art of writing; I studied the heaven with the masters of divination; I solved problems of division and multiplication; I learned to write Sumerian and Akkadian; I read the record of all events since before the flood.

And he collects the first library. It contains not less than 1 000 distinct compositions, some of them copied by Ashurbanipal himself. Among the compositions are *Gilgamesh* and *When on high* as well as *When Anu and Enlil*.

Gilgamesh, *When on high*, and *When Anu and Enlil*, all three, are attested in copies more numerous and more widely disseminated than any other Akkadian compositions, and in particular in the one century-odd of massive writing under these princes.

In particular, then, continuity from *Gilgamesh*

to the *Iliad* and *Odyssey* is indicated by their contents, as well as by the quality of the poetry. Continuity from *When on high* to the *Theogony* is indicated very strongly by their contents. And continuity from *When Anu and Enlil* to the *Work and days* is indicated very strongly by their contents.

In general, continuity is indicated by the fact that the oldest Greek compositions are committed to writing – and the Greek cities become literate – in that one century-odd, the one century-odd of massive writing under these princes. Just as the oldest Hebrew compositions are committed to writing – and the Hebrew states become literate – in that one century-odd, the one century-odd of massive writing under these princes. The oldest Hebrew compositions are committed to writing – and the Hebrew states become literate – deep inside the domain of the Assyrian princes. The oldest Greek compositions are committed to writing – and the Greek cities become literate – outside the domain of the Assyrian princes. But not too far outside, if all princes from the middle of the sea prostrate themselves in the feet of Esarhaddon and bring him their tribute, from Yadnana, Javan, and as far as Nusisi.

And if so, and the state begins among the Greek cities wiser, Assyria is a main cause of this as well, even if more remotely of this than it is of Judaism.

The beginning of the first church is a part of the development of the greatest state. And the wiser beginning of the state further west is a part, if more remotely, of the development of the greatest state. One is a darker part, the other a brighter part.

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And the development of the state in the one century-odd from Tiglath-pileser III to Ashurbanipal attests a very great advance in the acquisition of knowledge.

The advance in warfare, the building of an army of 100 000, its deployment continuously for one century, its deployment across 1 700 km northwest to southeast and northeast to southwest, the development of the logistics of the support and deployment of this army, all attests the solution of theoretical problems, irrespective

of whether practical problems are thus solved as well.

The building of the largest state, not less than twice larger than the largest earlier state, the building of an empire, bringing all former states under one state, the bringing of one tenth of humanity under one state, the pacification of this population, the mixing of this population, all attest the solution of theoretical problems as well, irrespective of whether practical problems are thus solved.

With all this the Assyrian princes have won propositions. Very many propositions.

The more explicit formulation of the theory of the state is also an advance, and its better implementation is also an advance.

And in the description of the surface of the earth and in history the Assyrian princes are a decisive advance.

In one of his inscriptions Tiglath-pileser III records 149 localities, not counting the dozens lost in lacunae. In his other inscriptions he records more. Sargon II records more. Sennacherib records more. Esarhaddon records more. Ashurbanipal records more.

The spatial relations of the localities are steadily more explicit.

And the princes are clear that they are pressing against the limits of the known earth. I brought under my feet lands that had never been conquered. I opened mountains that had never been traversed. I took the most distant paths, across impassable mountains, across endless sands. A land beyond the sea, a distant land of which my fathers had never heard.

On all three counts, the number of the recorded localities, the determination of their spatial relations, and pressing explicitly against the limits of the known earth, with the Assyrian princes the description of the surface of the earth is on the verge of becoming systematic and deliberate investigation. Becoming geography.

Where the Assyrian princes leave off, Homer and Hesiod continue.

The description of the surface of the earth by the princes reaches in the west Egypt, Phrygia, Lydia, and Ionia. The description of the surface of the earth by Homer and Hesiod reaches in the east Ionia, Lydia, Phrygia, and Egypt. The two

descriptions overlap.

Spatial relations are not explicit in Homer and Hesiod. If the poets are pressing against the limits of the known earth, too, they are rather poetically. For instance: father Ocean and mother Tethys live at the end of the earth where lady Hera visits them (*Iliad*, XIV, 200-2).

Homer and Hesiod are yet a great advance in the description of the surface of the earth. Not less than 200 of the localities in Homer's catalogue are real. Hesiod's is the first enumeration of rivers, 23 of them real.

And the most dramatic is the advance in history.

The important historians are,

- 785 - 727 **Tiglath-pileser III,**
- 767 **Assyrian prince list,**
- 760 - 705 **Sargon II,**
- 740 - 680 **Sennacherib,**
- 715 - 668 **Esarhaddon,**
- 708 synchronistic prince list,
- 690 - 627 **Ashurbanipal.**

The inscriptions of the Assyrian princes have become chronicles – describing events in detail, systematically, generalizing over them – with Adad-nirari, prince c. 1305-273.

The chronicles have begun including annals – describing events year by year – with Tiglath-pileser, prince 1116-076.

They have begun including true annals – counting the years explicitly – with Adad-nirari II, prince 912-891.

And this advance in the development of the chronicle culminates in Tiglath-pileser III, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal.

The record of Tiglath-pileser III is massive. The record of Sargon II is more massive than the record of any of his predecessors. The record of Sennacherib is more massive. The record of Esarhaddon more massive. And the record of Ashurbanipal more massive.

The inscriptions of Tiglath-pileser III are detailed, systematic, chronicles. The inscriptions of Sargon II are more detailed, more systematic, better chronicles. The inscriptions of Sennacherib more detailed, more systematic, better chronicles. The inscriptions of Esarhaddon more detailed, more systematic, better chronicles. And the inscriptions of Ashurbanipal are more detailed,

more systematic, better chronicles.

When Esarhaddon counts:

586 years have passed since my ancestor Shalmaneser, the son of Adad-nirari, built the temple of Ashur,

586 years have in fact passed.

The Assyrian prince list is compiled under Shalmaneser V. From Ashurbanipal back to the first prince who lived in a tent the list has a series of 114 princes. Back to the first prince who has left his inscriptions behind,

Shallim-ahhe prince c. 1960,

the list has a series of 83 princes, reaching thirteen-odd centuries into the past before Ashurbanipal. Back to

Ashur-bel-nisheshu – prince c. 1417-08,

the list has the series of 45 princes, who have attempted to build the greatest state, and again, and again, and have succeeded, and have left behind steadily more and better chronicles, for seven and a half-odd centuries through Ashurbanipal, the chronicles corroborating the list, the list corroborating the chronicles.

The synchronistic prince list is completed under Ashurbanipal. It correlates the reigns of 82 Assyrian princes with 98 Babylonian princes.

All chronology rests on the Assyrian prince list.

The history of the seven and a half centuries through Ashurbanipal is substantially and essentially the record of the Assyrian princes. The history of Assyria is their record exclusively. The history of Urartu in its entirety is inseparable from their record. The history of Babylon in these centuries is inseparable from their record. The history of Israel and Judah is inseparable from their record. The history of Egypt toward the end of these centuries is inseparable from their record. Media emerges from obscurity in their record. Lydia emerges from obscurity in their record.

The Assyrian book, which the father of history has not written, the Assyrian princes have written.

The description of the past has become systematic and deliberate investigation with the Sumerian prince list. It has become history.

With these princes the description of the past has become substantially more systematic and substantially more deliberate. It has become very

much better history.

How much better can be judged by the same fact. When Esarhaddon counts: 586 years have passed since my ancestor Shalmaneser, the son of Adad-nirari, 586 years have in fact passed.

Such a feat, reaching in fact 586 years into the past, will not be achieved by Herodotus, not by Thucydides, not even by Polybius, not by any Greek historian. Such a feat will become again possible only when the next greatest state is built in Rome and Livy writes the history of this state. And it will not be achieved by Livy either, it will be first achieved again by Livy's successors.

These Assyrian princes advance history very greatly.

And there is again the fact of the spatial and temporal contiguity.

It is within the domain of these princes, and at their time, that the Hebrew writings relate that past of the Hebrews steered by god. And that past will long be taken to be history.

It is outside the domain of these princes, yet within the domain of princes who prostrate themselves in their feet, that Homer sings of the greatest warrior and the greatest war. And this will be taken to be history.

And it can be concluded that of this, too, and both, of the relations of those pasts and of the eagerness to take them to be history, the Assyrian princes are a main cause.

Assyria, at this time, is a very powerful cause.

All in all, then, the steps of advance in the acquisition of knowledge indicated by the development of the state and the development of history, including geography, are these.

Tiglath-pileser III, who once again brings the entire valley under one state, begins making the peoples in it live in peace, records more localities than his predecessors, and resumes the advance in the development of the chronicle.

The Assyrian prince list.

Homer, who catalogues 241 localities, not less than 200 of them real.

Sargon II, who breaks out of the valley, expands the state in the north and in the east, continues making the peoples live in peace, begins making them speak the same tongue, records more localities and more explicitly, implying more unambiguously maps, and continues the

advance in the development of the chronicle.

Theopompus, with whom Sparta begins.

Sennacherib, who consolidates the state, and continues the advance in the description of the surface of the earth and in history.

Hesiod, who enumerates 25 rivers, 23 of them real.

Esarhaddon, who expands the state further in the north, east, and south, who unifies the two valleys, under whom peace and prosperity prevails, who establishes Babylonian as the tongue of all lands, continues the advance in the description of the surface of the earth and in history, and solves conclusively the problem of reckoning time across centuries.

Ashurbanipal, who expands the state further in the south, under whom the four quarters are in perfect order, like the finest oil, who formulates the theory of the state at its most explicit, continues the advance in the description of the surface of the earth and in history, and collects the first library.

To continue also the tabulation of the distribution of the steps, continuing to count centuries with respect to the year of birth assigned to the first prince, 3040, the distribution is,

840- 741	5,
740- 641	4.

**The three-odd centuries from
Ashurbanipal to Alexander**

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The decisive centuries continue.

The great advance in the development of warfare continues, and accelerates very greatly.

The expansion of the domain under the state continues, and accelerates very greatly.

The power which the state is grows, and more, and more.

Experimentation with the forms of government begins.

The advance in the development of the law resumes, and accelerates.

The development of religion culminates in the completion of the building of the first church.

Philosophy begins.

In particular, the philosophers begin concern-

ing themselves with the state, and at length the investigation of the state begins.

The description of the surface of the earth becomes deliberate, systematic, becomes geography, and geography advances very greatly.

History advances very greatly.

Counting the first church a state, the particulars indicate 22 states.

Assyria is destroyed.

Babylon and Media destroy Assyria. Egypt and Lydia also rise. The four kingdoms fight one another, vying to become the dominant power on earth.

Persia rises very greatly. The great kings conquer the four kingdoms, and build the greatest state.

Judah is destroyed by Babylon. But under the Babylonian princes, then under the great kings the most important Hebrew holy writings are composed, and the building of Judaism in place of Judah is completed.

In the meantime the state has risen greatly among the Greek cities further west. The attempts to build the state are many.

Corinth first rises briefly. Megara, Sicyon, Miletus, and Mytilene are among the more important abortive attempts. Samos, the first attempt to build a maritime power, is also abortive.

Sparta is a greatly successful attempt. And Athens is a greatly successful attempt. Sparta becomes the dominant power among the Greek cities. Athens and Sparta stop the expansion of the great kings. Athens builds the first maritime empire. It builds also democracy. Sparta and Athens fight the greatest war.

Thebes defeats Sparta and Athens.

Macedon rises very greatly. It conquers Greece. Alexander conquers the state of the great kings.

In the colonies further west Catana and Acragas are among the more important abortive attempts to build the state. Syracuse is a successful attempt.

Carthage builds a maritime empire.

And Rome begins, very auspiciously, with laws, and victories.

The state has expanded greatly eastward, and very greatly and very substantially westward.

This is the time of the father of history, and

after him of more historians, and many more, and ever more. Before this time, the sources are never many. Beginning at this time, the sources are always many, and more, and many more, and ever more.

The collection of the particulars, then, is in this order.

Assyria. Babylon. Media. Egypt. Lydia. Persia. Judaism. Corinth. Megara. Sicyon. Miletus. Mytilene. Samos. Sparta. Athens. Thebes. Macedon. Catana. Acragas. Syracuse. Carthage. Rome.

The investigation of the state. Geography. And history.

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Assyria.

The particulars are 2,

Ashur-etil-ilani prince 627-3,

Sin-shar-ishkun prince 622-12.

Both are sons of Ashurbanipal.

After the long series of great and very great princes, Assyria comes to an end with 2 feeble princes.

And this is one of the causes of the fall of Assyria, that it is under feeble princes.

The other cause are Babylon and Media, that they are under powerful princes.

And the cause of this latter cause are the Assyrian princes, the earlier and great Assyrian princes. The Babylonian and Mede princes have learned from them.

Babylon rises with Nabopolassar, prince 626-05. Media rises with Cyaxares, prince *c.* 625-585. Before Nabopolassar there has not been a state of any authority in Babylon for ten centuries. In the one century-odd before Nabopolassar the Assyrian princes have reduced and ruled Babylon. Then Babylon rises with Nabopolassar. Before Cyaxares there has never been a state of any authority beyond the mountains in the east. The Medes have been one of the hordes beyond the mountains which in the one century-odd before Cyaxares the Assyrian princes have reduced and ruled. Then the Medes rise with Cyaxares. In particular, Nabopolassar has learned warfare. As Nabopolassar's chronicle reports: in his 1st year the prince of Akkad joined battle with the Assyrians (chronicle 2); in his 2nd year the prince of

Akkad joined battle with the Assyrians (*id.*); in his 3rd year the prince of Akkad joined battle with the Assyrians (*id.*). In particular, Cyaxares has learned warfare as well. As Nabopolassar's chronicle reports: in the 12th year of Nabopolassar the Medes joined battle with the Assyrians; and the prince of Akkad concluded an alliance with the prince of the Medes Cyaxares (chronicle 4). The 12th year of Nabopolassar is 614.

And in 612 Nabopolassar and Cyaxares sacked Nineveh, and this was the end of Assyria.

The end of Assyria is catastrophic. Assyria continues powerfully, counting back to Ashurbel-nisheshu, for seven and a half centuries. In the last of these centuries, through Ashurbanipal, Assyria is the greatest state, very nearly the one and only state on earth. Then less than two decades after Ashurbanipal Assyria is no more.

This is not new.

In the valley of the Nile, the old kingdom continues strongly through Pepi II, then after him the old kingdom is no more. The middle kingdom continues powerfully through Amenemhet III, then less than two decades after him the middle kingdom is no more. The new kingdom is the exception, at its peak under Amenhotep III, it declines slowly over the next two-odd centuries.

In the valley of the two rivers, Akkad continues powerfully through Sharkalisharri, then less than four decades after him Akkad is no more. Ur continues powerfully through Shu-Sin, then less than three decades after him Ur is no more. The great Babylon continues strongly through Ammisaduqa, then less than three decades after him the great Babylon is no more.

New is that there is no disorder after the fall of Assyria. There are no hordes of wild men, there are no local chieftains. There are powerful states.

And of this, too, the Assyrian princes are the cause. With their labors the state has acquired permanence.

Moreover, not only are there powerful states after the fall of Assyria. Babylon, Media, Egypt, and Lydia all rise after the fall of Assyria. And the four kingdoms are singly none of them as powerful as Assyria has been. But the four jointly are more powerful than Assyria has been. The four will also continue to join battle, with one another now, and will continue to expand the

domain under the state.

The fall of Assyria – powerful princes earlier, feeble princes at the end – and feeble princes inside, powerful princes outside – can hardly have indicated more unambiguously the identity of the prince and the state. The prince is the state and the state is the prince.

Babylon.

The particulars are 5,

Nabopolassar prince 626-05,

Nebuchadnezzar prince 605-562,

Awil-Marduk prince 562-0,

Neriglissar prince 560-56,

Nabonidus prince 556-39.

The name chronicles has established itself for the record of these princes, and chronicles their record is, and this as well these princes have learned from the Assyrian princes.

Nabopolassar installed himself prince of Babylon in 626. And he joined battle with the Assyrians. In his 1st year. In his 2nd year. In his 3rd year. By 616 he was firmly in control of the lower valley, and in that year: he defeated the army of Assyria and the army of Egypt, and pursued them to the Lower Zab (chronicle 3). The Lower Zab is in the upper valley. The prince of Egypt was Psamtik. Installed by Ashurbanipal, he remained loyal to his successors. Nabopolassar continued to join battle with the Assyrians. Cyaxares also joined battle with the Assyrians. In 612 Nabopolassar and Cyaxares captured Nineveh: they plundered the city, took countless booty, and reduced the city to rubble; the prince of Assyria Sin-shar-ishkun died (*id.*). The remnants of Assyria, under Ashur-uballit II, retreated to Harran, on the Euphrates. Nabopolassar continued to join battle. In 609: he defeated Ashur-uballit and a large Egyptian army, and took Harran (*id.*). This is the last report of an Assyrian host. Necho was now the prince of Egypt. Nabopolassar was firmly in control of the entire valley east of the Euphrates. And the battle for the littoral west of the Euphrates was now with the prince of Egypt. In 608 Nabopolassar campaigned in the north, in Urartu (chronicle 4).

His son Nebuchadnezzar led the army in Nabopolassar's last years. In 606: the army of Egypt crossed the Euphrates, and pushed back the army of Akkad (chronicle 5). In 605: Nebuchadnezzar

destroyed the army of Egypt; Nabopolassar died, and Nebuchadnezzar ascended; he mustered his troops, marched on Hatti, and took Ashkelon (*id.*). Hatti is the littoral, Ashkelon is south of Judah. In 601: the prince of Egypt mustered his troops; he joined battle with the prince of Akkad, and they inflicted heavy losses on one another (*id.*). In 599: the prince of Akkad marched on Hatti, and advanced deep in the desert; he took countless booty (*id.*). In 598: he took Jerusalem, and installed a prince to his liking (*id.*). *Kings* adds: he took the people of Jerusalem, the officers and the soldiers, 10 000 in all, and all craftsmen and smiths, and left in the city only the weakest people (II, 24).

Nebuchadnezzar thus won the littoral. And the entire valley, from the desert in the south to the mountains in the north and from the mountains in the east to the sea in the west, was now the domain of Babylon.

Nebuchadnezzar built the city of Babylon into the largest city on earth. Herodotus writes: its circumference is 480 stades (I, 178). 480 stades is 70+ km. Not quite as large, apparently, it was yet the largest city on earth. Excavation has attested a circumference of 18 km.

In 587 Nebuchadnezzar removed the last prince of Judah and razed Jerusalem. *Kings* reports: Nebuzaradam, a general of the prince of Babylon Nebuchadnezzar, came to Jerusalem, razed the house of the lord, razed all houses, tore down the walls, and took in exile the people that had been left in the city (II, 25). *Jeremiah* reports: 4 600 were led in captivity (52). This is the beginning of the Babylonian captivity.

Neriglissar campaigned beyond the valley: he defeated the prince of Pirindu (chronicle 6); with ships he took Pitusu, a land in the middle of the sea, and carried off its people (*id.*); he set fire to the country from Sallune to the border of Lydia (*id.*).

Pirindu is on the southern coast of Asia Minor. Pitusu is probably Cyprus. Where Sallune is is not clear, but where Lydia is is clear. Croesus was at this time the prince of Lydia. The campaigns of the Babylonian princes have reached the domain of the Lydian princes in central Asia Minor.

Nabonidus joined battle in his 1st year, and in

his 3rd year (chronicle 7). After that he did not join battle: in his 7th year the army stayed in Akkad (*id.*); in his 9th year the army stayed in Akkad (*id.*), and so the army continued to stay, until in his 17th year, in 539: Cyrus joined battle with the army of Akkad (*id.*); and Cyrus entered Babylon (*id.*).

The fall of Babylon as the fall of Assyria – powerful princes earlier, a feeble prince at the end – and a feeble prince inside, the most powerful prince outside.

At this time, under these princes, the four quarters were drawn.

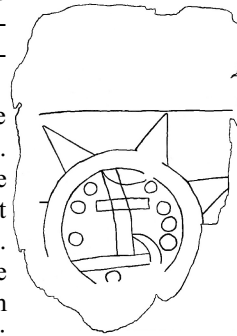
The tablet is BM 92687.

On the reverse of the tablet, a note announces it: a drawing of the four quarters.

On the obverse, in the upper part, a brief fragmentary text recalls creation by Marduk.

In the lower part the four quarters are drawn. The vertical band inside the circle, although not labeled, is the Euphrates. All other features are labeled. The oval from which the river issues is: mountain. The rectangle straddling the river is: Babylon. The horizontal band into which the river issues is: swamp. The eight small circles inside the larger circle are: cities. Five are particular cities, clockwise, on the right: Urartu, Ashur, on the bottom: Susa, on the left: Bit Yakin, Habban. The circular band surrounding the cities is: salt water. The triangles outside are: islands. There were four or five more islands than the three preserved. The names of five are preserved. One is: where the morning dwells. Clearly, east. Another is: where the sun is never seen. Clearly, north. Not so clearly, also: where the light is brighter than the sunset or the stars; where the bird does not end its flight; where a bull charges whoever goes there.

Ever since its publication in 1889, it has been said to be a map of the world. It is a picture all right. But it is a very remote inkling of a map, never mind the world. It is not an advance in the description of the surface of the earth, not even



remotely after the great advance achieved by the Assyrian princes.

Media.

The particulars are 4,

Deioces	prince c. 655,
Phraortes	prince c. 635,
Cyaxares	prince c. 625-585,
Astyages	prince c. 585-50.

Babylon, the state of the valley ruled earlier by Assyria, earlier by the great Babylon, earlier by Ur, earlier by Akkad, is the direct heir of these earlier states. The princes of Babylon style themselves princes of Akkad, too. In this way Babylon is not a new state.

Media is a new state. It is the first state of the country east and north of the mountains bounding the valley, and a powerful state.

Herodotus writes at some length on the Mede princes (I, 96-130). Most of it is, as he himself describes it: tales (123). But not all of it. And this part, the not tales, indicates clearly the beginning of a state.

Herodotus reports: Deioces first united the Medes (101).

Then: his son Phraortes first began fighting the Assyrians (102).

And then: his son Cyaxares was a far greater warrior than his predecessors; he first organized the Asians into regiments, he first divided them into separate units, spear-bearers, archers, and cavalry (103).

Cyaxares, with Nabopolassar, sacked Nineveh. And Cyaxares was now the master of the country east of the valley.

Alyattes was the prince of Lydia. Herodotus reports: Cyaxares fought Alyattes for five years (74), and: in the middle of their battle in the sixth year of their war, a solar eclipse occurred, day became night before their eyes, the kings stopped their battle and made peace (*id.*).

This was the eclipse which Thales had predicted.

And: the Kizilirmak became the boundary between the Lydian and the Mede kingdoms (72).

The Kizilirmak, the largest river in Asia Minor, divides the peninsula into western and eastern halves. Cyaxares was now the master of the country north of the valley of the two rivers as well. Herodotus reports the descent of Cimmerian

and Scythian hordes into that country at this time (103-6). And: Cyaxares slaughtered most of them (*id.*).

His successor Astyages maintained his sway over the domain conquered by Cyaxares.

The chronicle of Nabonidus, reporting the fall of Babylon to Cyrus, reports earlier the fall of Media to him: Astyages mustered his troops and marched on king Cyrus of Anshan; but the army of Astyages rebelled against him, and delivered him to Cyrus; king Cyrus then took Ecbatana and plundered it (chronicle 7).

Ecbatana was the new city built by the Mede princes in their country of Media. Anshan was an old city in the country of Persia, southeast of the country of Media. Cyrus became the master of both Persians and Medes in 550.

At its peak the state of Media held sway over the country beyond the mountains in the east and in the north from Anshan in the southeast to the Kizilirmak in the northwest, 2 000 km apart along the great circle. And this was the base, when he conquered it, from which Cyrus conquered next Lydia, next Babylon.

Egypt.

Ashurbanipal installed Psamtik, prince 664-10, and his successors are,

Necho	prince 610-595,
Psamtik II	prince 595-89,
Apries	prince 589-70,
Amasis	prince 570-26,
Psamtik III	prince 526.

Under these princes, beginning with Psamtik, Egypt is once again a strong state.

The inscriptions of these princes are not many. They yet attest their control of the valley of the Nile up to Napata, at the fourth cataract. They attest also that these princes, like their predecessors, built temples and made lavish gifts to the temples. They attest also prominently the spells of *The book of the dead*. Everyone continued to go to Re in heaven.

But the state in the valley of the Nile was now very much part of the development of the state outside the valley of the Nile.

This is attested by the fact also that Herodotus reports in some detail on these princes as well (II, 152-82), and the balance between tales and not tales in his reports on these princes is more in

favor of the not tales than in his reports on the Mede princes. Herodotus is, in fact, the most important source on these princes.

Psamtik was installed by Ashurbanipal, and consolidated his rule over all Egypt under the sovereignty of the Assyrian prince. He remained loyal to Ashurbanipal's successors and fought with them against Nabopolassar. Then he contested the Asian Mediterranean littoral with Nabopolassar.

Then his successor Necho continued the contest with Nabopolassar, and then with Nabopolassar's successor Nebuchadnezzar.

The contest continued throughout the first decade of Necho's reign. It is to this time that the report of *Kings* refers: Necho, the prince of Egypt, marched to the Euphrates; prince Josiah of Judah stood against him at Megiddo, and Necho slew Josiah; when the people installed Jehoahaz prince in Judah, Necho removed him, installed Jehoiaquim, and collected a tribute of 100 talents of silver and 1 talent of gold (II, 23).

Nebuchadnezzar won the Asian Mediterranean littoral. Necho retained Sinai.

Herodotus reports also: Necho began building a canal from the Nile to the Red Sea; later on, king Darius completed the canal; it is four days of walking long, and it is wide enough for two triremes to sail abreast (II, 158).

And Herodotus reports also Necho's most spectacular feat. Under Necho, twenty-one centuries before da Gama, Africa was circumnavigated. Herodotus writes: Necho dispatched a fleet of Phoenicians to circumnavigate Africa; they set out from the Red Sea sailing south; in the third year of the voyage they passed through the strait of Gibraltar, and came back to Egypt from the west; they said that as they rounded Africa the sun was on their right (42).

The length of the voyage is also the first indication of the size of the continent. The sighting of the sun on their right is also the first indication that the continent extends far to the south of the equator. Even if Herodotus adds: some may believe this, I do not (*id.*).

The colonization of the Mediterranean littoral was at its most intense. Herodotus reports that Greeks first settled in the delta of the Nile under Psamtik (154). During Psamtik's reign as well, c.

630, Cyrene was founded, west of Egypt. Apries sent an army against the Cyrenaics, and the Cyrenaics defeated it (161).

Amasis was a general of Psamtik II. An inscription on the leg of one of the colossi of Ramesses II at Abu Simbel reports: when king Psamtik came to Elephantine, this was carved by those who sailed with his son as far as the river permits; the foreigners were led by Potasimto, the Egyptians were led by Amasis (*id.*). Potasimto has left behind his sarcophagus, his offices are listed, and one of them is: overseer of the Greeks (*id.*). Amasis brought down Apries and became the prince of Egypt.

Herodotus writes: under Amasis Egypt was very prosperous, there were 20 000 cities in the country (II, 177).

The Greek city of Naucratis flourished in the delta.

Amasis captured Cyprus (182).

He concluded a treaty with the Cyrenaics (181). Lydia was under Croesus, and Amasis concluded a treaty also with Croesus (I, 77). Polycrates ruled Samos, and Amasis concluded a treaty also with Polycrates (III, 39). Amasis also sent 300 talents to Delphi for the building of a temple (II, 180).

Herodotus writes also: Amasis made a law that every year each Egyptian should on pain of death declare his means of livelihood; Solon borrowed this law from Egypt, and imposed it on the Athenians; it is an excellent law, may they long have it (177).

Thales had also gone to Egypt earlier. At this time Pythagoras went to Egypt.

The state in the valley of the Nile was very much part of the development of the state outside the valley of the Nile.

Cyrus conquered Media, then Lydia, then Babylon. And in 526 Cambyses conquered Egypt.

Lydia.

Lydia begins at Ashurbanipal's time with Gyges, prince c. 680-45, and his successors are Ardys, prince c. 635,

Sadyattes prince c. 625,

Alyattes prince c. 615-560,

Croesus prince 560-46.

Gyges sent messengers to Ashurbanipal, sent men to the prince of Egypt, sent gifts to Delphi.

And he plundered the countries of the Greek cities on the Aegean coast.

After him Cimmerian and Scythian hordes descended on Asia Minor.

Alyattes expelled the hordes from the west of the peninsula as Cyaxares expelled them from the east. The two princes then fought one another for five years. In the sixth year of their war they made peace, and the Kizilirmak became the boundary of Lydia in the east. In the west Alyattes began the subjugation of the Greek cities on the coast. He captured Smyrna, and made war on Miletus, the largest city on the coast, for eleven years. Across the Aegean, Periander ruled Corinth, and Alyattes maintained relations with Periander.

With Alyattes Lydia has become the first powerful state far to the west of the valley of the two rivers.

Croesus completed the subjugation of the Greek cities on the coast, reducing them all to tribute.

Herodotus reports: at the time of Croesus the Lydians were the bravest and most valiant soldiers in all of Asia; they fought on horse, with long lances, and were excellent horsemen (I, 79).

He writes also: Croesus decided to build ships to subdue the Aegean islands; it then happened that Bias came to the king, or perhaps it was Pittacus, and when the king asked him for news, he replied, sir, the islanders are buying 10 000 horses to fight you; the king exclaimed, I pray to the gods they would! the other said, sir, as you pray to the gods to let you catch the islanders on land, do you not think the islanders pray to catch you at sea? pleased with this answer, the king gave up the building of ships (27).

It can be concluded that Croesus himself had 10 000 horsemen.

That Bias came to Croesus, or perhaps it was Pittacus, is representative. On another occasion, when Solon came to him, Herodotus notes: at the time of Croesus all wise men came to Lydia on one occasion or another (29).

Philosophy begins at this time, and the first philosopher, the second philosopher, and the third philosopher are all 3 from Miletus, from the time when Alyattes made war on the city for eleven years, then the city became a tributary of Croesus.

The *Histories*, too, begins with the Lydian princes: Gyges (8-15), Ardys (15), Sadyattes (16), Alyattes (16-25), and Croesus (26-91).

Herodotus reports also: the Lydians first cut gold and silver and used it for money; they were also the first shopkeepers (94).

Both temporally and spatially the state of Lydia is the bridge in the development of the state from east to west.

Defeated by Cyrus, Croesus sent messengers to Amasis in Egypt and to Nabonidus in Babylon to ask for help (77).

In 546 Cyrus conquered Lydia.

The four kingdoms, Babylon, Media, Egypt, and Lydia, are an important step in the development of the state. By 627 the Assyrian princes had built the greatest state. Beginning in 550 the great kings built a greater state, in its turn the greatest. The four kingdoms are the step from the state of Assyria into the state of the great kings.

Babylon ruled the valley of the two rivers, first brought under one state by Sargon. Egypt ruled the valley of the Nile, first brought under a state by Narmer. Media brought under a state the countries further east and north. Lydia brought under a state the country further west. The four kingdoms expanded substantially the domain under the state. And the contiguous domains of the four indicate clearly the one and only one domain of the great kings.

The four kingdoms also began integrating this domain. Babylon and Media fought together. Babylon and Egypt fought one another. Media and Lydia fought one another. Babylon campaigned to the borders of Lydia. Egypt and Lydia concluded a treaty. They began integrating the Greek cities as well into the one domain under the state. Lydia conquered the Greek cities in Asia Minor. Egypt fought the largest Greek colony on the southern Mediterranean coast. Corinth was the first attempt to dominate the cities in Greece, and Lydia maintained relations with Corinth. Samos was the first attempt to dominate the sea, and Egypt maintained relations with Samos. A Greek city flourished in Egypt. The princes of Lydia and Egypt sent gifts to Delphi.

Thus, the four kingdoms rose. Then the four kingdoms became the one and only one kingdom

of the great kings.

Persia.	dx
The great kings are,	
Cyrus	prince 559-30,
Cambyses	prince 530-22,
Gaumata	prince 522,
Darius	prince 522-486,
Xerxes	prince 486-65,
Artaxerxes	prince 465-24,
Xerxes II	prince 424,
Darius II	prince 424-05,
Artaxerxes II	prince 405-359,
Artaxerxes III	prince 359-38,
Artaxerxes IV	prince 338-6,
Darius III	prince 336-0.
Some of the generals and officials who served the great kings are,	
Harpagus	under Cyrus,
Otanés	under Darius,
Megabyzus	under Darius,
Scylax	under Darius,
Datis	under Darius,
Mardonius	under Xerxes,
Sataspes	under Xerxes,

Cyrus
Conon

under Darius II,
under Artaxerxes

II.

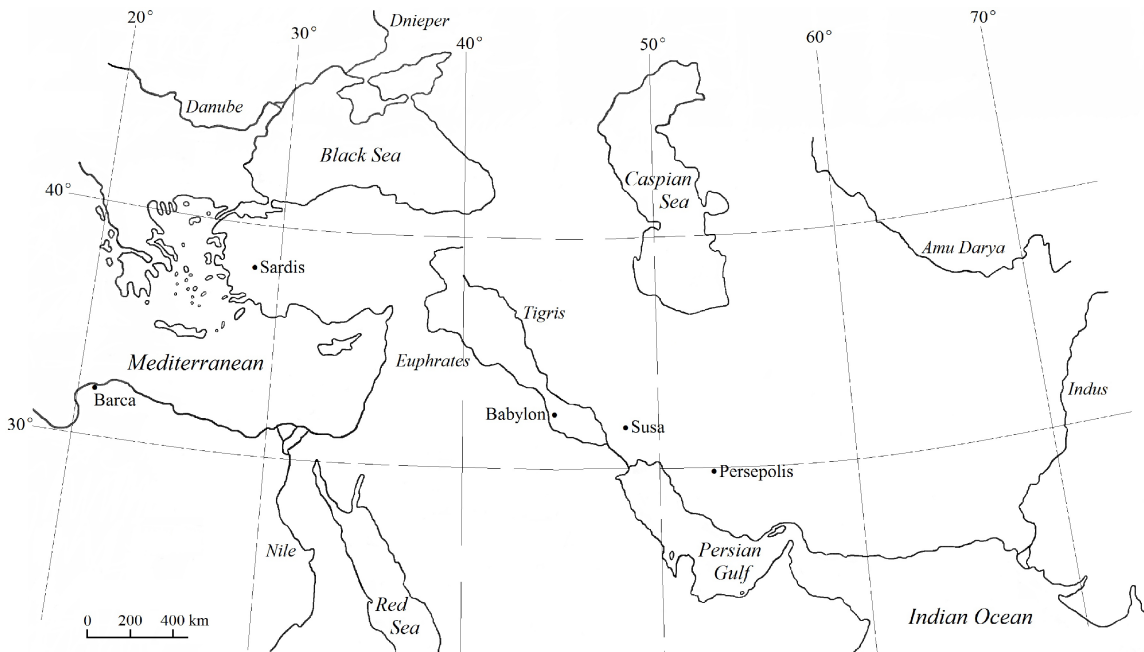
And in the enumeration of the great kings, in fact, belongs also Alexander, prince 336-23, who, having conquered the domain of the great kings, installed himself their successor, the highest magistrate of the same state first built by Cyrus and continuing for nearly two and a half centuries through and including himself. Alexander's successors destroyed this state.

The rise of Persia with Cyrus is one of the most spectacular, next to those of Akkad with Sargon, of Babylon with Hammurabi, of Macedonia with Alexander, of France with Napoleon, and it is the most spectacular of them.

When he ascended, Cyrus was the lord of a petty principality which had never been of any consequence. Two decades later, Cyrus had built the greatest empire that had ever been.

He became in 559 the ruler of Anshan. This is how he styled himself when he became the lord of the earth:

I am Cyrus, lord of the earth, the great king, the mighty king, prince of Babylon, prince of Sumer and Akkad, lord of the four quarters;



Lambert conic conformal projection.

son of Cambyses, the great king, prince of Anshan, grandson of Cyrus, the great king, prince of Anshan, descendent of Teispes, the great king, prince of Anshan, eternal seed of prince-ship, beloved of Bel and Nabu (cylinder).

Anshan is beyond the valley, 490 km east of the confluence of the two rivers. It is first attested by the conquests of the princes of Akkad, seventeen centuries before Cyrus. And in all these centuries it remained outside the development of the state, at the furthest limits of conquest, attested very infrequently by the princes who campaigned the furthest, and plundered Anshan, too. It was brought within the development of the state by the Mede princes, by Cyaxares and Astyages, in the two generations before Cyrus. The great kings his immediate predecessors, his grandfather Cyrus and his father Cambyses, were local chieftains under the Mede princes.

Then Cyrus ascended, and then: Astyages mustered his troops and marched on king Cyrus of Anshan; but the army of Astyages rebelled against him, and delivered him to Cyrus; king Cyrus then took Ecbatana and plundered it.

This was in 550. Cyrus thus became the lord of the domain brought under the state by the Mede princes. 2 000 km from Anshan in the southeast to the Kizilirmak in the northwest.

Further west was Lydia. And Cyrus defeated Croesus in southern Asia Minor, and then conquered Lydia.

This was in 546. Cyrus thus became the lord of the domains brought under the state by the Mede princes and the Lydian princes both. His became the largest state ever, 2 600 km from Anshan to the Aegean. His became also an empire, a state unifying states, and powerful states.

South and west of his domain now, surrounded by his domain, was the valley of the two rivers, under Babylon. And Cyrus conquered the valley, and entered the city of Babylon without a battle. As he reports:

my vast army which, like the water in a river, cannot be counted, marched into Babylon without a battle; Marduk delivered Nabonidus, the prince who did not honor him, into my hands (*id.*).

This was in 539. The largest state ever became very much larger. The empire became a very

much greater empire.

And the three former kingdoms, Media, Lydia, and Babylon, will remain unified into the one and only one state of the great kings for the following two-odd centuries, through and including Alexander.

Cyrus not only conquered them. He began laying the foundations of their lasting unification.

The armies he defeated he began enlisting in his army. The officials of the princes he vanquished he began making his officials. The cities he conquered he began rebuilding. The peoples he brought into his empire he began administering.

Thus, after the conquest of Lydia, the king returned back east. In the newly conquered west he left in command Harpagus. Herodotus reports: Harpagus was a Mede, an official of the Mede prince Astyages before becoming an official of Cyrus; Harpagus reduced the Greek cities on the coast; and he then subdued Caria and Lycia in the southwest with Greeks from the cities he had subdued serving in his army (I, 162-71).

Under Cyrus already begins the amalgamation of Persians and Medes, so that in the later Greek record the Persians will become indiscriminately Persians and Medes. The integration also of Greeks. Many Greeks will serve in the armies of the great kings, and will often enough lead them.

In general, the beginnings of *pax Persica*, of peace and prosperity and the mixing of the peoples in the empire, are indicated under Cyrus already.

As *Ezra* also attests. *Ezra* begins: in the 1st year of king Cyrus of Persia the word of the lord spoken by Jeremiah was fulfilled, and the lord roused the spirit of king Cyrus of Persia to issue a proclamation throughout his domain; thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building him a house in Jerusalem, which is in Judah; so anyone of you his people, may god be with you, go to Jerusalem, which is in Judah, and build the house of the lord god of Israel, the god who is in Jerusalem (1). – So the Babylonian exile, having begun in 587, came to an end in 538.

The state had the deepest roots in the valley of the two rivers, and having conquered the valley,

Cyrus began building it into the foundation of his empire.

He reports:
 my vast army marched into Babylon in peace; I
 did not permit anyone to molest the people of
 Sumer and Akkad;
 I brought wellbeing to the city of Babylon; I
 relieved the people from servitude; and Mar-
 duk rejoiced at my labors;
 all princes on earth, from the upper sea to the
 lower sea, from the west and from the east,
 brought their tribute to me and kissed my feet
 in Babylon;
 in Babylon, Ashur, Susa, Akkad, Eshnunna,
 Zamban, Metutnu, Der, and as far as Gutium,
 I restored the temples which had long been
 abandoned; I restored the gods to their houses;
 I gathered the people and returned them to their
 cities; I settled them in their peaceful abodes;
 I rebuilt the great wall of Babylon;
 I restored the quay (cylinder).

He styles himself: prince of Sumer and Akkad,
 as the princes of Akkad, and of Ur, and of Baby-
 lon, and of Assyria have styled themselves. In
 one of the restored temples:

I saw an inscription of Ashurbanipal, who had
 been a king before me (*id.*).

One century later, Herodotus writes: there are
 many ways to show the power of Babylon, but
 the best is this; all countries which the great king
 rules are divided for the maintenance of the king
 and his army, and for four of the twelve months
 of the year the country of Babylon provides the
 maintenance, for the other eight months the rest
 of Asia provides it; so in power this country
 counts as one third of Asia (I, 192).

One century earlier, before all the further
 conquests of Cyrus's successors, this country
 counted in power very much more.

And having conquered Media, Lydia, and
 Babylon, Cyrus also greatly expanded the empire
 further in the east. In 530 he fell fighting the
 Massagetae beyond the Amu Darya. It is 1 400
 km from Anshan to the middle course of the Amu
 Darya.

The countries east of Media to the Amu Darya
 Cyrus first brought under the state. And these
 countries as well will all remain unified into the
 one and only one state of the great kings through

and including Alexander.

From the Aegean to the Amu Darya it is 3 100
 km along the great circle. Cyrus campaigned very
 much further than any of his predecessors.

Cyrus is thus also, and to begin with, a major
 advance in the development of warfare. He led
 armies across 3 100 km. He campaigned annually
 for not less than two decades. Both indicate an
 advance in logistics. And his vast army, like the
 water in a river, cannot be counted. Still, given
 the size of Media, given that the prince of Lydia
 had a cavalry of 10 000, and given the power of
 Babylon, next to the fact of annual campaigns for
 not less than two decades and across 3 100 km,
 Cyrus led tens of thousands, and several tens of
 thousands rather than a few.

The expedition against the Massagetae, be-
 yond the Amu Darya, is also only the first of the
 many with which the great kings will redefine the
 limits of knowledge of the surface of the earth.

Cambyeses succeeded. He reigned only 8 years.
 He nevertheless greatly expanded the empire in
 the west.

In 526 he conquered Egypt.

Unlike the other great kings, Cambyeses has
 left behind no monumental inscriptions. In Egypt,
 however, he honored Apis, the bull, first honored
 by the princes of the old kingdom two and a half
 millennia earlier. And on the granite sarcophagus
 with which he honored Apis the great king styles
 himself as the princes of Egypt have styled them-
 selves since the old kingdom:

Horus, prince of upper and lower Egypt, son of
 Re, Cambyeses, given life forever (*id.*).

Cambyeses brought into the empire also Libya,
 further west, including the Greek cities of Cyrene
 and Barca.

With Cambyeses also the campaigns of the
 great kings to the uttermost ends of the earth
 continued. He sent an expedition further south-
 west than any of his predecessors and himself led
 an expedition further south than any of his prede-
 cessors.

On the expedition in the southwest Herodotus
 reports: Cambyeses sent 50 000 men against the
 Ammonians; they never came back; it was said
 that the entire army was buried by a sandstorm
 (III, 25-6).

And on the expedition in the south: the king

himself led an expedition against the Ethiopians; but on this campaign to the uttermost ends of the earth, the army ran out of provisions before it had completed one fifth of its journey; the men began to eat the train animals; but these ran out, too, and the king still did not abandon the expedition; the men began to eat grass; but then the army entered the desert; the men began drawing lots to eat one out of ten men; and the king then turned back (*id.*).

The fifth cataract is 1 700 km south of the sea. Cambyes reached substantially further before he turned back.

Cyrus and Cambyes had built the greatest empire in less than three decades. And after the early death of Cambyes the states brought into the empire rose to try and revert to being its own state each. The empire held. Darius succeeded, and crushed all rebellion. The empire also continued to rise greatly. Darius greatly strengthened the empire, and greatly expanded it.

His greatest inscription is at Behistun, 15 x 25 m, carved in the limestone in the mountain on the road from Babylon to Ecbatana. The inscription was found in 1836 by Rawlinson, a major of the British army serving in Persia at the time. It is in three languages, Persian, Babylonian, and Elamite. With its translation by Rawlinson, in *The Persian cuneiform inscription at Behistun*, in 1846-51, the decipherment of cuneiform begins.

In the Behistun inscription Darius reports: Cambyes had a brother, Bardiya by name; afterward Cambyes slew Bardiya (10).

Herodotus, rendering the name Smerdis, is more explicit: when Cambyes was king, Smerdis, a brother of Cambyes, was suspected of plotting against the king and was killed on the king's orders (III, 30). Darius continues:

then a magus, Gaumata by name, lied to the people; I am Bardiya the son of Cyrus, he said; and the people rebelled against Cambyes; then Cambyes died, and Gaumata took Persia and Media and other countries (11-2).

Herodotus writes: after the death of Cambyes an usurper claiming to be Smerdis ruled for seven months (III, 67-79). Darius continues:

by the favor of Ahura Mazda I became king, Ahura Mazda bestowed the kingship on me;

I slew Gaumata and his followers; and I restored the kingship; I restored it to what it had been (13-4).

The attempt to destroy the empire was general. Darius reports:

I fought 19 battles; by the favor of Ahura Mazda

I defeated and captures 9 princes;

one was the magus; he rebelled in Persia;

another was an Elamite, Acina by name; he rebelled in Elam;

another was a Babylonian, Nidintu-Bel by name;

I am Nebuchadnezzar the son of Nabonidus, he said; he rebelled in Babylon;

another was a Persian, Martiya by name; he rebelled also in Elam;

another was a Mede, Phraortes by name; I am a descendent of Cyaxares, he said; he rebelled in Media;

another was a Sagartian, Tritantaechmes by name; he rebelled in Sagartia;

another was a Margian, Frada by name; he rebelled in Margiana;

another was also a Persian, Vahyazdata by name; I am Bardiya, he also said; he also rebelled in Persia;

another was an Armenian, Arakha by name; I am Nebuchadnezzar the son of Nabonidus, he also said; he also rebelled in Babylon;

these were the princes who rebelled; and Ahura Mazda delivered them all into my hands (52-4).

Sagartia and Margiana are in the east, among the countries Cyrus first conquered.

Darius reports also:

the men who followed me, when I slew Gaumata, and stood by me, were Intaphernes, Otanes, Gobryas, Hydarnes, Megabyzus, and Ardumanis (68).

Writing three generation later, of these same men, who stood by Darius, Herodotus writes: after the death of Cambyes and the crushing of the magus, seven Persians gathered to discuss what form of government to establish; Otanes proposed democracy, Megabyzus proposed aristocracy, Darius proposed monarchy; one man gave us freedom, Darius said, one man will preserve our freedom (III, 80-2). Herodotus is clear also that this report will meet with scepticism. Reporting on events one generation-odd

later, he writes: when Mardonius came to Ionia, a wonderful thing happened, wonderful, that is, for those who do not believe that Otanes proposed that Persia should be a democracy; Mardonius brought down the tyrants and established democracies in the cities (VI, 43).

Darius ascended in 522. By 519 he was firmly in control of the entire empire. In the Behistun inscription he reports:

these are the countries I rule;

Persia, Elam, Babylon, Assyria, Arabia, Egypt, the country of the sea, Lydia, Ionia, Media, Armenia, Cappadocia, Parthia, Drangiana, Aria, Chorasmia, Bactria, Sogdiana, Gandara, Scythia, Sattagydia, Arachosia, and Maka;

23 countries in all; I am their king; they are my countries; they bring their tribute to me (26-7).

Nor is the arrangement of the countries random. Darius has first Persia, then 8 countries in the west, then 3 countries in the north, then 11 countries in the east.

And in the following years Darius greatly expanded the empire in the west and in the east. He also campaigned further than any of his predecessors. With him also the expeditions of the kings to the uttermost ends of the earth continued, continuing to redefine the limits of knowledge of the surface of the earth.

In the west, Darius crossed the Bosphorus, marched to the Danube, crossed the river, and continued to march further north. Herodotus reports: the people living in these parts are the stupidest of all, except for the Scythians; indeed, the Scythians have made the greatest discovery, they have discovered how no one can conquer them; they have no cities, carry their houses with them, and live not from tillage but off their herds; so how can they not be invincible (IV, 46)? and when Darius advanced against them, the Scythians had carried their houses away; the king advanced further, but the Scythians had again retreated; the king advanced further, but the Scythians had again retreated; tired of the endless pursuit, Darius sent a herald to tell them, fight or submit; the Scythians did neither, and the king abandoned the expedition (121-35).

Darius abandoned the expedition. Nevertheless, it was this expedition that opened the country north of the Black Sea. And all the countries

from the Bosphorus to the Danube became tributaries of the great king. One of the tributaries in the far west was the petty principality of Macedonia (V, 18). The Danube is 400 km north of the Bosphorus.

On the east, Herodotus reports: most of Asia was discovered by Darius; the king wanted to know where the Indus issues into the sea; and he sent ships under Scylax to explore the river; they set out from Caspatyrus, sailed down the river toward the sea, then west through the ocean, and in the thirteenth month returned through the Red Sea; Darius then conquered the Indians and sailed the ocean; thus it was discovered that, except to the east, Asia is bounded by the sea (IV, 44). The mouth of the Indus is 3 000 km east of the Red Sea.

All in all, it is 4 400 km along the great circle from the lower course of the Danube to the mouth of the Indus.

Darius led armies across 4 400 km, very much further than any of his predecessors.

Herodotus indicates deliberate exploration, too: the king wanted to know where the Indus issues into the sea; and thus it was discovered that, except to the east, Asia is bounded by the sea.

Scylax, who opened the Indus for Darius, was a Greek, another of the many serving the great kings.

The fortunes of the Greek cities, in general, were increasingly intertwined with the fortunes of the great kings.

Cyrus conquered the Greek cities on the coast of Asia Minor, and the cities remained a part of the great kings' domain.

In the Aegean, Samos rose under Polycrates. He provided Cambyses with 40 ships for the conquest of Egypt. Later on he was captured and crucified by the satrap of Sardis.

The largest Greek city in Asia Minor was Miletus. Herodotus reports: Histiaeus was the tyrant of Miletus; he held power at the mercy of Darius; he accompanied Darius on the king's expedition in Thrace and Scythia, and his loyalty saved the king from disaster (IV, 137-41); his loyalty was tested by the Ionian revolt (VI, 2-5); the satrap of Lydia impaled him (30).

The Ionian revolt began in 499, led by Aris-

tagoras, the new leader of Miletus. By 494 the revolt had been crushed. Miletus was razed, its inhabitants enslaved.

To acknowledge the supremacy of the great king, countries and cities surrendered to him a token of their earth and water; and after the suppression of the Ionian revolt Darius sent heralds throughout Greece to ask the cities to submit earth and water (48).

Sparta and Athens did not submit earth and water. Sparta and Athens had risen greatly in the previous couple of generations.

In 490 Darius sent an army under Datis against Athens and Sparta. Miltiades defeated Datis at Marathon.

Darius began preparing an expedition to lead against Athens and Sparta himself. In 486 he died. Xerxes led the expedition.

Darius greatly expanded the empire, and he greatly strengthened it.

Herodotus reports: the Persians called Darius the shopkeeper, because he kept accounts for everything (III, 89).

And first of all, the shopkeeper kept an account of his countries.

The Behistun inscription enumerates 23 countries. The Susa inscription enumerates 27 (*id.*). The Naqsh-e Rostam inscription enumerates 29 (*id.*). Keeping pace with conquest and the developing administrative organization of the realm. And quoting a tax register, Herodotus enumerates 77 countries and peoples. He writes:

Darius set up 20 satrapies, assigned each people to a satrapy, and determined the yearly tribute of each satrapy;

satrapy I; Ionians, Magnesians in Asia, Aeolians, Carians, Lycians, Milyans, and Pamphylians; 400 Babylonian silver talents;

satrapy II; Mysians, Lydians, Lasonians, Cabalians, and Hyttenians; 500 talents;

satrapy III; Hellespontines, Phrygians, Bithynians, Paphlagonians, Mariandyni, and Syrians; 360 talents;

satrapy IV; Cilicians; 500 talents and 360 horses;

satrapy V; Posideium, Phoenicia, Palestinian Syria, and Cyprus; 350 talents;

satrapy VI; Egypt, the parts of Libya neighboring Egypt, Cyrene, and Barca; 700 talents and 120 000 bushels of grain;

satrapy VII; Sattagydae, Gandarians, Dadicae, and Aparytae; 170 talents;

satrapy VIII; Susa and the rest of Cissia; 300 talents;

satrapy IX; Babylon and the rest of Assyria; 1 000 talents and 500 boys to be eunuchs;

satrapy X; Ecbatana and the rest of Media, Paricanians, and Orthocorybanthians; 450 talents;

satrapy XI; Caspians, Pausi, Pantimathi, and Daritae; 200 talents;

satrapy XII; Bactrians as far as the Aegli; 360 talents;

satrapy XIII; Pactyes, Armenians, and their neighbors as far as the Black Sea; 400 talents;

satrapy XIV; Sagartians, Sarangae, Thamanaei, Utians, Mycians, and islanders in the Persian Gulf; 600 talents;

satrapy XV; Sacae and Caspians; 250 talents;

satrapy XVI; Parthians, Chorasians, Sogdians, and Arians; 300 talents;

satrapy XVII; Paricanians and Ethiopians in Asia; 400 talents;

satrapy XVIII; Matieni, Saspires, and Alarodians; 200 talents;

satrapy XIX; Moschi, Tibareni, Macrones, Mosynoeci, and Mares; 300 talents;

satrapy XX; Indians; 360 talents of gold dust;

and, subtracting 140 talents spent on the Cilician cavalry, and reckoning that one Babylonian talent is worth one and one sixth Euboic talents and that gold is worth thirteen times its weight in silver, the yearly tribute amounts to 14 560 Euboic talents; and in this total I disregard amounts of 10 talents or less;

this tribute came to Darius from Asia and Africa; later, however, tribute was collected also from the Aegean islands and from Europe as far as Thessaly;

Persia is the only country exempt from tribute; and the following peoples were ordered not to pay tribute but to give gifts, as they still do in my time;

Ethiopians; 2 choenixes of unrefined gold and 200 ebony logs every two years;

Colchians and their neighbors in the Caucasus; 100 boys and 100 girls every four years;

Arabs; 1 000 talents of frankincense every year (III, 89-97).

The tax register attests a great advance in the

description of the surface of the earth. The arrangement of the 20 satrapies and 77 countries and peoples in the 20 satrapies indicates orientation west to east, and by their numbering rather explicitly, too, from the Ionians in Asia Minor and the city of Barca in Libya, in the west, to the Indians, in the east, across 4 900 km. It indicates also the analysis of each satrapy into its component countries and peoples. Nor are only the spatial relations of the countries and peoples assessed, their relative wealth is also assessed.

The tax register attests the great prosperity of the entire domain of the great kings. – 1 Euboic talent equaled 60 minae, 1 mina equaled 100 drachmae, 1 drachma equaled 6 obols. Thucydides records a treaty of Athens and Argos in 420, stipulating that: when one of the cities is helped by troops from the other, it will maintain them at the rate of 3 obols for one infantryman for one day (V, 47). – At this rate, on their yearly income of 14 560 talents – disregarding amounts of 10 talents or less, the 120 000 bushels of grain collected from Egypt, the 360 horses collected from Cilicia, the 1 choenix of unrefined gold and 100 ebony logs collected from Ethiopia, and the 1 000 talents of frankincense collected from Arabia, as well as the tribute collected later from the Aegean islands and Europe as far as Thessaly, never mind the boys and the girls – the great kings could maintain 478 684 infantrymen for one year in the field. And if the amount of the tribute attests the prosperity of the entire domain of the great kings, its yearly collection attests the peace of their entire domain.

The tax register is also but one of the indications of peace and prosperity. Expeditions to the uttermost ends of the earth attest prosperity. Building attests peace and prosperity. Darius's greatest building projects were the two royal cities, the building of the magnificent new city of Persepolis and the magnificent rebuilding of the old city of Susa, in Elam. Persepolis is 510 km southeast of Susa. Darius also completed the canal from the Nile to the Red Sea, four days of walking long, wide enough for two triremes to sail abreast. Under Darius also, in 515, the temple in Jerusalem was completed.

Most of all the tax register attests a great advance in the development of administration.

Presuming some tens of officials per country or people on average, the register indicates an administration of thousands, very probably many thousands. It indicates also the massive incorporation of local officials into the administration. A smoothly functioning administration, too, collecting year after year tribute from Ionia and Barca in the west to India in the east and gifts from the Caucasus in the north to Ethiopia in the south.

The great kings do not attest advance in the law. Not over the code of Hammurabi. The code of Hammurabi itself, however, is widely attested in use under the great kings. And their inscriptions attest that the great kings learned from Hammurabi.

The Susa inscription proclaims:

I am Darius, the great king, the king of kings, the king of all kinds of peoples of all kinds of origin; I am the lord of the earth, far and wide (*id.*),

the Behistun inscription lists his 23 countries, and continues:

king Darius says, within these countries whoever was a friend, I firmly protected him, whoever was a foe, I utterly destroyed him (8),

and concludes:

king Darius says, I ruled in accordance with justice; I did no wrong to the weak and no wrong to the strong; whoever helped my rule, I favored him, whoever was its foe, I utterly destroyed him (63),

and the Susa inscription explains:

king Darius says, the peoples were in commotion, all peoples fighting each other; by the grace of Ahura Mazda I brought an end to the fighting; they no longer fight each other at all, all are at peace; they fear the law; the strong do not fight or destroy the weak (*id.*).

I am the great king, the king of all kinds of peoples of all kinds of origin. I am the lord of the earth.

I ruled in accordance with justice. I did no wrong to the weak and no wrong to the strong. Whoever helped my rule, I favored him, whoever was its foe, I utterly destroyed him.

I brought an end to the fighting. They no longer fight each other at all. All are at peace. They fear the law. The strong do not fight or destroy the weak.

The theory is not new. New is the application of the theory to not less than one fifth of humanity.

With Darius there is also a development in religion.

He first attests Ahura Mazda.

Ahura Mazda bestowed the kingship on me. By the favor of Ahura Mazda I became king. By the grace of Ahura Mazda I brought an end to the fighting.

And the Susa inscription begins:
the great god is Ahura Mazda;
he created the earth, he created the heaven, he created man, he bestows happiness on man;
he made Darius the king, one king for the many, one ruler of the many (*id.*).

Ahura Mazda created the earth, he created the heaven, he created man, he bestows happiness on man.

Much as Marduk had been doing for eleven centuries by this time, counting back to *When on high*. The lord god of the Hebrews had been doing it for three centuries by this time, counting back to the Yahwistic document. Marduk had been doing it with the help of his retinue. The lord god of the Hebrews had been doing it without help. Ahura Mazda did it also without help.

Ahura Mazda will be venerated in the *Avesta*. The *Avesta* will be the holy writings of Zoroastrianism. They will be committed to writing under Shapur II, prince 309-79^{AD}, eight centuries after Darius. They incorporate older materials, however, the oldest are the *Gathas*, the words of Zarathustra himself, and the *Gathas* can be dated to about the time of Darius.

By the time of Darius the most important of the holy writings of Judaism had also been completed. With the Priestly code the torah was completed. And the priests who authored these writings, in Babylon and in Judah, were subjects of the great kings.

By the end of the reign of Darius philosophy had also developed for some four generations. And many of the philosophers, too, were subjects of the great kings.

Cyrus, Cambyses, and Darius are a very high peak in the development of the state. They built the largest state ever, larger than the largest earlier state by an order of magnitude. At the time

of Darius the human population of the earth was some 115 million, Darius ruled some 25 million, more than one fifth. They built the greatest empire, unifying all older states, Egypt, Babylon, Media, and Lydia, as well as some dozens of countries which had never been under a state. By the time of Darius *pax Persica* flourished, too, peace, prosperity, and the mixing of peoples.

Xerxes succeeded in 486.

He suppressed revolts in Egypt and Babylon. And he continued the preparations for the expedition against Athens and Sparta which Darius had begun.

Xerxes led the expedition in 480.

The expedition failed. In 480 Themistocles defeated the king's navy at Salamis. In 479 Pausanias defeated his army at Plataea. And later in that year Leotychidas defeated the remnants of the king's army and navy at Mycale.

Xerxes's expedition and the battles which stopped it are all by themselves a major advance in the development of warfare, and hence also in the development of the state.

Quantitatively.

Herodotus reports: Xerxes invaded Europe with 1 700 000 men (VII, 60).

At Salamis: the king's navy numbered 1 207 ships (89); Themistocles commanded 380 ships (VIII, 82).

At Plataea: the king's army, under Mardonius, numbered 300 000 (32); Pausanias commanded 110 000 (30).

These numbers – even if they be suspected – and it has been shown above that there is no sound ground on which they will be suspected – even if, for the sake of the argument, they are reduced by an order of magnitude each – these numbers attest an expedition substantially larger than any earlier expedition, a naval battle substantially greater than any earlier naval battle, and a land battle greater than any earlier land battle.

And qualitatively.

And the quality of the advance corroborates Herodotus's numbers, too.

Where the great kings are concerned, the expedition is the culmination of three generations of continuous conquest, expansion, and development of the army. Hence, in the army of Xerxes jointly marched: Persians, Medes, Cissians,

Hyrceanians, Assyrians, Chaldeans, Bactrians, Sacae, Indians, Arians, Parthians, Chorasmians, Sogdians, Gandarians, Dadicae, Caspians, Pactyes, Utians, Mycians, Paricanians, Arabians, Ethiopians who live above Egypt, Ethiopians of the east, Libyans, Paphlagonians, Ligyans, Mati-
eni, Mariandyni, Cappadocians, Phrygians, Lydians, Mysians, Thracians, . . . , Cabalees, Milyae, Moschi, Tibareni, Macrones, Mossynoeci, Mares, Colchians, Alarodians, Saspies, islanders from the Red Sea, Sagartians, Phoenicians, Palestinian Syrians, Egyptians, Cypriots, Cilicians, Pamphylians, Lycians, Asian Dorians, Carians, Ionians, Aegean islanders, Hellespontines (61-95). In the army of Xerxes jointly marched a very substantial portion of humanity.

And the expedition failed, and the expansion of the empire stopped. However, and as a consequence, the consolidation of the empire continued. *Pax Persica* continued to flourish, peace, prosperity, and the mixing of peoples.

Where Athens and Sparta are concerned, Salamis and Plataea are a culmination of the two-odd generations of their rise among the Greek cities, dominion over the cities, and development of the army. And, as a consequence, too, Athens and Sparta continued to rise. Athens built the first maritime empire. And less than two generations after Salamis and Plataea, Athens and Sparta fought the greatest war, the Peloponnesian war.

In general, Xerxes's expedition is a divide in the development of the state. Great acceleration in the development of the state begins with the Assyrian princes. And through Xerxes's expedition the center of the acceleration remains where it has been, in the east, with the great kings. Theirs is the most dynamic state. With the defeat of Xerxes's expedition the center of the acceleration moves west, with Athens and Sparta now. Theirs are the most dynamic states now.

After the victory, Athens continued to fight to gain the Greek cities on the coast of Asia Minor from the great king. The fight continued throughout Xerxes's reign. And Athens gained control over the cities. The great king retained control over the interior.

Other than that, the reign of Xerxes continued peaceful. He reigned 21 years, and passed the empire inviolate to his successors.

Two more feats of his are important.

Xerxes counted his army, the 1 700 000 of them, attesting the first census. Herodotus reports: they packed together as tightly as possible 10 000 men, drew a circle around them, then let them go and built a wall to the height of a man's navel on the circumference of the circle; next they packed others inside the wall, next others, and so until they had counted them all (60).

Xerxes also dispatched an expedition to the Atlantic. Once again Herodotus: Xerxes was about to impale Sataspes for the rape of Zopyrus's daughter, but agreed to spare him if he sailed around Africa; so Sataspes sailed west, passed the strait of Gibraltar and then sailed south, but after many months there was always more sea to cross, and he turned back; to Xerxes he said that he had reached a land of dwarfs, and had turned back because his ship would not sail further; Xerxes did not believe him, and impaled him for the old offense (IV, 43).

On Xerxes as well – as also on his successors – Ahura Mazda bestowed the kingship: the great god is Ahura Mazda; he created the earth, he created the heaven, he created man, he bestows happiness on man; he made Xerxes the king, the great king, the king of kings, the king of all countries, lord of the earth, far and wide (Persepolis ins.).

And it is by Xerxes, in Herodotus, that the theory of the state is formulated at its most explicit. Before embarking on the expedition, the great king told his council: Persians, you know all the peoples Cyrus, Cambyeses, and Darius conquered; so when I succeeded to the throne, I considered how I can be worthy of my predecessors and how I can give the Persians as much power as they did; I decided to lead my army in Europe, against Greece; if we conquer the Greeks, we will make the limits of Persia the same as the limits of heaven are for Zeus; I will march to the end of Europe, and when the sun looks down, it will see no country bordering on ours, because I will make them all one country; there will be no city or people left among men to fight against us (VII, 8).

Alas, the expedition failed.

In 465 Xerxes was assassinated.

Artaxerxes succeeded.

There was another revolt in Egypt, helped this time by Athens with 200 ships (Thucydides, I, 104). It was suppressed.

Pax Persica continued to flourish.

Ezra convoked the great assembly under Artaxerxes, under the auspices of the great king, organized by the cupbearer of the great king.

Herodotus also wrote the *Histories* under Artaxerxes. In particular, Herodotus describes the royal road, from Sardis to Susa. He writes: it is 450 parasangs long, a ninety-day journey from one end to the other, protected by 111 guard stations (V, 53). 450 parasangs is 2 700 km. Herodotus describes the road in detail, and adds: it is safe along its entire length (52). Herodotus traveled the empire also west to Cyrene and south to Elephantine. It is 2 500 km from Susa to Cyrene, 800 km from the Mediterranean to Elephantine. Clearly, the roads to Cyrene and to Elephantine were also safe along their entire length.

Artaxerxes reigned 41 years, and passed the empire inviolate to his successors as well.

The succession was disputed briefly between two sons of Artaxerxes. Xerxes II reigned some 40 days.

Darius II succeeded. He reigned 19 years. Peace and prosperity continued to prevail.

Sparta and Athens were now fighting the greatest war. Athens continued to dominate the cities on the Aegean coast of Asia Minor, to assail its southern coast, and to foment unrest in Egypt. In 412 the great king joined the war on the side of Sparta. Thucydides records the treaty which the great king and Sparta concluded (VIII, 18). Sparta recognized the great king's right over the Greek cities of Asia Minor. The great king undertook to supply Sparta with money. Sparta won the war.

Darius II as well passed the empire inviolate to his successors.

Artaxerxes II succeeded in 405.

At his accession Egypt seceded from the empire.

In 401 Cyrus, another son of Darius II, in command in Asia Minor, marched east in an attempt to seize the throne. He led 12 900 mercenaries, mostly Greeks, one of whose leaders was Xenophon. Xenophon was to describe the cam-

paign in *The march of Cyrus*. The attempt to seize the throne failed.

Sparta won the greatest war, and began itself assailing Asia Minor. With a navy under the Athenian Conon, the great king defeated Sparta on the sea in 394. Athens, Thebes, and Corinth joined the war on the side of the great king against Sparta. The great king emerged victorious. In 386 he dictated to the Greek states: the king's peace. Xenophon records the treaty (*History*, V, 1). All Greek states recognized the king's right over the cities of Asia Minor. The king undertook to maintain: on land and on sea, with ships and with money (*id.*) the right of each of the several Greek states to rule itself.

The king made two attempts to restore Egypt in the empire. Both failed. After the second, in 373, satraps from Armenia to Syria rebelled as well. The king crushed this revolt quickly.

For all the commotion, the empire continued strong under Artaxerxes II. It lost Egypt. Other than that, it continued as it had been, from the Indus to the Aegean. In the far west, on the Aegean coast, counting back to the expedition of Xerxes, the empire had withstood for more than one century the continuous rise of Athens and Sparta and their continuous assault on its borders. It had not only withstood the assault without a loss, too. The great king had emerged, with the king's peace, the arbiter of the Greek states.

Plutarch wrote the life of Artaxerxes II.

Artaxerxes II reigned 46 years.

In 359 he was assassinated.

Artaxerxes III succeeded.

Another attempt to restore Egypt in the empire failed. This failure was also followed by a revolt of satraps, in Palestine, Phoenicia, and Cilicia. This revolt was also crushed.

And with his next attempt, in 343, the great king restored Egypt in the empire.

Egypt remained outside the empire for two generations. It did not prosper. A succession of 6 rulers proclaimed themselves kings of Egypt in these two generations. – The first 3 of the 6 ruled from 405 to 380, first from Sais, in the western delta, then from Mendes, in the eastern delta. This was the time of the war of the great king and Sparta, then joined also by Athens, and in Egypt it was a time of increasing intervention by the

Greek states, and of increasing numbers of Greek mercenaries in the army of these kings of Egypt. They repulsed the first attempt of the great king to restore Egypt in the empire. Other than that, the authority of these kings of Egypt did not extend beyond the delta. In the delta itself disorder prevailed. – The last 3 of the 6 ruled from 380 to 343, from Sebennytyos, also in the delta, Nectanebo, prince 380-62, Teos, prince 362-0, and Nectanebo II, prince 360-43. They repulsed the next two attempts of the great king to restore Egypt in the empire. Their authority extended beyond the delta. Some stability began being restored. Some restoration of temples is attested. But the numbers of Greek mercenaries in the army of these kings of Egypt continued to increase. – All in all, the attempt to restore the state in Egypt was not successful. And the next attempt of the great king to restore Egypt in the empire, in 343, was successful.

The empire thus continued strong under Artaxerxes III as well, and with Egypt restored in it, continued such as Cyrus, Cambyses, and Darius had built it, from Libya to the Indus, two centuries earlier.

And still peace and prosperity prevailed.

It is at the time of Artaxerxes III that Plato writes: had the Persians won the war, we would have been all mixed together, Greek with Greek, Greek with barbarian, barbarian with Greek, as we now see the peoples ruled by the Persians all mixed together.

Artaxerxes III was also assassinated. The brief reign of Artaxerxes IV followed, himself assassinated.

Darius III succeeded in 336.

In 334 Alexander crossed to Asia. In 333 he defeated Darius III at Issus. In 331 he defeated him at Gaugamela, and became the master of the entire domain of the great kings, from Libya to the Indus.

And Alexander became the highest magistrate of the state of the great kings. He established his court in Babylon. He married Barsine, the daughter of Darius III. He married 80 of his officers and 10 000 of his soldiers to Persian and Mede wives. He had 30 000 Persian boys brought up and trained in Macedonian ways. He enlisted in his regiments Persians, Medes, Bactrians, Sog-

dians, Arachosians, Zarangians, Arians, Parthians, under their own officers. He founded 70 cities, from Alexandria at the mouth of the Nile to Alexandria at the mouth of the Indus.

Alexander's successors destroyed the greatest state.

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And it was the greatest state.

The foundation was once again smiting. Cyrus campaigned further than any of his predecessors. Cambyses campaigned further than any of his predecessors. Darius campaigned further than any of his predecessors. Xerxes led the greatest expedition. And if the expedition failed, and the state stopped expanding, it did not retreat. It lost the Greek cities of Asia Minor, then it recovered them. It lost Egypt, then it recovered it.

From Cyrus through Alexander it remained the greatest state for 236 years.

It was the greatest in size.

The state of the Assyrian princes reached from the source of the Euphrates in the north to Thebes in the valley of the Nile in the south and from the delta of the Nile in the Mediterranean in the west to Susa in Elam in the east, across 14° of latitude and 18° of longitude, 1 600 km along the meridian and 1 700 km along the parallel. It was the state of some 10 million people, not less than one tenth of humanity. It was not less than twice larger in area and more than twice larger in population than the largest earlier state.

The state of the great kings reached from the southern slopes of the Caucasus in the north to the southern shores of the Red Sea in the south and from Barca in Libya in the west to the valley of the upper Indus in the east, across 30° of latitude and 52° of longitude, 3 200 km along the meridian and 4 900 km along the parallel. It was the state of some 25 million people, more than one fifth of humanity. It was not less than five times larger in area and more than twice larger in population than the state of the Assyrian princes.

It was the greatest in power.

The state is power. Unitary power.

The power is indicated by the area which the state has brought under itself. It is indicated by the human population which it has brought under itself. Most of all, it is indicated by the unifica-

tion of the area and of the human population which it has brought under itself.

With the Assyrian princes the state is for the first time, in fact, an empire. It is the greatest in area. It is the greatest in population. Most of all, it is the one state of all former states, it has brought all former states under itself. With the Assyrian princes the state is also for the first time a deliberately unifying power. It is a state making them all live in peace. It is a state making them all speak the same tongue. It is a state establishing one tongue as the tongue of all lands.

With the great kings the state is a very much greater empire. It is the greatest in area. It is the greatest in population. Most of all, it has unified all powerful former states, Media, Lydia, Babylon, and Egypt. It has unified also dozens of countries which have never been under a state before. Not less than one half of the 77 countries and peoples in Darius's tax register have been brought under the state for the first time by the great kings. It is a deliberately unifying power. They no longer fight each other at all. All are at peace. And a very successful deliberately unifying power. As we now see the peoples ruled by the Persians all mixed together, Greek with Greek, Greek with barbarian, barbarian with Greek.

After the death of Cambyses and the crushing of the magus, seven Persians gathered to discuss what form of government to establish. Otanes proposed democracy, Megabyzus proposed aristocracy, Darius proposed monarchy. One man gave us freedom, Darius said, one man will preserve our freedom.

The form of government remained monarchy, such as, counting back to Narmer, it had been the only form of government in the preceding twenty-five centuries of development of the state.

The great kings never resolved the problem of succession. Assassination remained its prevalent means. Assassinations over, however, from Cyrus through and including Alexander the state remained a monarchy as stable as the state remained powerful. And rather the other way around, the state remained as powerful as the monarchy remained stable.

Further west, among the Greek states, this was a time of great experimentation with the forms of

government. Hence, an element of aristocracy, if not of democracy, can be detected in the state of the great kings, too. Not only was the great king advised by a council of nobles. The satraps each commanded areas and populations larger than any other state. 20 satrapies over two centuries, beginning with Darius, indicate many hundreds of satraps. And many hundreds of satraps indicate an element of aristocracy in the form of government. The more so, given that throughout the not quite two and a half centuries from Cyrus through Alexander revolts of satraps are few. The following are more representative. Early on, the official of the Mede prince Harpagus became an official of Cyrus, and left in command in Asia Minor, subdued the country and ruled it for the great king. Later on, Artabazus, satrap of Phrygia under Artaxerxes II (Siculus, XV, 91), revolted against Artaxerxes III (XVI, 22), fled to Philip in Macedonia when the revolt was suppressed (52), but returned to serve Artaxerxes III (*id.*), and remained loyal to Darius III to the end (Arrian, *Alexander*, III, 21), before joining Alexander, who made him satrap of Bactria (29).

In any case, the great kings attest a great advance in the development of administration. Darius's tax register indicates an administration of many thousands. The administration collected a tribute of 14 560 talents when the tribute was first assessed by Darius. It collected it three generations later, as Herodotus reports. And it collected it three generations later still, as Alexander attests. When he captured Susa he found in the kings' palace: 40 000 talents in coin, next to other treasures of incalculable value (Plutarch, *Alexander*, 36). An administration of many thousands, functioning smoothly for not less than six generations.

The great kings do not attest advance in the law. They do attest the very great advance in the law which the code of Hammurabi is. More than thirteen centuries after it was first promulgated the code of Hammurabi remained in use under the great kings.

There were several developments in religion under the great kings.

The great kings first attest Ahura Mazda.

The great god is Ahura Mazda. He created the earth, he created the heaven, he created man, he

bestows happiness on man.

So much the inscriptions of Darius, Xerxes, Artaxerxes, and Artaxerxes II proclaim.

And so much is not new. Marduk had been doing that for eleven centuries by this time. The lord god of the Hebrews had been doing it for three centuries, and all by himself. In the valley of the Nile, Aten had done it eight and a half centuries earlier, also all by himself.

The inscriptions of the great kings proclaim so much and no more.

Zoroastrianism will claim the great kings. And the beginning of Zoroastrianism with the *Gathas* can be traced back to their empire. Then again, Judaism will also claim the great kings – *Isaiah*: thus said the lord to Cyrus, leading him by the hand to subdue peoples and undo kings; you do not know me, but it is I who has given you your strength, so that through you all men from the rising sun to the setting sun will know that there is no one but me (45); *Ezra*: thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building him a house in Jerusalem, which is in Judah (1). And Judaism flourished in their empire. And the grounds on which Zoroastrianism will be ascribed to the great kings are not firmer than those on which Judaism will be ascribed to them.

This is how Herodotus describes the religion of the Persians: the customs of the Persians which I have seen for myself are these; they make no images of the gods and build no temples, and they think that the people who do so are fools; this is because, I think, they do not worship the gods in human shape, as the Greeks do; to sacrifice to Zeus they go up into the highest mountains, and they call the entire circuit of the heaven Zeus; they sacrifice to the sun, to the moon, to earth and fire, and to the winds (I, 131).

They make no images of the gods and build no temples. And the report of the historian is corroborated by the fact that the great kings built magnificent cities, built the road 450 parasangs long, built the canal four days of walking long, wide enough for two triremes to sail abreast. And built no temples.

They think that the people who do so are fools. But they did not interfere with the fools.

Thus, somewhere in their empire, in some country in the east, Zoroastrianism begins. The *Gathas* first attest immortality outside the valley of the Nile in the east. As at the same time Pythagoras first attests immortality outside the valley of the Nile in the west. And Zoroastrianism will prove a consequential development, continuing as it is to the present day.

Somewhere in their empire as well, in a tiny country on the Mediterranean littoral, Judaism flourished. It will prove a most consequential development, continuing as it is to the present day, giving rise as it will to Christianity, and to Islam.

The state of the great kings is one of the two most important steps in the transformation of custom. The other is Rome. These are the two most decisive steps in the generalization of the practice of the virtues which must be practiced from the men of the tribe to the men of a larger tribe, and larger, and all the way to humanity.

Quantitatively. The state of the great kings brought together into one and only one state very many more tribes than had ever been brought together – it brought together all tribes from those of the Greeks in the west to those of the Indians in the east – and held them together in the same one and only one state for eight generations, counting from Cyrus through Alexander. And qualitatively. Peace and prosperity prevailed, increasingly mixing the tribes, increasingly forcing them all to see, even as they would all much rather not see, that they must practice the virtues which must be practiced with respect to the great tribe of the empire, the one fifth of humanity that it was, even as they would each much rather continue practicing the virtues with respect to its own petty tribe only, the insignificant fraction of humanity that it was.

Thus, for instance, when they returned from the exile, then built the temple, and then convoked the great assembly, the Hebrews separated themselves from all other tribes as resolutely as a tribe has ever separated itself, and legislated the exclusion of its own practices from those of all other tribes as explicitly and decisively as a tribe has ever done. – Cyrus ended the exile. The temple was built under Darius. The great assembly was convoked under the auspices of Arta-

xerxes, organized by his cupbearer. – Even as the Hebrews did not, the great kings practiced at least some of the virtues which must be practiced with respect to that tribe, too, which most resolutely, explicitly, and decisively refused to practice them with respect to any other tribe but itself.

Also for instance. The Greeks defeated the barbarians at Marathon, at Salamis, and at Plataea. At Marathon under Miltiades, at Salamis under Themistocles, at Plataea under Pausanias. Before Marathon, Miltiades served Darius, Darius honored him and his family (Herodotus, VI, 39-41; Cornelius Nepos, 1). After Salamis, Themistocles served Xerxes and Artaxerxes, Xerxes and Artaxerxes gave him three cities to provide for his needs (Thucydides, I, 135-8). After Plataea, Pausanias became the first Greek to adopt Persian dress and Persian custom and to aspire to become the king of all Greeks, he offered his services to Xerxes, Xerxes offered him his own in return (128-35). At least these members of the tribes of the Greeks and of the barbarians practiced at least some of the virtues which must be practiced, at least occasionally, the Greeks with respect to the barbarians, the barbarians with respect to the Greeks.

More generally, Greeks served in the Persian armies under Cyrus already. A Greek opened India for Darius. Greeks provided dozens of the contingents in Xerxes's army. The deposed Spartan king Demaratus advised Xerxes during his expedition against the Spartans. An Athenian led the navy of Artaxerxes II. Xenophon not only was a general in the army of a Persian pretender and wrote *The march of Cyrus*. While Plato in his dialogues was elevating Socrates into a paragon of virtue, Xenophon wrote *The education of Cyrus* to elevate into a paragon of virtue Cyrus.

More generally still, Herodotus writes: I think that, if men are asked to examine all customs on earth and choose the best, each people will choose their own; and there are many ways to show this, but the best is this; Darius once called some of the Greeks in his service and asked them what would it take to make them eat their dead fathers; the Greeks said that nothing in the world could make them do that; Darius then called some of those Indians who eat their dead parents, and in the presence of the Greeks, to whom he had the

conversation translated, asked them what would it take to make them burn their dead fathers instead of eating them; the Indians shouted, do not speak of such horrors; I thus think that Pindar is right, when he says, custom is the king of all (III, 38).

With all due respect to Herodotus, and Pindar, custom is not the king of all. Darius is the king of all. In particular, Darius is the king of custom. For the Greeks would not eat their dead fathers, and the Indians would not burn their dead fathers, but Darius has made them both, Greeks and Indians, practice at least this one virtue which must be practiced, examine all customs on earth and choose the best. Even as they would both, Greeks and Indians, continue to practice the one virtue which most of all must not be practiced, choose their own custom each. And as the great king has made Greeks and Indians, so he has all other tribes in between, 77 countries and peoples large enough to owe more than 10 talents each, annually, for two centuries.

And the state of the great kings is a very great advance in the acquisition of knowledge.

The development of warfare is an advance in the acquisition of knowledge.

The building of the greatest state is.

The application of the theory of the state, which the princes have been developing for more than two millennia by this time, to one fifth of humanity is.

On this theory, the end of the state is this.

There will be no country bordering on ours, because I will make them all one country. There will be no city or people left among men to fight against us.

The end of the state is thus formulated in the historian. But the princes themselves are explicit enough.

I am the great king, the king of all kinds of peoples of all kinds of origin. I am the lord of the earth. I brought an end to the fighting. They no longer fight each other at all. All are at peace.

Nor has any of the many other ends of the state, proposed in the two and a half millennia since by the philosophers who have kept building and rebuilding the state in speech, been either more likely to be the end of the state or loftier.

The great kings advanced greatly the descrip-

tion of the surface of the earth.

Cyrus campaigned beyond the Amu Darya. Cambyses campaigned beyond the fifth cataract. Darius campaigned beyond the Black Sea, reached the Indus, sailed the Indian Ocean. Xerxes dispatched an expedition to the Atlantic. The expeditions of the great kings reached from the northernmost shores of the Black Sea in the north to the southernmost shores of the Red Sea in the south and from the strait of Gibraltar in the west to the mouth of the Indus in the Indian Ocean in the east, across 33° of latitude and 73° of longitude. The Assyrian princes are the peak in the advance in the description of the surface of the earth before the great kings. The great kings increased the portion of the earth brought under exploration by an order of magnitude, some 10 times. They opened the east. They opened the north. They made the most valiant attempt to open the south. They made the most valiant attempt to open the west.

And they organized this portion of the earth into a unity, all of it by the still loose bond of exploration, most of it by the always tight bond of taxation. Hence, Darius's tax register is a description of countries and peoples more explicit, by far, over a larger portion of the earth, by very far, than any earlier.

And hence, geography begins, and advances greatly. The systematic and deliberate investigation of the surface of the earth begins, and advances greatly.

It begins with Hecataeus, and advances greatly with Herodotus.

Hecataeus was from Miletus, in Asia Minor, a subject of the great kings, under Darius. Herodotus was from Halicarnassus, also in Asia Minor, also a subject of the great kings, under Artaxerxes.

The fragments of Hecataeus attest 300-odd localities, distributed from Scythia in the north (fr. 185-90) to Ethiopia in the south (fr. 325-7) and from the strait of Gibraltar in the west (fr. 39) to the Indus in the east (fr. 296). Coinciding precisely with the reach of the expeditions of the great kings.

In the *Histories* Herodotus describes 1 012 localities, distributed from the Atlantic in the west (I, 203) to the Indus in the east (IV, 44),

coinciding precisely with the reach of the expeditions of the great kings. In the north, where the people are the stupidest of all, except for the Scythians, Herodotus reaches a little further than Darius, to the problem of the source of the Dnieper (53). In the south, where there is not even grass to eat, he reaches a little further than Cambyses, to the problem of the source of the Nile (II, 31-3).

The great kings did not advance history. They are, however, the foundation of the greatest advance in history.

Beginning to end, the *Histories* is concerned with: the antecedents of the rise of Cyrus (I, 1-74), the expeditions of Cyrus (I, 75-216), the expeditions of Cambyses (II, 1-III, 66), the expeditions of Darius (III, 67-VII, 4), and the expeditions of Xerxes (VII, 5-IX, 122).

It is clear why. The father of history proposes to research the great and magnificent deeds of Greeks and barbarians, and the deeds of the great kings are the greatest and most magnificent.

The state of the great kings is a principal cause of the development of geography and of history. More generally, it is a principal cause of the development of philosophy. It first made accessible to observation the facts, both, of how large the earth is and of how large humanity is.

dxii

The collection of the development of the state, and of history, and more particularly in the three-odd centuries from Ashurbanipal to Alexander, should continue with the building of the first church, Judaism, in these centuries.

Before turning to that, however, a little more should be said about that other prophet, Zarathustra, about his words, the *Gathas*, and about the beginning of Zoroastrianism, as these belong to this time as well, under the empire of the great kings as well.

The holy writings of Zoroastrianism are the *Avesta*.

The *Avesta* worship Ahura Mazda, and on their own authority Ahura Mazda gave the *Avesta* to Zarathustra. As the Hebrew holy writings worship the lord god, and the lord god gave the law to Moses. The gospels worship the son of god, and the son of god gave the gospel to the

apostles. The koran worships allah, and allah sent an angel to give the book to Muhammad.

Like all holy writings, the *Avesta* pose acutely the problems of when and how they were authored, and of what, if anything, of all that they relate is real, and rather more acutely than all other holy writings.

These problems began being solved when Anquetil-Duperron traveled to India, studied Zoroastrianism as it continued in the practices of the Parsi, studied their holy writings, and published the first edition and translation of the *Avesta* in 1771. And two and a half centuries later, the problems have all been long solved.

Thus, the *Avesta* were committed to writing under Shapur II, prince 309-79^{AD}. Shapur II is one of the more important Sassanid princes, who, beginning with Ardashir, prince 224-40^{AD}, ruled Persia in the following four centuries, until its conquest by the successors of Muhammad.

Like other holy writings as well, the *Avesta* incorporate older material. Their central part, the liturgical, are the *Yasna*. Incorporated into the *Yasna* are the five hymns of the *Gathas*.

And the five hymns of the *Gathas* are the oldest material. These would be the words, if not of Ahura Mazda himself, of the prophet himself, of Zarathustra.

The *Gathas* are the oldest.

And the solution of the problem of how old, exactly, they are, although continuing to involve some difficulty, involves no mystery either.

In order to commit the *Avesta* to writing, under Shapur II, a script was devised for this very purpose, based on the Greek. And the priests who accomplished the task attest, in the *Avesta*, numerous elementary grammatical errors and recurring passages of complete incomprehensibility. Both no doubt, errors and incomprehensibility, enhancing the mystery of the texts. Both attesting also – next to the need to devise a script to commit them to writing – the fact of the oral transmission of the materials committed to writing. Both, errors and incomprehensibility, attesting also the fact of the severe limitations of oral transmission.

Moreover, illiteracy is indicated very generally.

Great in so many other ways, the great kings themselves – nine to seven centuries before the

Sassanid princes – were not great writers. Compared with the Assyrian princes before them, the great kings have left behind very few inscriptions. To write down their native Persian, they adopted cuneiform, and wrote their inscriptions in Babylonian and Elamite next to Persian. And in all the seven centuries after the great kings and before the Sassanid princes – when Persia was ruled first by Macedonian princes, from the west, then by Parthian princes, from the east – where Persian is concerned, very general illiteracy is indicated.

Thus, should Zarathustra be dated to 1000^{BC}, as he would be – and he would be dated earlier still – and should the *Gathas*, if not Zarathustra, be dated to 1000^{BC}, as the *Gathas* also would be, 1000^{BC} to Shapur II would be thirteen and a half centuries of oral transmission. 45 human generations of oral transmission.

Here as everywhere, then, the problem is first of all chronological.

The problem is to date Zarathustra, if Zarathustra is real.

If Zarathustra is not real, the problem is to date the *Gathas*. The *Gathas* are unquestionably real, they are real enough to count – 278 stanzas, 1 016 lines, 5 567 words.

And given the fact of oral transmission, the problem is, in particular, to date the beginning of Zoroastrianism such as this beginning can be presumed transmitted to the *Gathas*, or what is the same, to date the oldest contents of the *Gathas*.

And to begin with, to this end, dating, the holy writings themselves are no help at all. There is nothing in them – with but one exception – that can be taken to indicate a particular time or a particular place. More than any other, these holy writings have succeeded in detaching themselves completely from all time and all space.

Next, there is the evidence of language and subject matter. On this ground philological scholarship has fixed the relative chronology of the record of Zoroastrianism, as it has the relative chronology of all older writing. In this case, however, the evidence of language and subject matter has been substantially more limited than in others. It has been limited by its scarcity. As the fact that the *Gathas* are 5 567 words suffices to show. It has been limited severely by the lack of

any inkling of development in the record itself. Such as in the Egyptian record begins with the Palermo stone, in the Sumerian record with the first princes already as they note one another from the first. And it has been most severely limited by the fact that this record is in relation to no state before the Sassanid princes, so that the development of the state would provide points of reference for its development. Such as the Assyrian princes provide for the Hebrew holy writings.

Thus, finally, the philosophers, as they noted so much else – scarcity of writing is never a difficulty where the philosophers are involved – noted also Zarathustra. And given that the holy writings themselves are no help at all, and that the evidence of language and subject matter is severely limited, the evidence of the philosophers is decisive.

And this is the evidence of the philosophers.

In one of the spurious Platonic dialogues, the *First Alcibiades*, at issue is once again education, and the education of the heir to the Persian throne is introduced as a laudable example. In particular: when the boy turns 7, they teach him to ride and to hunt; when he turns 14, four great nobles take over his education, the wisest, the justest, the most temperate, and the bravest; and the wisest teaches him the worship of the gods, the magic of Zoroaster, the son of Horomazes, and all that a king should know (121c-2a). – Zoroaster is Zarathustra, his father Horomazes is Ahura Mazda. The dialogue is from the early Academy, from the time of the last great kings. And, clearly, by approving of the great kings, the philosopher who authored the dialogue shows his independence from the master.

Pliny, in the *Natural history*, writes at some length on the art of magic, too, and introduces the subject in this way: there is no doubt that this art begins in Persia with Zoroaster; on this all writers are agreed; although it is still uncertain whether there was only this one Zoroaster, or there was also another one later on; Eudoxus, who endeavored to show that of all parts of philosophy the art of magic is the most beneficial, tells us that Zoroaster lived 6 000 years before Plato, and Aristotle supports him in this; Hermippus, who has written with the greatest exactitude and has commented on the 2 000 000 verses of Zoroaster,

says that Zoroaster learned his doctrines from his master Agonaces, and lived 5 000 years before the Trojan war (XXX, 2). – On those labors of Eudoxus and Aristotle, so unlike all their other labors, Pliny is the only authority. Eudoxus and Aristotle are contemporary with the composition of the *First Alcibiades*, at the time of the last great kings as well. Hermippus is one century after Aristotle. Pliny himself is three centuries after Hermippus.

Laertius, in *The lives and doctrines of the philosophers*, begins with the problem of the origin of philosophy, and in particular, by addressing the claims that philosophy originated among the Egyptians or among the Persians with the magi. He writes: if we are to believe the Egyptians, philosophy began with Hephaestus, and he lived 43 863 years before Alexander; as to the magi, the first of them was Zoroaster, who, according to Hermodorus the Platonic, lived 5 000 years before the Trojan war; but Xanthus the Lydian reckons 6 000 years from Zoroaster to the expedition of Xerxes (I, 2). – Xanthus the Lydian wrote a book on Lydia in the generation before Herodotus, at the time of Artaxerxes. Hermodorus the Platonic was an early Platonic, contemporary with Eudoxus, Aristotle, and the *First Alcibiades*, at the time of the last great kings as well. Laertius himself is two centuries after Pliny.

And al-Biruni, in *The monuments of past generations*, in order to calculate when the world was created, examines the various earlier calculations, and in particular reports: the Persians and the magi say that the world will continue 12 000 years, and that Zarathustra, their lawgiver, said that 3 000 years have passed before him; now, Zarathustra was 258 years before the beginning of the era Alexander; so, on this reckoning the world was created 3 258 years before the beginning of the era Alexander (3). – The beginning of the era Alexander is 312^{BC}. 258 years before that is the time of Cyrus. Al-Biruni himself is seven and a half centuries after Laertius.

This is the evidence.

Hence, Zarathustra – the son of Ahura Mazda, who lived 6 000 years before Plato, composed 2 000 000 verses 5 000 years before the Trojan war, was 6 000 years before the expedition of

Xerxes, and 258 years before the beginning of the era Alexander was the lawgiver of the Persians and said that 3 000 years have passed since the creation of the world – Zarathustra cannot be burdened with the presumption of reality. Not more than his father Ahura Mazda can. Not on this evidence. And there is no other.

On the other hand, the philosophers attest Zarathustra and his magic first at the time of Artaxerxes, with Xanthus. At the time of the last great kings they attest Zarathustra and his magic widely, with Eudoxus, Aristotle, the *First Alcibiades*, and Hermodorus the Platonic.

And the philosophers thus provide a *terminus ad quem* for the beginning of Zoroastrianism. The reign of Artaxerxes.

Al-Biruni, reporting what the Persians say about Zarathustra, their lawgiver, dates him to the reign of Cyrus.

And this can be taken to provide a *terminus post quem* for the beginning of Zoroastrianism. The reign of Cyrus. The more so, given that, with all due respect to the Persians, if they had a lawgiver at that time, that lawgiver was Cyrus.

The date of the beginning of Zoroastrianism is thus this, the century before Artaxerxes.

This is still eight and half centuries before Shapur II and the commitment of the *Avesta* to writing. 28+ human generations.

It was in that century, however, the century before Artaxerxes, with Darius, that Persian was committed to writing. The transmission of the beginning of Zoroastrianism across those 28+ human generations can be presumed helped by writing.

And hence, the same date can be assigned to the beginning of Zoroastrianism such as this beginning can be presumed transmitted to the *Gathas*, or what is the same, to the oldest contents of the *Gathas*, the century before Artaxerxes, prince 465-24.

This date is supported also, feebly as it is, by that exception, the one thing in the *Gathas* which can be taken to indicate a particular time and place.

The *Gathas* sing:

what reward has Zarathustra promised
to his followers, whom in the house of song
Ahura Mazda first attained?

good thought and righteousness will be your
blessings;

and lord Vishtaspa with the other followers
accepted the path of good thought,
the teachings which with righteousness
holy Ahura Mazda himself devised (*Yasna*, 51).

Lord Vishtaspa accepted the teachings which
holy Ahura Mazda himself devised.

The father of Darius was Vishtaspa, or Hystaspes. Darius himself attests him in the Behistun inscription (35-6). Herodotus attests him: Hystaspes was the father of Darius; he served Cyrus (I, 209-10); he was the satrap of Persia when Darius became king (III, 70).

And eight and a half centuries after Darius, the father of Darius is associated with Zoroastrianism for the first time by Ammianus.

Ammianus wrote the *Deeds*, recording events down to 378^{AD}. Rome and Persia, under Shapur II, were at war in 337-50, again in 359-61, and again in 371-76. Ammianus served in these wars. And at one point in the *Deeds* Ammianus writes: derived from the secret teachings of the Chaldeans, the art of magic was developed in ages long past first by Zoroaster, the Bactrian, and after him by the wise king Hystaspes, the father of Darius (XXIII, 6.32).

Ammianus writes eight and a half centuries after Darius. But he writes at the time of Shapur II. It can be presumed that, when he associates the father of Darius with Zoroastrianism, he thus renders the judgment of Shapur II and the priests who committed the *Avesta* to writing.

The date of the beginning of Zoroastrianism, and thus of the oldest contents of the *Gathas*, then, is, the century before Artaxerxes.

The difficulty of reducing the mystery to a date all by itself shows that the beginning of Zoroastrianism was very small, and that Zoroastrianism remained for a long time very small. It did not become a part of the development of the state until the Sassanid princes, in the third Christian century. As religions have since grown greatly, too, Zoroastrianism has remained very small. It is very small compared to Judaism, very very small compared to Christianity, and very very small compared to Islam.

And for this very reason, because it has always been very small, the more powerfully Zoroastri-

anism attests the indestructibility of the doctrines which it shares with those other religions.

Here are, next to the passage above, two more passages from the *Gathas*.

The *Gathas* sing:

the holy one I acknowledge you, Mazda Ahura;
I first saw you at the birth of life,
you first made the rewards for deeds and words,
evil for the evil, good destiny for the good,
so by your wisdom will creation reach its end;
you will do this by your holy spirit, Mazda,
in your kingdom; good thought will increase
all that they have for the righteous,
and they will proclaim their piety;
your wisdom none can deceive;
the holy one I acknowledge you, Mazda Ahura;
when good thought came to me, and asked me,
who are you? to whom do you belong?
how will I recognize at the day of judgment
what is yours and yourself?
thus I said to him, I am Zarathustra,
true foe of the liar to the utmost that I can,
strong friend of the righteous; so that I attain
the future blessings of the eternal kingdom
I praise and sing you, Mazda (*Yasna*, 43).

Also:

thus I ask you, tell me truly, Ahura,
how, oh righteousness, will I earn my reward,
the ten mares with a stallion and a camel
that were promised me, Mazda, as well as
the salvation and immortality that you bestow?
thus I ask you, tell me truly, Ahura,
he who will not give his reward to him who has
earned it,
even to him who is true to his word,
how will you punish him now?
what his last punishment will be I know (44).

There they are, the doctrines which Zoroastrianism shares with those other religions.

One god. The teachings which the one god himself devised. Creation. Good thought and righteousness. Punishments and rewards. Evil for the evil, good destiny for the good. Piety. And always more rewards and always more punishments. The future blessings of your eternal kingdom. The day of judgment. How will I earn my reward? The ten mares with a stallion and a camel that were promised me? As well as the salvation and immortality that you bestow? How

will you punish him now? What his last punishment will be I know.

None of it singly is new with the *Gathas* either. All of it singly is older, most of it many centuries older. But its amalgamation into a single body of teachings, which the one god himself devised, too, is rather new. The intensity of the delivery of that single body of teachings is also rather new.

Rather new, not altogether new. For, given the date for the *Gathas*, the century before Artaxerxes, prince 465-24, by this time most of the Hebrew holy writings, through and including the Priestly code, had been composed. With the exception of immortality, all of it is in these writings. And in these writings it is all amalgamated into a single body of teachings, which the one god himself devised, too. And the intensity of the delivery of that single body of teachings is second to none.

dxiii

Judaism.

The last princes of Judah, those after Josiah, prince 640-09, are,

Jehoahaz	prince 609,
Jehoiakim	prince 609-598,
Jehoiachin	prince 598,
Zedekiah	prince 598-87.

The princes are not important. Important and very important are the writings and Ezra. And all the writings belonging to this time, important and not important, as well as Ezra, are,

<i>Zephaniah</i>	prophecy between 640 and 609,
<i>Deuteronomy</i>	the law promulgated in 622,
<i>Habakkuk</i>	prophecy between 627 and 587,
<i>Ezekiel</i>	prophecy began in 593,
<i>Ruth</i>	the century before 538,
<i>Joshua, Judges, Samuel, Kings</i>	– the two generations after 587,
<i>Proverbs</i>	between <i>Deuteronomy</i> and the Priestly code,
<i>Lamentations</i>	the century after 587,
<i>Haggai</i>	prophecy began in 520,

<i>Zechariah</i>	prophecy began in 520,
Priestly code	the century before 445/33,
<i>Job</i>	the century after 538,
<i>Song of songs</i>	the century after 538,
<i>Malachi</i>	the century after 515,
<i>Obadiah</i>	between 587 and c. 312,
Ezra	great assembly in 445/33,
<i>Joel</i>	between 515 and c. 343,
<i>Esther</i>	the century after 465,
<i>Chronicles, Ezra, Nehemiah</i> – the century after 445/33,	
<i>Jonah</i>	the century after 445/33.

At issue, then, is the development of Judaism in the three-odd centuries from Ashurbanipal to Alexander. The first two of these three-odd centuries are the decisive in the development of Judaism.

And to begin with, here is a review of the earlier development.

dxiv

From the Yahwistic document through *Daniel*, the Hebrew holy writings were composed over seven centuries. And the writings indicate three major steps in the development of Judaism.

One. The first two of the seven centuries. These are the two centuries preceding the three-odd at issue. In general, this is the time of Assyria. In particular, the state of Judah is ruined. But the writings begin, and begin to accumulate, from the Yahwistic document through *Jeremiah*. And with these the building of the first church has begun.

Two. The next two of the seven centuries. These are the first two centuries of the three-odd at issue. In general, this is the time of the four kingdoms which rose after the fall of Assyria, and then of the empire of the great kings. In particular, the state of Judah has been destroyed. But the writings continue to accumulate, and the most important writings are composed, from *Deuteronomy* through *Joshua*, *Judges*, *Samuel*, *Kings* to

the Priestly code. This is the decisive step. And it culminates in the great assembly under Ezra. In place of the state the first church has been built.

Three. The last three of the seven centuries. These are the last century of the three-odd at issue and the two centuries after that. In general, this is the time of the last great kings, and then of Alexander's successors. In particular, there is the first church now. And the last writings are but a few, from *Chronicles*, *Ezra*, *Nehemiah* to *Daniel*.

In the first step, then, in the two centuries preceding the three-odd at issue, the building of Judaism begins.

It is the time of Assyria.

The Assyrian prince is the lord of the earth. He destroys all foes. He brings under his sway the lands from the sea of the rising sun to the sea of the setting sun. From the horizon to the zenith he establishes the princeship over them.

He brings all lands under the single rule of Ashur. He brings them within the borders of Ashur. He imposes the princeship on all lands. And all lands submit to the princeship.

He makes all peoples live in peace. He counts them among the people of Ashur. He makes them all speak the same tongue. He establishes one tongue as the tongue of all lands.

In particular, Judah is reduced to tribute. It becomes one tiny part of the greatest state. It becomes one of all the lands brought under the single rule of Ashur. It becomes one of all the peoples counted among the people of Ashur.

And, as *Kings* reports, the princes of Judah worship the gods of other peoples. They set up shrines and make sacrifices and offerings abhorrent to the lord. They follow the ways of other peoples.

In the meantime, however, the writings have begun, and begun to accumulate. In response to the Assyrian princes, too, and the ruin of Judah.

First there is the Yahwistic document. It breaks new ground in several ways.

First: you shall have no other gods beside me. That one god is elevated above all creation is not new. Creation is not new either. Nor is it new that there are no other gods. There are other gods: when I deliver the people of the land to you, and you drive them out, you shall not worship their gods; you shall make no covenants with those

people and their gods; and those people shall not remain in your land, lest you sin against me by honoring their gods. New is the injunction. You shall not have those other gods. You shall not worship them. You shall make no covenants with them. You shall not honor them.

Next, the injunction is the first law in a code of laws. The code has some 50 laws. It is not an advance in the development of the law. There is no procedure. No witnesses, no proof, no judges, no investigation, no verdict, no contracts. There is not much discrimination either. New is the protection of god, and very vigorous protection. Four of the ten commandments protect god, the first four. New is also that god himself is the lawgiver. New is also that god gives the law directly to you. The laws of all earlier codes – Ur-Nammu's, Lipit-Ishtar's, Dadusha's, Hammurabi's, Tiglath-pileser's – are conditionals. If a man does such-and-such, then such-and-such should be the consequences. God's laws are injunctions. You shall not, you shall not, you shall not, you shall, you shall not, you shall not. The punishments are also somewhat sterner. I visit guilt in the third and the fourth generation. But altogether new are the rewards. You are for the first time promised rewards for following the law. I bestow favors to the thousandth generation. New is also that this code of laws is not concerned in any way to obtain your consent. It is concerned in every way, and most explicitly, to obtain your obedience.

Next: I will set your borders from the sea of reeds to the sea of Philistia and from the wilderness to the Euphrates. The countries under the state had long been bestowed by the gods. New with the Yahwistic document is that the promised land is promised, that god bestows it prospectively. The borders which god promises you are also all by themselves a challenge most particularly to Assyria.

Finally, and most important, the Yahwistic document has provided the injunction, you shall have no other gods beside me, reinforced by the code of laws, reinforced by the promise of the promised land, with a past. It relates the tribulations of Abraham, steered intimately by god, including god's promise to Abraham: I will make you a great nation. The tribulations also of Isaac,

also steered intimately by god, including also god's promise to Isaac: I will make your heirs as numerous as the stars. The tribulations also of Jacob, also steered intimately by god, including also god's promise to Jacob: kings will issue from your loins. The tribulations also of Joseph, also steered intimately by god, including also, dramatically, god's failure to make a grand promise to Joseph. And the tribulations of Moses, steered very intimately by god, to give the Hebrews the law which god gives him to give them, and lead them toward the promised land, an angel leading him leading them. If the relation of this past is history, the Yahwistic document has provided the state, Judah, with its history. If the relation of this past is history, it is a new kind of history, and it is with this new kind of history that the Yahwistic document most decisively breaks new ground.

That the end is political cannot have been asserted more unambiguously. I will make you a great nation. Kings will issue from your loins. I will set your borders from the wilderness to the Euphrates.

All by itself, the Yahwistic document is but a literary composition. Nothing indicates that, all by itself, it was in any way effectual. The princes of Judah continued to worship the gods of other peoples. The oldest Hebrew code of laws was never promulgated. The state of Judah remained confined to the city of Jerusalem, a petty tributary of the Assyrian princes. Nor was that past, steered by him, related in any substantial way to the state of Judah, such as it was. Or to any other state.

Without its successors, all by itself, the Yahwistic document would have been but a literary composition. But there were its successors. The writings continued, and continued to accumulate.

So there is then the first prophetic book, *Amos*. And *Amos* also breaks new ground, and more decisively than the Yahwistic document.

God is elevated above all creation substantially more explicitly. He made the stars, he makes day and night, he makes rain from the waters of the sea, and he destroys the cities.

Also, his central concern is not the making of the stars, or the making of day and night, or the making of rain. His central concern is the destruction of the cities. I will send down fire on Damascus, on Gaza, on Ashdod and Ashkelon, on

Ekron, on the Philistines, on Tyre, on Teman and Bozrah, on Rabbah, on Moab and Kerioth, and on Judah and Jerusalem, too.

Also, after the destruction there is consolation: and I will set up again the fallen house of David, I will build it firm as it was in the days of old. The fallen house of David is also: the house of Isaac, and: the house of Jacob, and: the house of Joseph.

And *Amos* has discovered the cause of the destruction of the cities, in general, and of the ruin of Judah, in particular. Can a misfortune befall a city if the lord did not send it? Hence *Amos* has discovered also, still more particularly, the immediate cause of the ruin of Judah: your wickedness.

Thus, you shall have no other gods beside me, and *Amos* has elevated him above all creation substantially more explicitly. I will set your borders from the wilderness to the Euphrates, and *Amos* has reasserted the promise, more cautiously, but rather more plausibly: I will build the fallen house of David firm as it was in the days of old. Most important, that past steered by god *Amos* has connected explicitly to the state of David. The means of god's steering has also become that of the princes, the destruction of cities. God himself has also become explicitly the general cause of the destruction. Can a misfortune befall a city if the lord did not send it? The particular cause is different. The particular cause is your wickedness.

That past steered by god has begun acquiring its political coherence.

Then there is *Hosea*. *Hosea* also breaks new ground.

Beginning to end the lord condemns you for your wickedness and tells you that he is punishing you accordingly: you are destroyed because of your disobedience, I reject you because you have rejected the teachings of the lord your god, and the more your children increase, the more will I reject them, because they will continue to sin against me. This is not altogether new.

But the means of your destruction are now explicitly the Assyrian princes. Assyria is now explicitly the means of his wrath at your wickedness. And the particular cause, your wickedness, is connected explicitly to the general, himself, and through its means: the Assyrian shall be their

king because they did not repent.

Assyria, too, is now assimilated into that past steered by god.

There is also *Isaiah*. And *Isaiah* also breaks new ground, and also very decisively.

The lord is exalted further. Seated on a throne, high and exalted, the skirt of his robe filling the temple, six-winged seraphim standing in attendance. Holy! Holy! Holy! His presence fills the earth.

Much more important, he is now also the lord of hosts. The lord of hosts! In particular, he is the lord not only of the Israelite host, he is the lord also of the Assyrian host.

So *Isaiah* reasserts: Judah has fallen because by word and by deed they have insulted the lord.

But the lord of hosts now has a plan. The plan is in two steps. And to the first step essential is the Assyrian host. To the second step essential is the Israelite host. First: the lord will bring against you the king of Assyria and his multitude, he will overflow your land, he will sweep over you like a flood. Second, however: the mighty god has a plan; a king will be born, great in battle, and great will be again the domain of the throne of David. And again: Assyria is the rod of my anger. And in general: all kings are my captains. And again: the lord has a plan; he will punish the arrogance of the king of Assyria; the king of Assyria thought, I am very clever, by my own hand, he thought, I have erased all borders, plundered all countries, carried off all peoples; but can an ax boast against the hand that wields the ax? assuredly the lord of hosts will waste him away; very soon my wrath at you will have spent itself and will turn against him; and again a shoot will grow out of the stump of Jesse; the spirit of the lord will be with him; he will gather the dispersed of Judah.

That the end is political cannot have been asserted more explicitly.

Thus, god is elevated very much further. He is the lord of hosts. Assyria is the rod of his anger. All kings are his captains. God's promise, I will set up again the fallen house of David, is reaffirmed, and again, and again, and again, and again. And hence, and most important, the past steered by god is now his plan. The nearer past of Judah is again connected explicitly to the remoter past related by the Yahwistic document. More

important, the immediate past of Judah, its ruin, is now his plan. And Assyria is relentlessly assimilated into that plan. Assyria is the rod of his anger. It is he who sends her forth against the peoples who displease him. The king of Assyria thinks that he is very clever, he thinks that by his own hand he has erased all borders, plundered all countries, carried off all peoples. But can an ax boast against the hand that wields the ax?

There is also *Micah*. He does have a plan. The same plan.

There are also the psalms. They continue his elevation, forcefully reassert his promise, and yet more explicitly connect the state of David to the past related by the Yahwistic document.

Thus, the princes of Israel and Judah worship the gods of other peoples, set up shrines and make sacrifices and offerings abhorrent to the lord, follow the ways of other peoples.

And then Hezekiah does not.

Hezekiah, as *Kings* reports, abolished the shrines, smashed the pillars, and cut down the sacred posts. There was no one like him among the kings of Judah before or after. He clung to the lord. He never turned away from the lord. He kept the commandments of the lord given by him to Moses.

And if Hezekiah did so because of the books – and *Kings* and then also *Isaiah* associate him explicitly with *Isaiah* – and the books had urged, and again, and again, and again, cling to the lord, never turn away from the lord, keep the commandments of the lord given by him to Moses, the books were not just literary compositions any longer. The books had become effectual. Their political end had become the ground of political action. The books had told Hezekiah what to do, and Hezekiah had done it.

And if so, Hezekiah is the beginning of Judaism. His is the first attempt to build the state on what the books have been relentlessly affirming, god elevated above all creation, his commandments, his promise, that past steered by him.

All also integrated into his plan now. First, Assyria is the rod of his anger. But then, second, he will set up again the fallen house of David firm as it was in the days of old. And while the plan was still in its first step, Hezekiah's is the first attempt to usher in the second step.

Thus, Sennacherib reports: Hezekiah did not submit to my yoke; I took 200 150 people from his cities; I shut him in Jerusalem like a bird in a cage; and he gave me 30 talents of gold and 800 talents of silver; he gave me gems, antimony, and ivory; he gave me his daughters, his wives, and his musicians. This is still very much the first step of the plan.

But Hezekiah clung to the lord, never turned away from the lord, kept the commandments of the lord given by him to Moses. And this is the first attempt to usher in the second step of the plan.

It was only the first attempt, however, and it was not a successful attempt.

His wrath at you had not spent itself. His rod kept coming. After Sennacherib Esarhaddon, after Esarhaddon Ashurbanipal.

Hezekiah's successors Manasseh and Amon reverted to doing what was displeasing to the lord.

But the writings continued to accumulate.

Nahum rehearses his elevation, his plan, his rod, his promise, the past steered by him.

Jeremiah rehearses it all in detail, and again, and again, and again. More important, it is the first book ascribing itself to a priest. The word of the lord came to the priest Jeremiah. The priest is also appointed over the nations and over the kingdoms. I appoint you over the nations and over the kingdoms, to pull down and to uproot, to overwhelm and to destroy, to build up and to plant. The priests are also part of his promise now. I will make a righteous branch of David spring up again; there will be no end on the throne of Israel to the successors of David; and there will be no end to the line of the levitical priests before me, to bring burnt offerings and perform sacrifices.

And then there is *Deuteronomy*.

And *Deuteronomy* will tell Josiah what to do, and Josiah will do it. And this second attempt to usher in the second step of his plan will be successful.

dxv

Deuteronomy builds on the earlier writings. It is also the synthesis of the results of the earlier writings. It is also in many ways the most impor-

tant of the Hebrew holy writings.

It is the book of the law. It is the word of the lawgiver, the lawgiver himself gives the law to the Israelites. It is the word of god, god himself has given the law to the lawgiver to give to the Israelites.

It divides into three parts, chapters 1-4, chapters 5-28, and chapters 29-34. The first part begins: these are the words which Moses spoke to all Israel (1). The second part begins: Moses summoned all Israel and said to them (5). And the third part begins: Moses summoned all Israel and said to them (29).

In the first part, chapters 1-4, Moses prepares Israel to receive the law.

In the second part, chapters 5-28, he gives Israel the law. He begins, in chapter 5, by giving them the ten commandments. The code of laws itself is chapters 12-26, preceded by the sternest exhortation to obedience to the law, and followed by an even sterner exhortation to obedience to the law.

And in the third part, chapters 29-34, Moses proclaims to Israel the promulgation of the law.

The most important result: the lord alone is god, there is no other beside him (4), is obtained in the first part. It is reasserted in the following parts, and it is the foundation of all other results.

The first and the third parts also relate the events preceding the lawgiving and the events to follow it.

Some two generations later, *Joshua*, *Judges*, *Samuel*, *Kings* will relate the events following the Mosaic lawgiving and all the way to the time of writing. It will thus become possible to calculate when exactly the lawgiving occurred. And six and a half-odd centuries later still, when the mishna will be completed, too, the tanna ben Halafta, in *The order of the world*, will calculate when the events related in the holy writings occurred. In particular, ben Halafta calculates: 890 years from the exodus to the destruction of the first temple (9-27). It is in the Mosaic lawgiving that the exodus culminates, as having led Israel out of Egypt, to the promised land, and in order to allow them to conquer the promised land, Moses gives Israel the law. The first temple was destroyed in 587, and if *Deuteronomy* was composed under Josiah, prince 640-09, it was composed one

generation-odd before the destruction of the first temple. And if so, the Mosaic lawgiving occurred eight and a half centuries before its relation by *Deuteronomy*.

And this is, more particularly, what occurred.

In the first part Moses prepares Israel to receive the law.

The book begins:

these are the words which Moses spoke to all

Israel on the other side of the Jordan (1).

Writing, apparently, on this side. More particularly:

on the other side of the Jordan, in the land of

Moab, Moses resolved to establish the law; he said, the lord has spoken to us at Horeb (*id.*). Horeb is in Sinai, somewhere along the way of the exodus. Moses continues:

and the lord said,

go now into the hill country of the Amorites and all their neighbors in the Arabah, in the hill country, in the Shephelah, in the Negev, and on the coast, in all the land of Canaan and the Lebanon as far as the great river, the Euphrates;

I give you this land; go and take possession of it, the land which the lord promised to your fathers, Abraham, Isaac, and Jacob, to them and their descendants after them (*id.*).

There are no distances, but the orientation is clear. The description proceeds east to west and north to south, then south to north. Moses speaks in Moab, on the other side of the Jordan, to the south. The hill country of the Amorites is to the north, still on the other side. The Arabah is to the west, adjoining the river, still on the other side. The hill country is further west, on this side. The Shephelah is further west and south. The Negev is further west and south, reaching in the west into Sinai, the wilderness, and in the south to the Red Sea, the sea of reeds. To the north is the coast, the coast of the Mediterranean, the sea of Philistia. And all this country is Canaan, to mt Lebanon in the north, and as far as the great river, the Euphrates, in the northeast. The part of the surface of the earth, which the promised land is, is described rather clearly.

Moses resolved to establish the law. And in order to do so, Moses begins with the promised land. The end of the writings has been political

from the first, and Moses begins with the end at its most explicitly political. The promised land is described in its entirety, too, such as it has been first promised in the Yahwistic document: I will set your borders from the sea of reeds to the sea of Philistia and from the wilderness to the Euphrates.

Moreover, the promised land is not just promised any longer. Moses resolved to establish the law. He so resolved in Moab, on the border of the promised land. The lord said, go now and take possession of it. And so Israel is about to do. The conquest of the promised land is imminent.

Moreover, in fact, the conquest of the promised land is not just imminent. The conquest has begun. Having described to Israel the promised land, Moses proceeds to tell them what they have just done. And what they have just done is conquer the hill country of the Amorites. Still on the other side of the Jordan, north of Moab is Ammon, in Ammon is Heshbon, further north is Bashan. And what Israel have just done is conquer Heshbon and Bashan. Moses tells them:

we marched through Moab; and the lord said, do not harass the Moabites, I will not give you any part of their land;

then we crossed the wadi Zered into the land of the Ammonites; and the lord said, I will not give you any part of their land either;

but then we crossed the wadi Arnon; and see! the lord said, I deliver into your hands Sihon the Amorite, the king of Heshbon, and all his land; and we captured all his cities, we killed man, woman, and child, we left no one alive; not one city withstood us (2);

then we marched on Bashan, and king Og of Bashan with his men took the field against us; and the lord delivered him to us with all his men; we took 60 cities; we killed man, woman, and child, we left no one alive; we took the cattle and all other booty (3).

This is what they have just done. And they will continue to do it:

with your own eyes you have seen what the lord your god has done to those two kings; and so the lord will do to all kings in the land into which you are about to go; do not fear them, for it is the lord your god who will wage war on them for you (*id.*).

The past steered by him, which the writings have been relating for two centuries, has thus for the first time become, explicitly, and in detail, the relation of the conquest of the promised land. His promise has been integrated into that past, and not as just a promise any longer. He has delivered on his promise. The conquest has begun, and most successfully. We captured all cities, we killed man, woman, and child, we left no one alive, not one city withstood us. We took 60 cities, we killed man, woman, and child, we left no one alive, we took the cattle and all other booty.

And the past steered by him, into which his promise, and the great success of his promise, is now integrated, is the foundation of the law. Moses resolved to establish the law. In order to do so, he tells Israel of the success of the conquest. And having told them of the success of the conquest, he tells them:

so now, Israel, pay heed to the laws and the rules which I am teaching you to obey, so that you may live to go and take possession of the land which the lord, the god of your fathers, is giving you (4).

Before giving them the laws and the rules which he is teaching them to obey, however, Moses also draws the most important result, on which in turn, once it is drawn, all other results will stand. The lord alone is god, there is no other beside him.

So the conquest of the promised land has begun. It has – if *Deuteronomy* was composed under Josiah, prince 640-09, and on ben Halafta's reckoning – eight and a half centuries before its relation by *Deuteronomy*.

This would be shortly after Thutmose, prince c. 1521-09. Thutmose conquered the Mediterranean littoral up to the river which goes downstream by going upstream. Conquered, that is, the promised land in its entirety. And the promised land remained under the successors of Thutmose for the following three centuries, through Merneptah, prince c. 1224-14.

Before giving them the laws and the rules which he is teaching them to obey, Moses also draws the most important result. The lord alone is god, there is no other beside him.

One god has been elevated above all creation

for nine and a half centuries by this time, counting back to *When on high*. One god has been very vigorously elevated above all creation by the Hebrew writings for two centuries by this time, counting back to the Yahwistic document. He has been elevated and exalted steadily further and steadily more vigorously, by *Amos*, *Hosea*, *Isaiah*, the psalms, *Jeremiah*. And *Deuteronomy* now for the first time asserts explicitly: there is no other beside him. *Deuteronomy* first draws this conclusion. And it is a conclusion, from the success of his promise. Indeed, it is a proof. You have before you clear proof that the lord alone is god, there is no other.

The first part of the book concludes:
 search the ages since the day god created man on the earth, from one end of the heaven to the other, has anything as great ever happened? has its like ever been seen or heard?
 has a people heard a god speak out of the fire and remained alive?
 has a god by his deeds, signs, portents, and war taken a people from amidst another people? as with his mighty hand and awesome power the lord your god, before your own eyes, took you out of Egypt?
 you have before you clear proof that the lord alone is god, there is no other;
 he let you hear his voice from heaven;
 he let you see on earth his great fire and hear his words come out of the fire;
 because he loved your forefathers, he chose you, their descendants; he himself led you out of Egypt, he drove out of your way peoples much greater than you;
 and he gave their lands to you to have today for yourselves;
 know therefore and heed that the lord alone is god in heaven above and on earth below, there is no other beside him;
 and keep his laws and commandments which I teach you this very day;
 this is the law which Moses gave Israel when they had taken possession of the countries of king Sihon the Amorite and king Og of Bashan on the other side of the Jordan (4).

Know therefore and heed that the lord alone is god, there is no other beside him. And keep his laws and commandments. This is the law which

Moses gave Israel when they had taken possession of the countries of king Sihon the Amorite and king Og of Bashan.

His promise, and the success of his promise, is now integrated into the past steered by him. He has delivered on his promise. Not indeed at the time of writing. At the time of writing the state of Judah is ruined. But he has delivered on his promise in the past. And in this you have clear proof that he alone is god.

Five centuries earlier, Marduk, in the *Marduk prophecy*, had first undertaken to steer the past. Mursili had taken Marduk to Hatti at the command of Tarhanna, Tukulti-Ninurta had taken Marduk to Ashur at the command of Ashur, Shutruk-Nahhunte had taken Marduk to Elam at the command of Inshushinak. Not so. Marduk reports: I commanded that I go to Hatti, I commanded that I go to Ashur, I commanded that I go to Elam. Clearly, this has to involve some difficulty, if there are those other gods. Just as clearly, there is no difficulty, if there are no other gods.

Thus, his delivery on his promise is clear proof that he alone is god, there is no other.

And also conversely, if he alone is god, there is no other, this could hardly fail to be clear proof of his delivery on his promise. And very generally, it could hardly fail to be clear proof of anything and everything.

So *Amos* had found the cause of the ruin of Judah in your wickedness. *Hosea* had found that Assyria is the means of his anger. *Isaiah* had found that he has a plan, first, he will bring against you the king of Assyria and his multitude, second, a king will be born and great will be again the domain of the throne of David. And of all this, that he alone is god, there is no other, would be clear proof.

For, in particular, it is clear proof first and foremost of the law. Know therefore and heed that the lord alone is god – and keep his laws and commandments – this is the law which Moses gave Israel. One god – and keep his laws – this is the law.

Thus, your wickedness is disobedience to the law. Assyria is punishment for disobedience to the law. The throne of David will be reward for obedience to the law.

The oldest Hebrew code of laws is in the

Yahwistic document. But it is never promulgated. And the prophetic books and the psalms have neglected the law. With *Deuteronomy*, however, the law – one god, and keep his laws, this is the law – is everything. All earlier results are integrated into the law.

And first and foremost, the law is now his means of steering the past. His promise, and his delivery on his promise, is integrated into the law. He has given you Heshbon and Bashan, hence he gives you the law, and hence he will give you the rest of the promised land. If you obey the law. If you do not obey the law, the consequences will be dire. Assyria, for instance.

The law is everything.

So, in the second part of the book, Moses gives Israel the law.

He begins by giving them the ten commandments, just as they are in the Yahwistic document. He then exhorts them to obey the law, and again, and again, and again. He then gives them the code of laws. And he then again exhorts them to obey the law, and again, and again, and again.

The second part begins:

Moses summoned all Israel and said to them, hear, Israel, the laws and the rules which I proclaim to you this very day;
the lord our god made a covenant with us at Horeb;

face to face the lord himself spoke to you on the mountain out of the fire;

and the lord said,

you shall have no other gods beside me;

you shall not make images of what is in the heaven, or on the earth, or in the waters under the earth, and you shall not worship them; for I am the lord your god, and I am a vengeful god; I visit the guilt of the parents on the children in the third and the fourth generation of those who reject me, and I bestow favors to the thousandth generation on those who love me and follow my commandments;

you shall not swear falsely by the name of the lord your god;

remember the seventh day and keep it holy, for it is the day of the lord your god;

honor your father and your mother, so that you may long endure in the land that the lord your god will give you;

you shall not murder;

you shall not commit adultery;

you shall not steal;

you shall not bear false witness against your neighbor;

you shall not covet your neighbor's house, or wife, or slave, or ox, or ass, or anything else of his (5).

Four of the ten commandments protect him, the first four.

The exhortations follow:

turn neither to the left nor to the right, but do as the lord your god has commanded you, so that you may long prosper and endure in the land which you are about to possess (*id.*);

hear, Israel, the lord is our god, the lord alone;

keep the law in your heart; teach it to your children; recite it when you are at home and when you are away, when you lie down and when you rise; bind it on your hand and on your forehead; write it on your doorposts and on your gates (6);

if you obey these laws, the lord your god will favor you, and bless you, and multiply you; he will bless your womb and the produce of your land;

you will be blessed above all other peoples;

no one will be barren among you, man, woman, or cattle; the lord will keep away from you all sickness;

you will destroy all peoples which the lord your god delivers to you;

and the lord your god will deliver them to you; he will strike fear in them and until you wipe them out; he will deliver their kings into your hands; he will obliterate their name from under the heaven; no man will withstand you and until you have wiped them all out (7);

it is a rich land that the lord your god is giving you, a land of streams and springs, a land of wheat and barley, of vines, figs, and pomegranates, a land of olives, oil, and honey, a land where you will eat to your heart's content and will never lack for anything, a land where the rocks are iron and the hills are copper (8);

but if you forget the lord your god and follow other gods and bow down to them, I warn you, you will be destroyed (9);

the highest heaven belongs to the lord your god

and the earth below and everything that is on the earth;
 fear the lord your god, him alone worship, to him alone hold fast, by his name alone swear (10);
 love the lord your god and keep forever the charge he has laid upon you, his laws, his rules, and his commandments;
 if you obey the commandments, I will send rain, and both the early rain and the late rain;
 but if you are led astray and serve other gods, the lord will be angry, he will shut up the skies, and there will be no rain;
 keep faithfully this law that I command you and the lord will drive away all nations before you; every spot on which you put your foot will be yours; your borders will be from the wilderness to the Lebanon and from the Euphrates to the western sea;
 a blessing and a curse I lay before you, a blessing, if you obey the commandments of the lord your god, a curse, if you do not obey the commandments of the lord your god (11).

The code of laws follows.

The code of the Yahwistic document has some 50 laws. The code of *Deuteronomy* has some 200. The amoraim, in the talmud, will count all the laws of the five books of the torah precisely, and will assign a precise reason for the number: 613 laws were declared to Moses, 365 prohibitions, because this is the number of days in the year, and 248 injunctions, because this is the number of parts in the body (*Lashes*, 23b). About one third of the days of the year and parts of the body, then, are in the code of *Deuteronomy*.

The code of the Yahwistic document is simpler than the earlier codes, much simpler than the greatest code, Hammurabi's. There is no procedure. There is not much discrimination.

New with the Yahwistic document is that the laws protect god, and very vigorously. New is also that god himself is the lawgiver. New is also that god gives the laws directly to you.

All this is in the code of *Deuteronomy* as well. The laws protect god, and very vigorously, god is the lawgiver, and he gives the laws directly to you. Also, however, there is procedure. There is great discrimination. And there are two new developments.

New is the protection of his sanctuary. His one

and only sanctuary. He alone is god, and his one and only sanctuary alone is sanctuary. One god – one sanctuary. His authority is localized, and centralized.

New is also the protection of his priesthood. Very vigorous protection, too, not less vigorous than the protection of his sanctuary. Localized, and centralized, his authority is equipped with an administration.

And the two new matters, his sanctuary and his priesthood, are very much a fundamental concern of the code. The code begins with the protection of his sanctuary. And with whatever else it concerns itself, it keeps coming back to his priesthood.

Also, in the Yahwistic document the punishments are somewhat sterner than in the earlier codes. But altogether new are the rewards. You are for the first time rewarded for following the law. And in *Deuteronomy* the punishments are very much sterner and the rewards are very much greater.

Deuteronomy is an advance in the development of the law. It is more elaborate than any earlier code, including the greatest, Hammurabi's. It is far more comprehensive, it regulates explicitly very many more relations, particular and general, than any earlier code. It is of very much greater unity than any earlier code. And to its very much greater power the fact of its continuing vigor – for twenty-six and a half centuries now – suffices to attest.

First, then, his sanctuary is protected:

you shall destroy all sanctuaries of the peoples whose land you take, you shall tear down the altars, burn the sacred posts, cut down the images of their gods;
 you shall not worship the lord your god like them;
 you shall only look up to the place which the lord your god chooses for himself, to dwell there, to establish his name there; there you shall go, there you shall bring your offerings and sacrifices and the firstborn of your herds;
 you shall not do as we now do, every man as he pleases;
 you shall bring everything that I command to the one place which the lord your god chooses to establish his name;

you shall not take your offerings to any other place; you shall bring them only to the place which the lord your god chooses for himself (12).

Then himself is once again protected:

if a prophet or diviner appears among you and says, let us worship other gods, show him no mercy, put him to death;

if someone incites the people of some city, let us worship other gods, put them all to the sword, and put the cattle to the sword, too (13).

Next eating is regulated:

you may eat the ox, sheep, goat, deer, gazelle, roebuck, wild goat, ibex, antelope, mountain sheep, and any other animal with true hoofs that brings up the cud;

you may not eat the camel, hare, and daman, for although they bring up the cud, they do not have true hoofs, and also the swine, for although it has true hoofs, it does not bring up the cud (14).

Next his offerings are regulated:

every year you shall set aside one tenth of everything that your land yields; and you shall bring it to the place which the lord your god chooses for himself;

if this place is too far for you, and it is hard for you to bring your tithe, you can exchange it for silver, and bring over the silver (*id.*).

Then the protection of his priesthood begins:

you shall not neglect the Levites among you, for they have no land for their patrimony; every third year you shall bring the full tithe of your land to them, as well as to the strangers, orphans, and widows among you (*id.*).

The remission of debts is next regulated, and in this connection, more generally:

there shall be no needy among you;

if there is someone needy, however, open your heart and hand to him (15).

His offerings are then further regulated:

you shall dedicate to the lord your god every firstborn male of your herds and flocks (*id.*).

His celebrations are established:

passover;

the feast of weeks;

the feast of the tabernacle;

the feast of unleavened bread (16).

Next the establishment of procedure begins:

you shall appoint judges in your tribes;

you shall not judge unfairly;

justice, justice alone you shall pursue (*id.*).

His offerings are further regulated:

you shall not offer to the lord your god an ox or a sheep that is misshapen, for this is abhorrent to the lord your god (17).

Himself is once again protected:

if a man or a woman has affronted the lord your god, you shall make a thorough investigation, and if it is true, stone them to death, man or woman (*id.*).

Procedure is then more particularly established, and the more particularly it is established, the more it rests on his priesthood:

you shall not put them to death on the testimony of a single witness;

if a case baffles you, bring it to the priests or the judges;

if anyone disobeys the decision of the priest who ministers to the lord your god, or of the judge, put him to death (*id.*).

Kingship is then regulated:

if you say, we will set up a king over us like all the peoples around us, you may do so;

you shall set up over yourselves the king whom the lord your god chooses;

when he is seated on his throne, he shall have a copy of this law made, on a scroll written by the priests; and it shall remain with him and he shall read it all his life, so that he knows to fear the lord his god and to obey faithfully every word of the law;

thus he and his sons shall long reign over the kingdom of Israel (*id.*).

Again his priesthood is protected:

the priests, the whole tribe of Levites, shall have no patrimony; they shall live from the lord's offerings, this shall be their patrimony;

and this shall be their due from the people; everyone who offers an ox or a sheep shall give to the priest the shoulder, the cheeks, and the stomach;

you shall give to the priest also the first fruits of your grain and wine and oil; you shall give him also the first sheering of your sheep;

for it is the priests and their descendants that the lord your god has chosen to minister to the lord your god for all time (18).

Prophecy is then regulated:

the lord your god will raise up a prophet among you; and if anyone fails to heed his words, I myself will take him to account;

but if a prophet presumes to utter an oracle which I did not command, he shall die;

and if you ask, but how will we know? if the oracle does not come true, it was not spoken by the lord (*id.*).

Procedure is again regulated:

a single witness shall not be enough to establish guilt or blame; guilt or blame can be established only by two or more witnesses;

if a man bears false witness, you shall do to him as he wanted to do to his fellow; thus you shall rid yourselves of wickedness; nor shall you show him mercy, life for life, eye for eye, tooth for tooth, hand for hand, foot for foot (19).

Warfare is then regulated:

when you take the field against your foe, and see horses and chariots more numerous than yours, have no fear, the lord your god is with you;

before you join battle the priest shall address the troops;

then the officers shall address the troops;

when you advance on a city, you shall offer them terms; if they submit, take them into forced labor;

if they do not submit, the lord your god will deliver them into your hands; you shall put the men to the sword; but you may take the women, the children, the cattle, and everything else in the city as booty (20)

Then once again procedure is established, once again in his priesthood:

the priests, the sons of Levi, the lord your god has chosen to minister to him and to pronounce blessings in his name; and every case of dispute or assault shall be subject to their ruling (21).

Some two thirds of the code have at this point been laid down. The concerns have been very general. Other than eating and the remission of debts, regulated in passing, the concerns have been very general, and very elevated. His sanctuary, himself, his offerings, his priesthood, again his offerings, his celebrations, procedure, again his offerings, again himself, again procedure,

again his priesthood, kingship, again his priesthood, prophecy, again procedure, warfare, again procedure, again his priesthood. So in the remaining one third the code turns to the more particular matters, and more mundane, which have been the predominant concern of earlier codes. Here is a sample of these as well:

if a man has two wives, one loved, one unloved, both have borne him sons, and the firstborn is the son of the unloved, he shall not treat the firstborn of the loved as his firstborn; he shall give the double portion to the firstborn of the unloved; for it is his birthright;

if a man has a wayward son who does not obey his father and his mother, they shall bring him before the elders, and shall say, this son of ours is wayward, he is a glutton and a drunkard; and the men of the city shall stone him to death;

if a man is guilty of a capital offense and you have impaled him on a stake, you shall not let the corpse remain on the stake overnight; for it is an affront to the lord (*id.*);

if a man is found lying with another man's wife, they shall both die;

if a virgin is betrothed to a man, and someone else lies with her, you shall stone them both to death; but if the man lies with her by force, only the man shall die (22);

no Ammonite or Moabite shall be admitted to the assembly of the lord, not in the tenth generation, nor shall you concern yourselves with their welfare or benefit; but you shall not abhor the Edomite or the Egyptian, children born to them may be admitted to the assembly of the lord in the third generation;

you shall not charge interest on loans to your countrymen, on money or on food or on anything else; but you may charge interest on loans to strangers;

when you go into another man's orchard, you may eat as many grapes as you want; but you shall not put any in your basket (23);

you shall not deny justice to the stranger or the orphan; you shall not take the cloak of the widow in pawn (24);

if two men fight, and the wife of one of them comes to help him and puts her hand on the genitals of the other man, you shall cut off her

hand;

you shall not have different weights in your bag, heavy and light; you shall have honest weights, and you shall weigh honestly (25).

The code concludes by revisiting one more time the most important matters:

when you enter the land which the lord your god is giving you, and settle in it, you shall take the first fruits of everything, go to the place which the lord your god chooses to establish his name, and give them to the priest;

the priest shall take them from you and set them down before the altar of the lord your god (26).

The code has been introduced by many and the sternest exhortations. And it is now followed by more and yet sterner exhortations. Moses has concluded the introductory exhortations by telling Israel: a blessing and a curse I lay before you, a blessing, if you obey the commandments of the lord your god, a curse, if you do not obey the commandments of the lord your god. And now the blessings and the curses come. In particular, first the more particular curses come, then the blessings come, very general, then again the curses come, also very general.

The first set of curses:

cursed be who makes an image abhorrent to the lord;

cursed be who insults his father or mother;

cursed be who moves his fellow's boundary stone;

cursed be who misdirects the blind;

cursed be who denies justice to the stranger, the orphan, or the widow;

cursed be who lies with his father's wife;

cursed be who lies with a beast;

cursed be who lies with his sister;

cursed be who lies with his mother-in-law;

cursed be who strikes his fellow in secret;

cursed be who accepts a bribe in a murder case;

cursed be who does not obey the law and all that it enjoins (27).

The blessings:

if you obey the lord your god, and faithfully follow his commandments, the lord your god will raise you above all peoples on earth; and these will be your blessings;

you will be blessed in your city and in your

country;

blessed will be the issue of your womb and the produce of your land;

blessed will be your basket and your bowl;

blessed will be your comings and your goings;

the lord will destroy your foes who attack you;

the lord will make you a holy people;

the lord will give you prosperity, to the issue of your womb and to all your produce;

the lord will open his bounty to you, he will give you rain;

you will be the creditor of all peoples, the debtor to none;

the lord will make you the head, not the tail;

you will always be at the top, never at the bottom (28).

And the second set of curses:

but if you do not obey the lord your god, and do not faithfully follow his commandments, these will be your curses;

you will be cursed in your city and in your country;

cursed will be your basket and your bowl;

cursed will be the issue of your womb and the produce of your land;

cursed will be your comings and your goings;

the lord will let loose against you calamity, fear, and pain in everything that you do;

the lord will deliver you to your foes who attack you;

the lord will strike you with scabs, boils, and itches from which you will never recover;

the lord will strike you with madness, blindness, and dismay;

you will pay the price for a wife, and another man will enjoy her, you will build a house, and you will not live in it;

the lord will bring a people from the far end of the earth to swoop over you like an eagle;

the lord will inflict on you and your offspring plagues of which you have not even heard;

plagues and diseases, which are not even mentioned in this book of law, will wipe you out;

the lord will scatter you among other peoples from one end of the earth to the other;

the lord will take you back to Egypt by the very road of which I told you, you shall never see this road again (*id.*).

The greatest code has concluded: let anyone

who is oppressed, let anyone who has a grievance, listen to my words, and may my words redress his grievance, may he understand the law, and may he be content. This code concludes with curses, blessings, and more curses.

In the third part of the book Moses proclaims to Israel the promulgation of the law.

He tells Israel:
when all these things have befallen you, the blessings and the curses, the lord your god will restore your fortunes and will take you back in love (30).

Joshua, Judges, Samuel, Kings will relate in detail all these things, the blessings and the curses, that have befallen you in all the centuries after Moses and through the time of writing.

The promulgation of the law is in writing and entrusted to the priests:

and Moses wrote down the law and gave it to the priests, the sons of Levi, who carried the ark of the covenant of the lord, and to the elders of Israel;

and he commanded them;

at the end of every seventh year, at the feast of the tabernacle, when all Israel comes to the place which the lord your god has chosen for himself, you shall read the law to all Israel; you shall gather the people, the men, the women, and the children, and the strangers among you, all to hear it, so that they fear the lord your god and observe faithfully every word of the law (31).

The book ends as Moses, about to die, climbs mt Nebo to the summit of Pisgah, opposite Jericho, and the lord his god shows him the entire promised land as far as the western sea (34).

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Joshua, Judges, Samuel, Kings reports:
in the 18th year of Josiah, during repairs in the house of the lord, the high priest Hilkiah found the book of the law; Hilkiah gave the book to the scribe Shaphan, who read it; Shaphan then read the book to the king; when the king heard what was in the book, he rent his clothes (*Kings*, II, 23);

the king defiled and demolished the shrines; he killed the horses that the kings of Judah had dedicated to the sun; he tore down the altars

and scattered the rubble; he scattered the pillars and cut down the sacred posts; he dug the bones out of the graves and burned them; he slew the priests and burned human bones on them;

so the king fulfilled the law recorded in the book found in the house of the lord;

the king then called the men of Judah and of Jerusalem, all the priests and all the prophets, all the people, young and old;

he read the entire book to them;

and he made a covenant before the lord that they will obey the lord and will keep his law (23).

The 18th year of Josiah is 622.

The book of the law is *Deuteronomy*. *Deuteronomy* has told Josiah what to do, and Josiah has done it. The law has become effectual. And this is the successful beginning of the first church.

Joshua, Judges, Samuel, Kings adds:

there was no king like Josiah before him, who turned to the lord with all his heart and might in full accord with the entire law of Moses; nor did a king like him arise again after him (*id.*).

Joshua, Judges, Samuel, Kings is not an irreproachable witness.

In general, it is the concern of this witness to relate all events from the Mosaic lawgiving through the time of writing, the more than eight centuries of them, on ben Halafta's reckoning. And all events this witness finds, without exception, steered by the lord.

In particular, on the one hand, this witness finds the book of the law in the hands of Joshua already, more than seven centuries before Josiah, on ben Halafta's reckoning. Right after the conquest of the promised land:

on mt Ebal, on stone, Joshua inscribed the law of Moses;

all Israel gathered, and Joshua read to them the entire law, the blessings and the curses, just as it is written in the book of the law; not a single word of all that Moses had commanded did not Joshua read to them (*Joshua*, 8).

On the other hand, he does not find the book of the law in the hands of any king of Judah before Josiah, not even David.

As to Josiah himself, the event of the covenant before the lord is one of two events this witness

reports in the reign of Josiah. The other is: Necho, the king of Egypt, marched against the king of Assyria to the Euphrates; Josiah stood against him at Megiddo, and Necho slew Josiah (*Kings*, II, 24).

This was in 609. When there was no king of Assyria. The king of Egypt marched against the king of Babylon. When there had been a king of Assyria earlier, there had been kings of neither Egypt nor Babylon.

Nor is the event of the covenant before the lord noted by any other of the holy writings. Dramatically, *Jeremiah*, dating itself to the reigns of Josiah and his successors, has the prophet say this to Josiah's son and successor:

your father was just and fair; he did justice to the poor and the needy (22).

This, and no more.

The evidence of that passage in *Joshua*, *Judges*, *Samuel*, *Kings* for promulgation of the law under Josiah is, by itself, not very strong.

But the evidence of the development of the holy writings is very strong. Their series – from the Yahwistic document through *Amos*, *Hosea*, and *Isaiah*, the psalms, and *Jeremiah*, through the synthesis of *Deuteronomy*, then *Ezekiel*, and through and including most particularly the further synthesis of *Joshua*, *Judges*, *Samuel*, *Kings* – is dated firmly, and indicates unambiguously promulgation of the law at this time.

And the evidence of the fact that the state of Judah disappeared, but a congregation under the book of the law continued, is conclusive. Judah disappeared altogether in 587. Many states had disappeared earlier, many more were to disappear later. For the first time, and beginning at this time, as this state disappeared, and its population was dispersed by the states destroying it, too, a population was brought under a law, and maintained under that law, dispersed as that population was, too, without a state.

It was brought, and maintained, under a law without a state. It was yet brought, and maintained, under a civil law.

Ulpian writes: whenever we add something to natural law or subtract something from it, we thus make a law particular to ourselves, and this is civil law.

The additions and subtractions, and mostly

subtractions, you shall not, you shall not, you shall not, *Deuteronomy* cannot have attested more unambiguously. And that it is a law particular to ourselves, the fact that it is enjoined most particularly on Israel, and most particularly on no one else, cannot have been attested more unambiguously either. As Spinoza writes: the laws revealed by god to Moses were laws only of the government of the Hebrews; they were binding on no one but the Hebrews, and not on them either after the downfall of their government.

That the law remained binding on the Hebrews after the downfall of their government, and through the time of Spinoza, and still remains binding, attests the power of the law.

Nor can it be difficult to explain the power of the law.

The lord alone is god, there is no other. And keep his laws and commandments. This is the law.

And if you obey the lord your god, and faithfully follow his commandments, the lord your god will raise you above all peoples on earth. You will be blessed in your city and in your country. Blessed will be the issue of your womb and the produce of your land. Blessed will be your basket and your bowl. Blessed will be your comings and your goings. The lord will destroy your foes who attack you. The lord will make you a holy people. The lord will give you prosperity, to the issue of your womb and to all your produce. The lord will open his bounty to you, he will give you rain. You will be the creditor of all peoples, the debtor to none. The lord will make you the head, not the tail. You will always be at the top, never at the bottom.

But if you do not obey the lord your god, and do not faithfully follow his commandments, you will be cursed in your city and in your country. Cursed will be your basket and your bowl. Cursed will be the issue of your womb and the produce of your land. Cursed will be your comings and your goings. The lord will let loose against you calamity, fear, and pain in everything that you do. The lord will deliver you to your foes who attack you. The lord will strike you with scabs, boils, and itches from which you will never recover. The lord will strike you with madness, blindness, and dismay. You will pay the price for

a wife, and another man will enjoy her, you will build a house, and you will not live in it. The lord will bring a people from the far end of the earth to swoop over you like an eagle. The lord will inflict on you and your offspring plagues of which you have not even heard. Plagues and diseases, which are not even mentioned in this book of law, will wipe you out. The lord will scatter you among other peoples from one end of the earth to the other. The lord will take you back to Egypt by the very road of which I told you, you shall never see this road again.

And all of it, the blessing and the curses, is not just prospective. It is not just what will happen. It is retrospective. It has happened. Beginning with Moses and in all the centuries since. Nay, beginning with Abraham and in all the centuries since. Nay, beginning with creation and in all the centuries since.

You have before you clear proof that the lord alone is god, there is no other.

Thus, the political end is achieved. The state is destroyed. But in place of the state there is now a church.

It is not a state. It does not have a domain. It is not under a king. It does not smite.

It is nevertheless very much like a state. It has a center. His one and only sanctuary. It has an administration. His priesthood is very much part of the law. It collects the tithe. Most of all, it has a population – its congregation – brought under itself more firmly than a population has ever been brought under a state.

The state is a power contrary to our natural passions, a power keeping men in awe, a power reducing the wills of men unto one will. And so is the church, a power contrary to our natural passions, a power keeping men in awe, a power reducing the wills of men unto one will.

And if the church has not reduced the wills of many unto one will, not at this time, not at any one time, not this first church, not nearly as many as Assyria has reduced, or nearly as many as the empire of the great kings will reduce, it has kept them reduced very much more firmly, and very much longer. For twenty-six and a half centuries now, counting back to the promulgation of the law under Josiah. No state has come close to achieving this feat.

Smiting has been the foundation of the power since the beginning of the state, for twenty-four centuries by the time of the promulgation of the law under Josiah. Writing has now become effectual, and rather more effectual than smiting.

And the writings will continue to accumulate, will continue to be effectual, and the church will continue to be established more firmly, and more.

dxvii

Assyria fell in 612. It brought no respite to Judah.

At first Babylon and Egypt contested the promised land.

In 609 Necho slew Josiah and took Jerusalem. He installed Jehoiakim, and as *Kings* reports: took 100 talents of silver and 1 talent of gold (II, 23).

Then Babylon won the promised land.

In 598 Nebuchadnezzar took Jerusalem. He installed Zedekiah, and as *Kings* reports: took all the treasures from the royal palace, he took all the gold from the house of the lord, and he took the people of Jerusalem, the officers and the soldiers, 10 000 in all, and all craftsmen and smiths, and left in the city only the weakest people (24).

But, *Kings* continues: Zedekiah rebelled against the king of Babylon (25).

And in 587: Nebuchadnezzar's general Nebuzaradam came to Jerusalem, razed the house of the lord, razed all houses, tore down the walls, and took in exile the people that had been left in the city (*id.*). *Jeremiah* reports: 4 600 were led in captivity (52).

This was the end of Judah.

The numbers indicate how thorough its destruction had been.

In 702 Sennacherib had taken 30 talents of gold and 800 talents of silver, and 200 150 people.

In 609 Necho took 1 talent of gold and 100 talents of silver.

In 598 Nebuchadnezzar had to strip the royal palace and the house of the lord, and when he took 10 000, he left in the city only the weakest people.

In 587 there was apparently nothing to take but the 4 600 that had been left in the city.

587, the end of Judah, is also the beginning of

the Babylonian captivity.

But the writings continued to accumulate.

Three prophetic books are from the last years of Judah, *Zephaniah*, *Habakkuk*, and *Ezekiel*. *Zephaniah* and *Habakkuk* are both brief and not important. *Ezekiel* is long and important, if not very important.

In general, 15 of the holy writings are prophetic books. The first 3 are very important. *Amos* discovered that he will inflict on you first destruction, then salvation, and that the cursing of all nations, nation after nation after nation, should be the transition from the revelation of the destruction to the revelation of the salvation. *Hosea* begins with the salvation, then focuses on the destruction. *Isaiah* discovered that it is his plan, first the destruction, then the salvation, and corroborated forcefully that the cursing of all nations, nation after nation after nation, should be the transition from the revelation of the destruction to the revelation of the salvation. The dichotomy of the destruction and the salvation coincides precisely with the dichotomy of the consequences of the law, the curses, if you disobey the law, and the blessings, if you obey it. Clearly, *Isaiah* has described his plan exhaustively. The subsequent prophetic books thus do not deviate from his plan.

Wellhausen writes: with the appearance of the law worship was restricted to Jerusalem; there was also now an authority in religion and this was the death of prophecy; we can call Jeremiah the last prophet; those after Jeremiah were prophets only in name; Ezekiel does not prophesy, he expounds the words of his predecessors.

With the appearance of the law and the restriction of worship to Jerusalem, there was now an authority in religion, and this was the death of prophecy. Even as prophetic books continued to be composed for two more centuries. But we should rather call Isaiah, much earlier, the last prophet. Those after Isaiah are all prophets only in name. For all their peculiarities, they all prophesy the same, all rehearse the plan, the destruction, the cursing, the salvation, and again, and again, and again. Isaiah exhausted prophecy.

Thus, *Micah* is brief, first the destruction, then the salvation. *Nahum* is also brief, first the salvation, then the destruction. *Jeremiah* is massive,

first the destruction, then more of it, and more of it, and more of it, then the salvation, then the cursing.

And thus also *Zephaniah*, *Habakkuk*, and *Ezekiel*.

Zephaniah follows the plan precisely, the destruction (1), the cursing (2), the salvation (3). *Habakkuk* unites the destruction and the cursing (1-2), the salvation follows (3).

And *Ezekiel* also follows the plan precisely, the destruction (1-24), the cursing (25-32), the salvation (33-9). The end of the book is spurious. But it does not deviate from the plan, the salvation continues (40-8).

One peculiarity of *Ezekiel* is that, while Isaiah sees the lord attended by six-winged seraphim, Ezekiel sees him attended by four-winged cherubim (*passim*). The four-winged cherubim are also four, and also four-handed, and four-faced, each with the face of a man and the face of a lion on the right and the face of an ox and the face of an eagle on the left (*id.*). Another peculiarity is that Ezekiel is explicit, as explicit as a prophet should be, that he is expounding the words of his predecessors:

the lord said to me, eat what is before you; so I opened my mouth and he gave me a book to eat; and I ate it, and it tasted sweet like honey (3).

It is not a peculiarity of *Ezekiel* that the prophet is a priest (1), or that the lord appoints him, the priest, the watchmen over all Israel (3). This begins with *Jeremiah*.

The destruction culminates in the razing of Jerusalem and the temple, clearly, not by Nebuchadnezzar or his general, but by the lord and his cherubim (8-11). So, although the book ended as it should with salvation, it yet needed to be supplemented with the restoration of Jerusalem and the temple. And in the spurious addition the lord takes the prophet on a tour of his future new temple (40-3), it is reasserted:

the levitical priests alone may enter my sanctuary, they alone may approach my table to minister to me, they alone shall keep my charge (44), and the promised land is restored and divided among the tribes of Israel (45-8). The division of the promised land among the tribes of Israel this witness has borrowed from *Joshua*, *Judges*,

Samuel, Kings, thus also dating himself after that witness.

The importance of *Ezekiel*, as of the accumulation of the smaller prophetic books, too, is in just that, the continuing accumulation of the writings. His plan is rehearsed, and again, and again, and again.

From this time is also the booklet *Ruth*. A man of Judah goes to Moab and marries a Moabite woman, Ruth (1). When he dies, his mother goes back to Judah, and Ruth goes with her (*id.*). Boaz marries Ruth, and they beget Obed, who begot Jesse, who begot David (4).

Joshua, Judges, Samuel, Kings is next, and *Joshua, Judges, Samuel, Kings* is very important. It is the second most important of the holy writing.

Deuteronomy has set up before you clear proof that the lord alone is god, there is no other. This is the law.

Joshua, Judges, Samuel, Kings supplies the evidence.

It is one unitary document, from a single hand. The division into several books – and into six books rather than four, as *Samuel* is also divided into *1 Samuel* and *2 Samuel*, and *Kings* into *1 Kings* and *2 Kings* – accommodates the size of the rolls to which the document was committed.

In *Deuteronomy* the lord has given the law to Moses to give to Israel. This occurred a long time ago. And to begin with, *Joshua, Judges, Samuel, Kings* shows when exactly it occurred. Beginning where *Deuteronomy* ends, it relates the subsequent events and through the fall of Judah, shortly before the time of writing, so that it is possible to calculate, and ben Halafta first calculates: 890 years from the exodus to the destruction of the first temple. The exodus took 40 years (*Deuteronomy*, 1), and it is not entirely clear whether the calculation is from its beginning or its end. But the first temple was destroyed in 587. And it is thus clear that the Mosaic lawgiving occurred between 1477 and 1437.

Independently, this is the time of Hatshepsut and Thutmose III, the promised land in its entirety firmly in their domain.

The books are subdivided into chapters, of more or less equal size. *Joshua* is in 24 chapters, *Judges* in 21, *Samuel* in 55, *Kings* in 47, for a

total of 147 chapters.

Joshua relates the conquest of the promised land and its division among the tribes of Israel.

First the south was conquered:

Joshua left no one alive, he destroyed everything that drew breath, as the lord had commanded (10).

Then the north was conquered:

the Israelites plundered the cities, and kept all the spoil and the cattle, but put everything living to the sword, left nothing that drew breath alive, as the lord had commanded Moses, Moses had charged Joshua, and so Joshua did (11).

The conquest of the promised land and the following division of the conquered land are also the high point in the description of the surface of the earth by the writers of the holy writings. The relation of the conquest concludes with the enumeration of the 31 kings of the Hittites, Amorites, Canaanites, Perizzites, Hivites, and Jebusites vanquished by Joshua and their cities, city after city after city (12), the relation of the division of the conquered land among the twelve tribes of Israel culminates, early on, in the enumeration of the 115 cities allotted to the tribe of Judah, city after city after city (15), and, in conclusion, in the enumeration of the 48 cities allotted to the Levites, city after city after city (21).

It is not an advance in the description of the surface of the earth.

The conquest of the promised land, Joshua himself calculates: took 5 years (14), the division of the land followed immediately. The conquest and division thus occurred between 1477-2 and 1437-2.

Independently, this is still the time of Hatshepsut and Thutmose III and also, at the very end of this time, Amenhotep II, the promised land in its entirety firmly in their domain.

The relation of the conquest of the promised land and its division requires 24 chapters, nearly one sixth of the whole.

Judges relates the events after the conquest of the promised land and its division and before the birth of Samuel.

These events are simple. Throughout: the Israelites did what was displeasing to the lord (2);

the Israelites did what was displeasing to the lord (4),

and again, and again. Later on also:

in those days there was no king in Israel (18);

in those days there was no king in Israel (19),

and again, and again.

David reigned *c.* 1003-963. Samuel anointed him. Samuel was old before that already (*Samuel*, I, 8). Samuel was thus born, say, not too long before 1050.

The events after the conquest of the promised land and its division and before the birth of Samuel thus occurred in the four centuries or so from about 1450 to about 1050.

Independently, this is the time first of the Egyptian princes through Ramesses II, the promised land firmly in their domain, then of the Assyrian princes, who, through Tukulti-Ninurta, conquered the promised land in its entirety, and through Tiglath-pileser, conquered again the promised land in its entirety.

The relation of the events after the conquest of the promised land and its division and before the birth of Samuel requires 21 chapters, one seventh of the whole.

Samuel divides into two parts. It relates the deeds of Samuel, and the deeds of David.

The law has regulated prophecy:

the lord your god will raise up a prophet among you; and if anyone fails to heed his words, I myself will take him to account.

So the lord raises up Samuel. He is also a priest. The lord says:

I will raise up for myself a faithful priest who will do what I want (I, 2);

and all Israel, from Dan to Beersheba, saw that

Samuel was a true prophet of the lord (4).

Dan is the land that had been allotted to the tribe of Dan (*Joshua*, 19), in the north. Beersheba is in the land that had been allotted to the tribe of Judah (15), although it had been allotted to the tribe of Simeon as well (19), either way in the south.

The law has regulated also kingship:

if you say, we will set up a king over us like all the peoples around us, you may do so; you shall set up over yourselves the king whom the lord your god chooses.

So they say, we will set up a king over us (8), and

set up Saul (10), but the lord chooses David, Samuel anoints David (16), and David conquers all Israel (II, 8).

The deeds of Samuel and David occurred from about 1050 to *c.* 963.

Independently, this is the time when hordes of wild men overran both valleys. In the valley of the Nile the hordes were Libyans, peoples of the sea, and Asiatics. In the valley of the two rivers the hordes were Arameans. Other parts of the valleys the two sets of hordes plundered separately, the promised land they plundered jointly.

The relation of the deeds of Samuel requires 15 chapters, one tenth of the whole. The relation of the deeds of David, continuing in *Kings*, requires 41 chapters, more than one quarter of the whole.

And *Kings* divides into two parts as well. It relates the deeds of Solomon, and the deeds of his 39 successors in Israel and Judah.

The deeds of Solomon, if not as great as those of David, are still great:

he excelled all princes on earth in wealth and in wisdom; the entire earth came to pay homage to Solomon and listen to the wisdom that god had given him; every year everyone brought their tribute, silver, gold, robes, weapons, spices, horses, mules (10).

The deeds of his successors in Israel and Judah are simple. 30 of the 39:

did what was displeasing to the lord (*passim*), the other 9:

did what was pleasing to the lord (*passim*).

The deeds of Solomon and his successors in Israel and Judah occurred in the three and a half-odd centuries from *c.* 963 to 587.

Independently, this is the time of the Assyrian princes, who, through Shalmaneser III, conquered once again the promised land in its entirety, and, beginning with Tiglath-pileser III, destroyed Israel and ruined Judah, and of the Babylonian princes after them, who completed the destruction of Judah.

The relation of the deeds of Solomon requires 10 chapters, a little more than one fifteenth of the whole. The relation of the deeds of his 39 successors in Israel and Judah requires 36 chapters, less than one hundredth of the whole per prince on average.

Joshua, Judges, Samuel, Kings has related the past from the Mosaic lawgiving through the fall of Judah, shortly before the time of writing.

And that past cannot be plausible.

There is the very difficult relation of that past to the independent evidence. It is not just disagreement. It is impossibility. If the independent evidence, not that past. If that past, not the independent evidence. If there were the Egyptian princes from Thutmose, prince c. 1521-09, to Ramesses II, prince c. 1291-24, and the Assyrian princes from Adad-nirari, prince c. 1305-273, to Tiglath-pileser, prince 1115-076, there was not the conquest of the promised land, not at any time in these four and a half centuries. If there was the conquest of the promised land at any time in these four and a half centuries, there were not those Egyptian and Assyrian princes. If the domain of Solomon reached from the Euphrates to Egypt, and everyone in his domain had his own vine and his own fig tree, and Solomon had 40 000 stalls of horses for his chariots and 12 000 horsemen, there were not the hordes of Libyans, peoples of the sea, and Asiatics, and Arameans. Unless they were circumventing that domain. If there were those hordes, and they were not circumventing that domain, that was not Solomon's domain.

But even if the independent evidence is ignored, that past all by itself cannot be plausible. David had 1 300 000 soldiers ready to draw the sword. An angel of the lord struck down 185 000 in the Assyrian camp. More particularly, things like that abound. More generally, Samuel is only the first prophet after Moses whom the lord raises up to do what he wants. After that prophets abound, as many as there are kings, the lord keeps raising them up, they keep telling the kings what the lord wants, yet the kings do three times more often what he does not want than what he wants. More generally still, in the nine centuries from the Mosaic lawgiving to the time of writing, on ben Halafta's reckoning, not more than two things turn out as he wants. The conquest of the promised land, over 5 years, 24 chapters, and David, over 40 years, 41 chapters. One thing turns out part as he wants part as he does not want, Solomon, over 40 years, 10 chapters. Everything else, eight centuries of it, 72 chapters,

keeps turning out as he does not want.

Joshua, Judges, Samuel, Kings poses the problem of why and how that past became plausible.

And if the relation of that past became history, and the only true history, and Judaism was built on that history, Judaism poses the problem of how and why it became plausible that the relation of that past is history, and how and why that history became the foundation on which Judaism was built.

Joshua, Judges, Samuel, Kings is an explanation.

And it is not a description at all. It is concerned with why what happened happened not just predominantly, it is concerned with it exclusively. What happened serves why it happened so unwaveringly and steadfastly, what happened has become substantially irrelevant. So much so, whether it happened has become substantially irrelevant as well.

18 of the 19 princes of Israel: did what was displeasing to the lord (*passim*). This explains the destruction of Israel.

12 of the 20 princes of Judah: did what was displeasing to the lord (*passim*). This explains the destruction of Judah.

1 of the 19 princes of Israel and 8 of the 20 princes of Judah: did what was pleasing to the lord (*passim*). This explains the continuance of the lord's worship.

All the particularity of the deeds of the princes is assimilated into the explanation. The explanation is very general.

Displeasing to the lord was: they set up shrines to the false gods of other peoples and made sacrifices and offerings abhorrent to the lord (*passim*). Pleasing to the lord was: they destroyed the shrines of the false gods and offerings of other peoples, and worshiped the lord as their father David had done (*passim*). The explanation is very general, and very uniform. There is one and only one cause.

And it is *passim*. The explanation is very general, very uniform, and very relentless.

As the more recent and somber development of Israel and Judah is explained, so the earlier and glorious beginning of the state is explained. It is related in great detail, and all detail is assimilated

into the same very general, very uniform, and very relentless cause.

As the beginning of the state is explained, so the centuries, four on ben Halafta's reckoning, preceding it are explained. They are related in much detail – they are also somber: they did what was displeasing to the lord – all of this detail as well assimilated into the same very general, very uniform, and very relentless cause.

And so the conquest of the promised land and its division is explained. This is also related in great detail – it is also glorious: as the lord had commanded Moses, Moses had charged Joshua, and so Joshua did – all this detail also assimilated into the same very general, very uniform, and very relentless cause.

Nine centuries, on ben Halafta's reckoning, of detail, in all of which the same very general and very uniform cause has been very relentlessly in operation.

Thus, the remote past related by the Yahwistic document, all that happened before the Mosaic lawgiving, is not yet assimilated into the detail steered by the cause. The Priestly code will shortly do that.

But everything else is.

Can a misfortune befall a city if the lord did not send it? There are now nine centuries of detail in evidence. The immediate cause of the destruction of Judah is your wickedness. There are now nine centuries of detail in evidence for this as well, as the destruction of Judah is now but a part of the detail. Assyria is the rod of his anger. There are now nine centuries of detail in evidence also for this, as Assyria is now also but a part of the detail. He is the lord of hosts, and he has a plan. There are now in evidence nine centuries of detail of his plan. The lord of hosts!

You have before you clear proof that the lord alone is god, there is no other. This is the law.

Now you have before you nine centuries of evidence that this is the law.

The law is the cause.

Explanation will make what it explains more plausible. Conversely, nothing but its explanation will make the implausible plausible. Being a better explanation made Copernicus, against whom *Joshua* itself was decisive evidence, more plausible. Being a better explanation has made

Darwin, against whom all holy scriptures continue to be decisive evidence, more plausible.

And that the past is explained is a very great feat.

By that time, history has advanced greatly. The advance has culminated in the Assyrian princes. By the end of Assyria, with their chronicles they have established the record of the past eight centuries – counting from Ashurbanipal back to Ashur-bel-nisheshu – in steadily greater detail, steadily more systematically researched, steadily more deliberately. And there is in all of it hardly any explanation, and nothing remotely like a general cause, or uniform, or relentless.

Beginning with Herodotus the history of the Greek cities will flourish. Again, there will be in all of it hardly any explanation, and nothing remotely like a general cause, or uniform, or relentless.

The history of Rome will flourish. Again, there will be in all of it hardly any explanation, and nothing remotely like a general cause, or uniform, or relentless.

When the history of the Christian church begins flourishing, then there will be again explanation, again very general, very uniform, very relentless.

To find causes has been difficult in history.

To find general and uniform causes has been difficult very generally.

That the past is explained is a very great feat. And the past is explained.

And that past steered by god is the foundation of the church.

The end was political. The end was a power keeping men in awe, reducing the wills of men unto one will.

This is how Spinoza describes it: the end was that men do nothing by their own decisions, act in all things by the mandate of others, and continually acknowledge with all their actions and thoughts that they are not under their own right, but under the right of others.

To this end, if you obey the law, you will be blessed above all other peoples, if you disobey the law, you will be cursed above all other peoples.

And if you began obeying the law, rather than disobeying it, at this time, when, after two centu-

ries of accumulation of the writings, *Deuteronomy* set up before you the clear proof that he alone is god, this is the law, and *Joshua, Judges, Samuel, Kings* set up before you the evidence of all the centuries since the Mosaic lawgiving that this is the law, you began obeying the law, rather than disobeying it, because in all the centuries since the Mosaic lawgiving, when you obeyed the law, you were blessed above all other peoples, when you forgot the lord your god, he destroyed you.

And this explains also why the relation of that past steered by him had to become history, and the only true history. If that past steered by him was the foundation of your obedience, that past steered by him had to be truth exclusively.

So the Priestly code will assimilate into the detail steered by him all that happened before the Mosaic lawgiving as well. Setting up before you the evidence of all the centuries beginning with creation that he alone is god, this is the law. So that you will obey the law, rather than disobey it, because in all the centuries since creation, when you obeyed the law, you were blessed above all other peoples, when you forgot the lord your god, he destroyed you.

And that that past steered by him is truth exclusively will become explicit, and relentlessly explicit.

By the time of Josephus the church has continued for six and a half centuries, having vanquished adversity after adversity, having withstood at this time, the time of Josephus, the greatest calamity since its beginning, too, the attempt of the mightiest empire to eradicate it. And Josephus not only affirms: our truly trustworthy books contain the record of all time. All other historians are liars: anyone can see that the historians invented themselves their histories; Ephorus exposes the lies of Hellanicus; Timaeus exposes the lies of Ephorus; later writers expose the lies of Timaeus; everyone exposes the lies of Herodotus; even Thucydides is accused of lies. Josephus, the priest, is quite clear also what the end is: it is natural for every Jew, from the day he is born, to look on our holy scriptures as the teachings of god, to abide by them, and gladly to die for them if need be.

And when the fathers of the church build the

next and very much more powerful church, they will be relentlessly explicit on all three counts. Our truly trustworthy books contain the record of all time. All other historians are liars. And everyone, from the day he is born, must look on our holy scriptures as the teachings of god, abide by them, and gladly die for them if need be.

The great importance of *Joshua, Judges, Samuel, Kings*, then, is threefold.

First, in the development of the law.

Deuteronomy is the book of the law. It is an advance in the development of the law. Its code is more elaborate than any earlier. It is far more comprehensive, it regulates many more relations, including warfare, including kingship, including prophecy, including priesthood. The law is of much greater unity. It protects god, god is the lawgiver, god gives the law directly to you. It has a center, his sanctuary. It has a priesthood, integrated into procedure. The punishments are sterner than ever, and there are also rewards, also greater than ever. The law does not seek abidance by the law, it instills obedience to the law. The power of the law is attested by the fact of its successful promulgation, it has achieved obedience, there is a population under the law. And the advance in the development of the law is a theoretical advance, an advance in the search for truth, irrespective of any and all of the practical ends of *Deuteronomy*, irrespective of the fact, too, that its deliberate ends are most explicitly practical exclusively, aiming at action, not truth.

Joshua, Judges, Samuel, Kings is not a further advance in the development of the law. If, however, obedience to the law was successfully instilled in a population, because in all the centuries since the Mosaic lawgiving, when the ancestors of that population obeyed the law, they were blessed above all other peoples, when they forgot the lord their god, he destroyed them, the importance of *Joshua, Judges, Samuel, Kings* in the successful promulgation of the law, in achieving obedience, in bringing a population under the law, and maintaining it under the law, can be judged greater even than that of *Deuteronomy*.

Second, in the development of history.

Joshua, Judges, Samuel, Kings is not an advance in history. But it is a very important step in the development of history.

The end is achieved when the law replaces the state. The foundation is that past steered by him.

In the Yahwistic document it is the past of a literary composition.

In the prophetic books it has begun acquiring its political coherence.

It is in *Deuteronomy* that the law becomes his means of steering the past. His promise, and his delivery on his promise, is integrated into the law. He has given you Heshbon and Bashan, hence he gives you the law, and hence he will give you the rest of the promised land.

Still, in all writings before *Joshua, Judges, Samuel, Kings*, even in *Deuteronomy*, the law replaces the state implicitly more than explicitly, prospectively more than retrospectively, it is his promise more than he has delivered on his promise, it is his plan more than he has carried out his plan. In *Joshua, Judges, Samuel, Kings* the law replaces the state explicitly, retrospectively, he has delivered on his promise, he has carried out his plan. The state is the law, and nothing but the law. When the law is obeyed, blessings, when the law is disobeyed, curses, and the state is nothing else. Such is the state of David. Such are the states of Israel and Judah. Such are all their relations with all other states. Egypt is but a means of his delivery on his promise. Assyria is but a rod of his anger. Babylon is but a rod of his anger. The 31 kings of the Hittites, Amorites, Canaanites, Perizzites, Hivites, and Jebusites are but a means of his delivery of his promise.

History is theoretical, part of the search for truth, and *Joshua, Judges, Samuel, Kings* is not an advance in this. But it is a very important step in the development of practice, the search for action. It is the first unconditional assimilation of even the inkling of truth into the search for action.

Third – the consequence of the success of the law and of that past steered by him – in the building of the first church.

The building of the first church is a very great practical success.

Like the building of the state, in general, the building of the first church, in particular, is also a theoretical advance, irrespective of any and all of the practical ends of the builders, irrespective of the fact, too, that their deliberate ends are most

explicitly practical exclusively.

And in the building of this new power contrary to our natural passions, keeping men in awe, reducing the wills of men unto one will, decisive are the labors first of *Deuteronomy*, then of *Joshua, Judges, Samuel, Kings*.

Achieved, again, not by smiting. By writing.

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And the writings continued to accumulate.

The Babylonian captivity lasted from 587, when Nebuchadnezzar razed Jerusalem and took its last inhabitants to Babylon, to 538, when Cyrus let the exiles return to Judah.

Joshua, Judges, Samuel, Kings is from this time. From this time are also *Proverbs* and *Lamentations*.

Solomon excelled all princes on earth in wisdom. Hence *Proverbs* collects his wisdom.

In the first one third of the book (1-9) wisdom in general is extolled. Clearly:

the lord bestows wisdom, he grants knowledge and understanding (2).

The more particular wisdom follows:

these are the proverbs of Solomon;

a wise son brings joy to his father, a foolish son is the bane of his mother;

ill-gotten wealth brings no profit, righteousness saves from death;

the lord does not let the righteous go hungry, but denies the wicked what he craves;

idle hands make the man poor, busy hands make him rich;

a thoughtful son gathers in summer, a slothful son sleeps at harvest;

blessings come to the righteous, the wicked chokes on his own misdeeds (10),

and so through the remaining two thirds of the book (10-29). Except that the massive collection of the wisdom of Solomon is supplemented by two brief collections of wisdom of Agur and Lemuel (30-1). Who Agur and Lemuel are remains a mystery.

His wrath at you had not spent itself. Hence more *Lamentations*:

our fathers sinned and are no more,

we must bear their guilt (5);

but you, oh lord, are enthroned forever;

why have you forsaken us so utterly?

take us back into yourself, oh lord,
build us again as in the days of old (*id.*).

The following two-odd centuries are the time of the great kings.

Their empire reaches from the southern slopes of the Caucasus to the southern shores of the Red Sea and from Barca in Libya to the valley of the upper Indus, 3 200 km along the meridian and 4 900 km along the parallel.

It is the state of some 25 million people, more than one fifth of humanity.

Peace and prosperity prevail, and the mixing of peoples.

They no longer fight each other at all. All are at peace. They fear the law. The strong do not fight or destroy the weak.

And *pax Persica* is very important for the entrenchment of the church. The writings continued to accumulate, and to become effectual. And to become effectual they were helped substantially by the prevailing peace and prosperity, in general, and by the great kings themselves, in particular.

In general, the congregation was not only not molested, it prospered. As *Haggai* reports: they dwelled in well-roofed houses (1). In particular, Cyrus ended the exile in 538. The temple was rebuilt under Darius, completed in 515. The great assembly was convoked under Artaxerxes, organized by his cupbearer, in 445/33.

The next prophetic books, *Haggai* and *Zechariah*, are from the time of the rebuilding of the temple. They rehearse the plan, the destruction, the salvation.

Haggai also – and in this is its importance – attests the rebuilding of the temple:

thus said the lord of hosts;

the people say, it is not yet time to rebuild the house of the lord;

but is it time for you to dwell in well-roofed houses, while the house of the lord lies in ruins (1)?

So they rebuild his house, the house of the lord of hosts.

There are no angels in *Haggai*. There are in *Zechariah* (*passim*).

The Priestly code is next, and the Priestly code is very important, it is the third of the most important holy writings.

The Priestly code is the conclusive redaction of the law. It is the conclusive redaction of the past steered by him. It is the conclusive integration of the two into one another, the past steered by him by the law. And it is the conclusive redaction of the foundational writings into the unity of the five books, the pentateuch, of the torah.

Beginning with Spinoza, the solution of the problem of how the Hebrew holy writings were authored was completed when Wellhausen identified the Priestly code and so named it: as it is entitled to be called by both its content and its origin.

Wellhausen writes:

Deuteronomy is essentially an independent book of laws;

when *Deuteronomy* is separated from the pentateuch, the most easily distinguished parts of what remains belong to the so-called fundamental text; it is distinguished by its predilection for numbers and formula, pedantic style, and phrases and expressions which occur nowhere else in the older Hebrew; strongly marked by its characteristics, it can be recognized with certainty; its base is *Leviticus* and allied parts in the adjoining books, and it contains chiefly legislation;

when this document is also separated, what remains is the Yahwistic book of history which, unlike the other two, is essentially narrative; its base is the story of the patriarchs, which belongs almost entirely to this document.

This is Wellhausen's analysis in 1878.

Conversely, it describes the synthesis achieved by the Priestly code twenty-three and a half centuries earlier. The Priestly code, distinguished by its predilection for numbers and formula, pedantic style, and phrases and expressions which occur nowhere else in the older Hebrew, composed *Leviticus* and allied parts in the adjoining books, containing chiefly legislation, integrated into this the Yahwistic book of history, which is essentially narrative and to which the story of the patriarchs belongs almost entirely, and appended to this *Deuteronomy*, which is essentially an independent book of laws.

This is how Wellhausen describes the success

of the holy writer:

unlike *Deuteronomy*, and unlike the Yahwist who does not pretend to be Mosaic law of any kind, the Priestly code tries hard to imitate the costume of the Mosaic period and to disguise its own; and it has been so successful in concealing the date of its composition that its many inconsistencies are taken to prove that this date lies beyond all known history and that its enormous antiquity can hardly be brought in connection with history.

The outcome of the synthesis is the torah. The pentateuch. *Genesis*, *Exodus*, *Leviticus*, *Numbers*, and *Deuteronomy*.

The Yahwistic document constitutes most of *Genesis*, some of *Exodus*, and some of *Numbers*. The Priestly code constitutes the rest of *Genesis*, most of *Exodus*, all of *Leviticus*, and most of *Numbers*.

These books as well are divided into chapters of more or less equal size. *Genesis* is in 50 chapters, *Exodus* in 40, *Leviticus* in 27, *Numbers* in 36, for a total of 153 chapters.

And the whole of the four books divides clearly into two parts. *Genesis*. And the other three books.

Genesis, in 50 chapters, relates the events from creation to the beginning of the sojourn in Egypt. The other three books, in 103 chapters, relate the events of the exodus. *Genesis* relates the events, on its own count, of two and a half millennia. The other three books relate the events, on their own count, of 40 years. In *Genesis* he steers the past by his repeated promise. In the other three books he steers the past by delivering on his promise. In *Genesis* he gives no laws. In the other three books he gives many laws, and many again, and many again, and many again. The bulk of *Genesis* is from the Yahwistic document. The bulk of the other three books is from the Priestly code.

Genesis itself divides clearly into three parts. Creation occurs in the first chapter. All events before the birth of Abraham, chief among them the flood, occur in the following 10 chapters. And in the remaining 39 chapters the tribulations of Abraham, Isaac, Jacob, and Joseph occur.

The bulk is from the Yahwistic document, essentially narrative, the story of the patriarchs.

The most substantial additions by the Priestly

code are three. Introducing all subsequent events with a more elaborate account of creation. Reinforcing his promise. And supplying all events with an overabundance of numbers.

Creation occurs for the first time in *When on high*, seven and a half centuries before the Yahwistic document, eleven before the Priestly code.

In the Yahwistic document he commands you: you shall have no other gods beside me. And clearly, that you shall not, creation by him has to be all by itself a powerful reason. Thus, in the Yahwistic document already, he takes over creation. In the second chapter of *Genesis*, the Yahwistic document begins: the lord god made earth and water; and he made man from the dust of the earth. That is that, however, creation is over in a couple of verses, and the Yahwistic document turns to the tribulations of Adam and Eve, and the serpent, in the garden of Eden.

Amos, the next holy writing, is more explicit: he made the stars, he makes day and night, he makes rain from the waters of the sea. He also destroys the cities.

The following holy writings take creation by him for granted, explicitly or implicitly, but do not elaborate on it further.

And then, in the Priestly code, creation by him is given its due prominence. *Deuteronomy* has asserted: the lord alone is god, there is no other beside him. And clearly, creation has to be by him alone, by no other beside him. Thus, in the first chapter of *Genesis*:

he makes light, sees that light is good, and separates light from darkness, the 1st day;

he makes heaven, the 2nd day;

he makes the earth and the sea, the 3rd day;

he fills the earth with plants, and makes the sun, the moon, and the stars, the 4th day;

he fills the sea and the heaven with living creatures, the 5th day;

he fills the earth with animals, and makes man in his own image, the 6th day;

he sees that all that he has made is very good (1), the first chapter ends, the second begins:

he rests, the 7th day (2),

and then the Priestly code lets the Yahwistic document continue with its briefer account of creation and the events that occur in the garden of Eden.

The Priestly code's is not, by itself, a better account of creation than that of *When on high*. It is shorter, less detailed, the lord god creates fewer things in particular than Marduk. Hesiod's, in the *Theogony*, some two centuries earlier, is a much better account of creation. By the time of the Priestly code, too, the philosophers have been laboring on the problem of the principles of all things and the problem of the earth, among others, for some four generations, investigating the world, describing it with increasing success.

Yet the Priestly code's account of creation will acquire unchallengeable authority not only in the first church. When the next church is built, it will acquire unchallengeable authority very generally. It will supersede all the labors of the philosophers, nearly one millennium of them by that time, investigating the world, describing it with increasing success, the success culminating in the description of the world in Ptolemy.

The Priestly code's account of creation is, by itself, not a better description of the world, not remotely. It is brief. It is vague. Yet it is of greater coherence and order than not just any earlier account of creation, it is of greater coherence and order than any attempt at description of the world, later not less than earlier. More important, creation is a part, and the beginning, of an uninterrupted series of events – creation – Adam and Eve, and the serpent – their progeny – the flood – and on and on – and, connected explicitly to the events in the other holy writings, through the fall of Judah. Nay, in this uninterrupted series of events, of which creation is a part, and the beginning, he is uninterruptedly present. Nay, he is not just present, he steers the events. Nay, he steers them with his promise and his deliverance on his promise. Nay, his deliverance on his promise culminates in the law which he gives directly to you. It is his plan that begins with creation. One century or so later, too, Plato will ask: and why did he make the world? and reply: because he was good, and this ultimate explanation of the philosopher's is – if not quite so explicitly – in the Priestly code already. All that he has made is very good.

Josephus writes: our truly trustworthy books contain the record of all time. And they do, beginning with creation, with the Priestly code.

The Priestly code also reinforces his promise.

The flood, for instance, occurs in the Yahwistic document much as it has earlier. In the Priestly code it becomes the occasion of his first promise.

The flood occurs for the first time in *The death of Gilgamesh*, twelve and a half centuries before the Yahwistic document, sixteen before the Priestly code.

Its occurrence in the Yahwistic document is not substantially different from its several earlier occurrences:

the lord sees how great the wickedness of men is, how every plan that he devises turns to evil, regrets making man on earth, and says, I will wipe them all out, the men I created, the beasts, and the birds, for I regret making them; but Noah found favor with the lord (6).

The Priestly code continues:

this is the line of Noah;

Noah was a righteous man; he was blameless;

Noah walked with god; Noah begot three sons, Shem, Ham, and Japheth (*id.*).

The Priestly code then repeats the reason for the flood, the wickedness of men, and the lord's decision to wipe them all out, except Noah. The lord then instructs Noah to build the ark:

300 cubits long, 50 cubits wide, 30 cubits deep (*id.*).

Some 150 m long, 25 m wide, 15 m deep, it was a big boat. And the lord tells Noah:

and I will make a covenant with you (*id.*).

In the following two chapters the flood rages, wipes out men, beasts, and birds, then abates, the ark comes safely aground on mt Ararat, and Noah builds an altar to the lord (7-8). This is from the Yahwistic document, with a few notes from the Priestly code here and there. Then the Priestly code continues:

and thus said the lord to Noah and his sons;

I now make my covenant with you and all your progeny to come;

my covenant is that I shall never again send a flood against all flesh, I shall never again destroy the earth;

and the rainbow in the clouds shall be the sign of my covenant; so that when I see it, I shall remember the covenant that I made with all flesh on earth (9).

His promise, now, steers the past beginning with the one man allowed to survive the flood. Noah was a righteous man, he was blameless, Noah walked with god.

And the Priestly code supplies all events with numbers.

Not quite all events. All events, however, which the lord is particularly concerned to steer, as he focuses steadily more unwaveringly on one narrow line of creation. The following are thus but a few of the numbers, only those tracing that line of creation:

Adam is 130 years old when he begets Seth;
Seth is 105 years old when he begets Enosh;
Enosh is 90 years old when he begets Kenan;
Kenan is 70 years old when he begets Mahalalel;
Mahalalel is 65 years old when he begets Jared;
Jared is 162 years old when he begets Enoch;
Enoch is 65 years old when he begets Methuse-

lah;
Methuselah is 187 years old when he begets Lamech;

Lamech is 182 years old when he begets Noah;
Noah is 500 years old when he begets Shem (5);
Shem is 100 years old when he begets Arpach-

shad;
Arpachshad is 35 years old when he begets Shelah;

Shelah is 30 years old when he begets Eber;
Eber is 34 years old when he begets Peleg;
Peleg is 30 years old when he begets Reu;
Reu is 32 years old when he begets Serug;
Serug is 30 years old when he begets Nahor;
Nahor is 29 years old when he begets Terah;
Terah is 70 years old when he begets Abram (11),
god promises Abram: I will make you a great
nation (12), renames him: Abraham (17), and:
Abraham is 100 years old when he begets Isaac
(*id.*);

Isaac is 60 years old when he begets Jacob (25),
god promises Isaac: I will make your heirs as
numerous as the stars (26), he promises Jacob:
kings will issue from your loins (35), renames
him: Israel (*id.*), and Jacob, or Israel, begets 12
sons, the progenitors of the 12 tribes of Israel,
Jacob, or Israel, loves Joseph best of his 12 sons,
because he is the child of his old age (37), his
brothers sell Joseph in slavery and he is taken to
Egypt (*id.*), Joseph prospers in Egypt, Jacob, or

Israel, and his other 11 sons go to Egypt as well
(46), so the sojourn in Egypt begins, the sojourn
continues 430 years (*Exodus*, 12) – and creation
is thus connected, number by number by number,
to the exodus, which continues 40 years, as
Deuteronomy has already established, and thence
connected to all the events and numbers of
Joshua, *Judges*, *Samuel*, *Kings*.

The Priestly code does not report how old
precisely Jacob, or Israel, is when he begets
Joseph. This is the single lapse in the precision
with which the chronology of that line of cre-
ation, which the lord is particularly concerned to
steer, is established. It is a very minor lapse,
however. Jacob, or Israel, lives 147 years, the last
17 in Egypt (*Genesis*, 47), Joseph is the child of
his old age, his twelfth son (37), Joseph is 17
years old when his brothers sell him in slavery
(*id.*), he is also 30 years old when he enters the
service of pharaoh (41), 7 years of plenty follow,
then 7 years of famine, and it is during these 7
years of famine that Jacob, or Israel, and his other
11 sons go to Egypt (43-6). The lapse is readily
fixed.

In another line of creation, that of the philoso-
phers, a couple of generations before the Priestly
code, Pythagoras has said that number is the
principle of all things. In this line of creation the
principle of all things is different. The Priestly
code has nevertheless brought the power of
number to bear on our truly trustworthy record of
all time. Beginning with the 1st day, and through
– the calculations of the philosophers will show,
and keep showing – the time of the calculations
of the philosophers.

Early on, when the letter of our truly trustwor-
thy record of all time was not yet unalterably
fixed, there were variant readings of the numbers
in the manuscripts. Ben Halafta's calculations,
for instance, attest slightly different numbers. The
Hebrew holy writings were translated into Greek,
the septuagint, some two-odd centuries after the
Priestly code, when their letter was still not
unalterably fixed, and this introduced further
variant readings of the numbers in our truly
trustworthy record of all time, and hence in the
calculations of the philosophers. – One way or
another, the numbers of the Priestly code contin-
ued to fix the age of the world until Buffon, in

1775.

Genesis is a collaboration of the Priestly code and the Yahwistic document, even if achieved by the Priestly code all by itself. And so are the other three books, *Exodus*, *Leviticus*, and *Numbers*.

In *Genesis* the share of the Yahwistic document is larger. The book is dominated by his promise. The events of his repeated promise are thus all-important, and all events in the book are from the Yahwistic document. From the Priestly code is the honing of their significance.

In the other three books, *Exodus*, *Leviticus*, and *Numbers*, the share of the Yahwistic document is smaller. These books are dominated by his deliverance on his promise. The main event of the deliverance, the exodus, and all the auxiliary events constituting the main event, are thus important, but they are not all-important. If you obey the law, you will be blessed above all other peoples. If you obey the law. Accordingly, as soon as he begins delivering on his promise, he begins giving you the law, and he never stops giving you the law as he continues delivering on his promise. All-important in these books is legislation. Thus, the Yahwistic document again contributes the events. And to the all-important task of legislation it is allowed to contribute the oldest code. Nevertheless, the all-important task of legislation the Priestly code has accomplished very substantially all by itself.

The whole of the three books, *Exodus*, *Leviticus*, and *Numbers*, in 103 chapters, divides clearly into two parts. The beginning of *Exodus*, its first 18 chapters, in which the exodus is prepared and begins, and even the strangers, the not Israelites, acknowledge: the lord is greater than all gods (18). And the rest of the three books, 85 chapters, in which, as the exodus haltingly proceeds, he never stops giving you: the laws and commandments of the lord your god (*id.*).

Exodus begins with a number:
the total number of Jacob's issue in Egypt was 70 (1).

Time passes, Jacob's issue multiplies and increases very greatly (*id.*). Then Moses is born: the son of a man of the house of Levi and a Levite woman (2).

Moses grows up. Then god remembers his promise:

the Israelites were groaning in bondage and crying out;

and god remembered his covenant with Abraham, Isaac, and Jacob (*id.*).

Moses is tending the flock of his father-in-law, and:

god called out to him from the bush, Moses!
Moses!

Moses answered, here I am;

and god said, I have come down to rescue my people in Egypt, and to bring them out to that good and spacious land, flowing with milk and honey, the country of the Canaanites, Hittites, Amorites, Perizzites, Hivites, and Jebusites (3).

That good and spacious land, flowing with milk and honey, the country of the Canaanites, Hittites, Amorites, Perizzites, Hivites, and Jebusites.

The rescue begins majestically. He inflicts 10 plagues on Egypt, first the Nile turns to blood, then the country is infested with frogs, then with some other indeterminate vermin, then with flies, then with pestilence, then with boils on man and beast, then with hail, then with locusts, then darkness engulfs the country, then every firstborn of the Egyptians dies (7-11). Then the exodus begins:

600 000 men, apart from the children, departed from Egypt;

the Israelites remained in Egypt 430 years; and at the end of the 430th year, to the day, all the people of the lord departed from Egypt (12).

This later number, 600 000, is men only. The earlier number, Jacob's issue, 70, is men and women. But all these 70 are enumerated (*Genesis*, 46), and the men are 52. So the increase of 52 into 600 000 over a little more than 14 generations, counting 1 generation 30 years, yields an average of a little more than 1.9 sons each who has a little more than 1.9 sons each. Postulating as many daughters as sons – even if in the first generation the sons are nearly three times more than the daughters – the average has to be a little more than 3.8 sons or daughters each who has a little more than 3.8 sons or daughters each.

The exodus begins, and as soon as the exodus begins legislation begins:

this was a night of vigil for the lord; this is the night of the lord; and it is a night of vigil for

all children of Israel throughout the ages;
 thus said the lord;
 this is the law of the passover offering (12).
 The exodus begins, as soon as the exodus begins
 legislation begins, and legislation begins with a
 law of offering. With ceremony. The law of the
 passover offering requires more than one chapter.
 Among its provisions:
 no stranger shall eat of it;
 a slave may eat of it once circumcised;
 no hired laborer shall eat of it;
 it shall be eaten in one house;
 all Israel shall offer it (12);
 seven days you shall eat unleavened bread, the
 seventh day shall be a celebration of the lord;
 you shall tell your son, this is because of what the
 lord did for me when I went free from Egypt;
 this shall be a sign for you, so that the law of the
 lord always be in your mouth;
 you shall set apart for the lord every firstborn of
 your cattle and your sheep; and you shall
 redeem every firstborn of your children (13).
 The exodus then continues as majestically as
 it has begun, including now also smiting. An
 angel of the lord leads the Israelites, the sea parts
 before them, the lord hurls the pursuing Egyptians
 into the sea, bread rains from heaven (14-6).
 The Israelites reach Horeb. In *Deuteronomy*,
 Moses, when he resolves to establish the law, in
 Moab, tells the Israelites that the lord has given
 them the law earlier, at Horeb. Now the deeds of
 the lord have shown that he alone is god, there is
 no other, even Jethro, Moses's father-in-law, a
 stranger, not an Israelite, acknowledges: I see
 now that the lord is greater than all gods (18), the
 Israelites have reached Horeb, and the lord does
 now, in *Exodus*, as *Deuteronomy* has said the lord
 has done, gives the Israelites the law.
 The second part of the whole of *Exodus*,
Leviticus, and *Numbers*, the legislative, begins
 with the exhortation:
 if you faithfully obey me and my covenant, you
 shall be my cherished possession among all
 peoples;
 all the earth is mine; but you shall be the king-
 dom of priests and holy people (19).
 You shall be my cherished possession among
 all peoples. This is not new, this begins with
Deuteronomy.

You shall be the kingdom of priests and holy
 people. This is new, this begins with the Priestly
 code.

Smoke issues from mt Sinai, the whole moun-
 tain trembles, the blare of a horn grows louder
 and louder (*id.*).

The next 4 chapters are the code of the Yah-
 wistic document, the ten commandments, and
 then the laws regulating murder, theft, adultery,
 buying a slave, selling a daughter, losing an eye,
 knocking out a tooth, an ox goring someone to
 death, an ox who is a known gorer, lending an
 ass, seducing a virgin, lying with a beast, molest-
 ing the widow and the orphan (20-3).

The code is written down in stone (24).

And in the rest of *Exodus*, 16 chapters, his
 tabernacle and his priesthood are set up (25-40).

His tabernacle is: my sanctuary, so that I dwell
 among you (25). It is set up lavishly: gold, silver,
 and copper, blue, purple, and crimson yarns, fine
 linen, goats' hair and rams' skins, acacia wood,
 oil and spices, lapis lazuli and other stones (*id.*).

Setting up his tabernacle and his priesthood is
 very much part of the law: exactly as I show you,
 so you shall do (*id.*).

They are set up in two steps. Exactly as I show
 you, so you shall do. So, first, in 6 chapters, he
 shows them (25-30). Second, in the last 6 chap-
 ters of *Exodus*, they begin doing as he has shown
 them (35-40).

In the 4 chapters in between the first of the
 many incidents of disobedience occurs, in partic-
 ular, the Israelites build the golden calf (32). The
 incident occasions, when the lord is mollified, the
 repetition of the ten commandments (34).

His instructions on how to set up his dwelling
 and his priesthood themselves divide into the
 appropriate two parts. First, in 3 chapters, he
 shows them how to set up his dwelling (25-7).
 Second, also in 3 chapters, he shows them how to
 set up his priesthood, what the vestments of his
 priests shall be (28), how his priests shall be
 consecrated (29), how they shall perform his
 rituals (30).

The execution of his instructions divides into
 the same two parts, setting up his dwelling and
 setting up his priesthood, but it requires in both
 cases more attention than his instructions. First,
 where the construction of his dwelling is con-

cerned, they need 4 chapters to do exactly as he has shown them (35-8). They do so, count themselves, and record the number:

603 550 men above the age of twenty (38).

Then, second, where the establishment of his priesthood is concerned, they begin doing exactly as he has shown them in the last two chapters of *Exodus*, beginning with the vestments of his priests and with offerings (39-40), but have to continue doing so through not less than 22 of the following 27 chapters of *Leviticus*.

Leviticus thus continues with the law of offerings, burnt offerings (1), plant offerings (2), animal offerings (3), guilt offerings (4-7), all these ceremonies administered by his priests (*passim*). The law of consecration of his priests follows (8-10). The law of purification follows, clean and unclean animals (11), purification after childbirth (12), purification from leprosy (13-14), purification after intercourse (15), then the law of atonement follows (16), all these ceremonies as well administered by his priests (*passim*).

In the following 4 chapters he reverts to greater generality, he reminds them:

I am the lord your god; you shall not do as they do in Egypt or in the land of Canaan to which I am taking you; my rules alone you shall follow, my laws alone; I am the lord your god (18);

you shall be holy, for I, the lord your god, am holy (19),

he revisits the ten commandments and some of the laws in the code of the Yahwistic document (20), and then returns to his priests.

So more laws of offerings and celebrations follow, and more (21-5), all these ceremonies as well administered by his priests (*passim*). The sustained legislation, which has begun when Horeb – or mt Sinai, as Horeb has become mt Sinai in the course of the writing – has been reached, is now coming to a close, and a chapter of exhortations follows, if you obey the law, a list of blessings, if you do not obey the law, a longer list of curses (26). And finally, *Deuteronomy* has the law: if it is hard for you to bring your tithe, you can exchange it for silver, and bring over the silver. So *Leviticus* concludes with:

this scale for vows to the lord;

a male twenty to sixty years old 50 shekels of

silver, a female of that age 30 shekels;

a male five to twenty years old 20 shekels, a female 10 shekels;

one month to five years old, a male 5 shekels, a female 3 shekels (27),

and so for land, for plants, for animals:

man or beast or land, it shall be presented to the priest, and the priest shall assess it (*id.*).

And the book ends:

these are the commandments which the lord gave to Moses to give to the Israelites on mt Sinai (*id.*).

Setting up the tabernacle is very much part of the law. Unity of worship is established, in his one and only one sanctuary. One and only one sanctuary is established in the middle of the wilderness, in the middle of the exodus, long before he has delivered that good and spacious land, flowing with milk and honey.

Unity of worship is established, in his one and only one sanctuary, under his priesthood. His sanctuary is very much part of the law, and his priesthood is very much part of the law, and by far the most important part of the law.

To assign a number to its importance, following the example of either Pythagoras or the Priestly code itself, the attention of how many chapters it demands can be counted. The code of the Yahwistic document, the ten commandments and the rest of its laws, demands 4 chapters. His sanctuary and his priesthood, with their vestments, consecration, rituals, offerings, and celebrations, demand 12 chapters in *Exodus* and 22 of the 27 chapters of *Leviticus*, for a total of 34. On this count, his sanctuary and his priesthood are not less than eight times more important than the code of the Yahwistic document. Separating his sanctuary, his priesthood alone, with their vestments, consecration, rituals, offerings, and celebrations, demands 27 of those 34 chapters. On this count, his priesthood alone is more than six times more important than the code of the Yahwistic document.

You shall be the kingdom of priests and holy people.

Numbers begin with a census (1-4). The Israelites are counted, tribe by tribe, and: the total number of the troops was 603 550; the number of the Levites was not recorded (2).

It is recorded a little later:

the number of all male Levites older than one month was 22 000 (3).

The ratio of male Levites older than one month to troops is better than 1 to 30. The Levites are the priests. In the kingdom of priests and holy people, the ratio of priests to people – priests, other males, and females – cannot be worse than 1 to 200.

After the sustained legislation of the previous two books, the exodus is at long last ready to continue, and in this book events and legislation merge into one another. Thus, as the tabernacle is readied for transportation, more laws of offerings, rituals, and purification follow, and more (5-9). Then, at long last, two silver trumpets are made to summon the people and set them in motion, and with long and short blasts the people are summoned and set in motion (10). The exodus continues, and the incidents of disobedience continue. There are more laws (15), and more laws (18-9). The Israelites approach that good and spacious land, flowing with milk and honey. In *Deuteronomy*, Moses, when he resolves to establish the law, in Moab, tells the Israelites, also, that they have just conquered Heshbon and Bashan. So now, in *Numbers*, the conquest of Heshbon and Bashan occurs (21). The Israelites continue, the incidents of disobedience continue. There is another census:

the total number of the Israelites bearing arms was 601 730;

the total number of all male Levites older than one month was 23 000 (26).

The ratio holds. There are more laws (28-30). There is another conquest, still on the other side of the Jordan, Midian, the country south of Moab, is conquered:

the Israelites slew every man;

the booty came to 675 000 sheep, 72 000 cattle, 61 000 asses, 32 000 virgins;

as the lord had commanded Moses, one half was given to the priest Eleazar;

one half of the other half was given to the Levites (31).

Eleazar, the son of Aaron, the brother of Moses, a Levite himself, is the high priest (20). The entire course of the exodus from Egypt is reviewed (33). The boundaries of that good and

spacious land, flowing with milk and honey, are prospectively drawn (34), the boundaries borrowed from *Joshua*, *Judges*, *Samuel*, *Kings*. There are more laws (35). And then this book also ends:

these are the commandments and rules which the lord gave to Moses to give to the Israelites, in Moab, at the Jordan, near Jericho (36).

And to the whole of the four books now, *Genesis*, *Exodus*, *Leviticus*, and *Numbers*, the older book of the law is appended. To complete the torah, the law. To become also, in the pentateuch now, the book of the *Second law*.

The great importance of the Priestly code is, like that of *Joshua*, *Judges*, *Samuel*, *Kings*, threefold.

First, in the relation of the past.

With the Priestly code our truly trustworthy record of all time is complete. He now steers the past beginning with the 1st day and, number by number by number, through the beginning of *Joshua*, *Judges*, *Samuel*, *Kings*.

In *Joshua*, *Judges*, *Samuel*, *Kings* what happened serves why it happened so steadfastly, not only what happened, whether it happened has become substantially irrelevant. In the Priestly code what happened is not substantially irrelevant, it is altogether irrelevant. Never mind whether it happened.

Ben Halafta calculates: 2 448 years from creation to the exodus; 890 years from the exodus to the destruction of the first temple.

It is from the Priestly code's numbers that ben Halafta calculates.

The first temple was destroyed in 587.

The Priestly code is from the century before 445/33.

Such as the Priestly code undertook to write it, had what happened been relevant, it would have happened between thirty-four centuries before the time of writing and nine and a half centuries before the time of writing. Ben Halafta's reckoning, too, is one of the lowest among all the reckonings. On the reckoning of other philosophers, from the Priestly code's numbers, too, had what happened been relevant, it would have happened one and a half millennia earlier, between forty-nine centuries before the time of writing and twenty-four and a half centuries before the time

of writing.

If *Joshua, Judges, Samuel, Kings* is the first unconditional assimilation of even the inkling of truth into the search for action, the Priestly code is the annihilation of that inkling.

The Priestly code is not a description of the past. But it is an explanation.

It is setting up before you the evidence of all the centuries beginning now with the beginning of the world that he alone is god, this is the law. So that you will obey the law, rather than disobey it, because in all the centuries since the beginning of the world now, when you obeyed the law, you were blessed above all other peoples, when you forgot the lord your god, he destroyed you.

Second, in the development of the law.

The Priestly code is the third step in the development of the law of the Hebrew writings.

First, the code of the Yahwistic document is not an advance in the development of the law. It is simpler than earlier codes. There is no procedure. There is not much discrimination. New is that the law protects god, that god himself is the lawgiver, and that god gives the law directly to you. The punishments are sterner, and there are for the first time also rewards for following the law. New is also that the law explicitly seeks obedience.

This code is never promulgated.

Next, some two centuries later, *Deuteronomy* is an advance in the development of the law. Its code is more elaborate than any earlier. It is more comprehensive, regulating more relations, including warfare, kingship, prophecy, priesthood. The law is of greater unity. It protects god, god is the lawgiver, god gives the law directly to you. The law now also has a center, his sanctuary. The law now also has a priesthood, integrated into procedure. The punishments are also sterner than ever and the rewards greater than ever. The law also most explicitly seeks obedience.

The law is now also successfully promulgated. There is now a population under the law.

And next, some one and a half centuries later, the Priestly code is not a further advance in the development of the law. It does not enhance the unity of the law, rather the contrary with all the detail upon detail regulated. It does not enhance the discrimination of the law either, again rather

the contrary with all the detail upon detail regulated. It does not concern itself with procedure. It does exhort to obedience as vigorously as *Deuteronomy*. But its punishments and rewards are not greater. Most important, it is not more comprehensive. It does regulate in minute detail and more minute detail. But it regulates fewer relations than *Deuteronomy*, and relations already regulated in *Deuteronomy*. It regulates his sanctuary. And it regulates his priesthood. Most of all, fundamentally, essentially, substantially, it regulates ceremony – centered on his sanctuary, administered by his priesthood – vestments, consecration, rituals, offerings, celebrations, more offerings, more celebrations, more offerings, more celebrations.

The Priestly code is not an advance in the development of the law. It is yet a very important step in the development in the law.

Deuteronomy has given the law a center, his sanctuary. In the Priestly code the authority of this center of the law, his sanctuary, is enhanced vastly.

Deuteronomy has begun giving the law an administration, his priesthood. In the Priestly code the authority of this administration, his priesthood, is enhanced very vastly, and the law is brought unconditionally under this administration.

The means of all three – enhancing the authority of the center of the law, enhancing the authority of its administration, and bringing the law under this administration – is ceremony.

The code of the Yahwistic document has some 50 laws. The code of *Deuteronomy* has some 200. The laws of the Priestly code are not less than twice as many. If all the laws in the torah are, as the amoraim counted them, 613, close to two thirds of all the laws in the torah are from the Priestly code.

And all in all, between the three codes, after their integration by the Priestly code into the torah, into the law, much more than two thirds of the law is ceremony. And not only quantitatively, there is now in the law more ceremony than there is anything else. Qualitatively, the Priestly code has made the law first and foremost, fundamentally, essentially, substantially, ceremony. The law is sanctuary, priesthood, vestments, consecra-

tion, rituals, offerings, celebrations, more offerings, more celebrations, more offerings, more celebrations, more offerings, more celebrations.

Spinoza writes: the end of ceremonies was that men do nothing by their own decisions, act in all things by the mandate of others, and continually acknowledge with all their actions and thoughts that they are not under their own right, but under the right of others.

That the end was achieved, the fact that Spinoza writes this does not attest. But the fact that the book in which he writes it, twenty-one centuries after the Priestly code, was burned, attests.

Deuteronomy was promulgated. There was now a population under the law.

But if obedience to the law was successfully instilled in that population through the integration of the law into the past steered by him – if that population began obeying the law, because in all the centuries since the Mosaic lawgiving, when the ancestors of that population obeyed the law, they were blessed above all other peoples, when they forgot the lord their god, he destroyed them – the importance of *Joshua*, *Judges*, *Samuel*, *Kings* in achieving obedience, bringing that population under the law, and maintaining it under the law, is greater than that of *Deuteronomy*. And in this, instilling obedience through the integration of the law into the past steered by him, the importance of the Priestly code is great as well. The ancestors of that population began being punished with Adam and Eve, and the serpent, and being rewarded, if not with Abel, positively with Noah.

And if ceremony gave obedience permanence, the importance of the Priestly code in maintaining that population under the law is decisive.

Exactly as I show you, so you shall do.

The laws are 613, 365 prohibitions, because this is the number of days in the year, and 248 injunctions, because this is the number of parts in the body. And clearly, exactly as I show you, so you shall do, in all the 365 days in the year with all the 248 parts in the body.

Sanctuary, vestments, consecration, rituals, offerings, celebrations, more offerings, more celebrations, more offerings, more celebrations, all administered by the priests.

Third – and again the consequence of the

success of that past steered by him and of the law – in the firm establishment of the church.

The law has already replaced the state.

With the Priestly code the law is brought under a priesthood.

Hence, exactly as I show you, so you shall do, and so you still do.

The kingdom of priests and holy people.

And in the building of this power contrary to our natural passions, keeping men in awe, reducing the wills of men unto one will, decisive are the labors first of *Deuteronomy*, then of *Joshua*, *Judges*, *Samuel*, *Kings*, then of the Priestly code.

Again, achieved not by smiting. Achieved by writing.

dxix

The temple was completed in 515.

Ezra convoked the great assembly in 445/33.

The Priestly code is from the couple of generations in between. And in the great assembly Ezra completed the building of the church, grounding it now in the law, the torah, as it has been completed by the Priestly code.

In the meantime, though, the writings continued to accumulate. From that time are *Job*, *Song of songs*, *Malachi*, and *Obadiah*. Only *Job* of these four is important, and not very important. It is yet very important that the writings continued to accumulate.

Malachi and *Obadiah* are prophetic books, both brief, *Malachi* rehearses your transgressions, *Obadiah* rehearses the cursing of the nations. *Song of songs* is, like *Proverbs*, by Solomon. It begins:

the song of songs, by Solomon;

give me the kisses of your mouth,

for more delightful than wine is your love (1).

In *Job*:

Job was blameless and upright, he feared god, he shunned evil, and he was blessed with 7 sons and 3 daughters, 7 000 sheep, 3 000 camels, 500 yokes of oxen, and 500 asses (1).

But then god lets satan take it all away. This raises in *Job* many questions:

why was I ever born?

why does he give life to the sufferer (3)?

what strength do I have to endure?

how long do I have to be patient (6)?

what have I done to you, oh watchers of men?
 why have you made me your target (7)?
 why do you give the earth to the wicked (9)?
 why do you hide your face and treat me like an
 enemy (13)?
 man languishes and dies, and where are you (14)?
 why do the wicked prosper?
 why do they live to see the children of their
 children?
 their bulls to breed?
 their cows never to miscarry?
 why do they revel to the tune of the pipe (21)?
 And then:
 the lord replied to Job out of the tempest;
 where were you when I laid the foundations of
 the earth?
 who shut up the sea behind doors?
 have you ever commanded the day to break?
 have you penetrated to the bottom of the sea?
 can you order the clouds to send rain (38)?
 can you make the behemoth whom I made as I
 made you?
 can you pull the leviathan by a fishhook (40)?
 The book ends with the lord's less enigmatic
 reply:
 and the lord blessed Job more than before; he had
 14 000 sheep, 6 000 camels, 1 000 yokes of
 oxen, 1 000 asses, and 7 sons and 3 daughters
 (42).

Twice more, other than the sons and daughters.

The great assembly is attested by *Chronicles*, *Ezra*, *Nehemiah*.

And this event, the great assembly, is, like all those earlier events, the exodus, the conquest of the promised land, David's prowess, Solomon's wisdom, not attested independently.

And this witness, *Chronicles*, *Ezra*, *Nehemiah*, is, like all those earlier witnesses, *Deuteronomy*, *Joshua*, *Judges*, *Samuel*, *Kings*, the Priestly code, not irreproachable. This witness collects from the earlier witnesses the genealogies leading from Adam to David, then revisits all that befell the Israelites from David to the destruction of Judah, adding what has befallen them since, and in particular the great assembly. And what this witness witnesses is ceremony. In the genealogies he witnesses the Levites. In what befell the Israelites since David he witnesses the uninterrupted proper worship of the lord in his temple, in

his one and only one sanctuary, under his priests, under the Levites, from its institution by David through the building of the temple by Solomon through the princes of Judah through the destruction of Judah through the great assembly. What happened not only steadfastly serves why it happened. What happened serves why it happened such as the Priestly code has established it. It happened because the lord either was or was not properly worship in his one and only one sanctuary under his priesthood.

Moreover, on the authority of this witness Artaxerxes, before he reigns after Darius (*Ezra*, 7), reigns before Darius (4).

Moreover, the main event of the great assembly and all the auxiliary events leading to that main event and constituting that main event, even if not steered either directly by god or by angels, are in many ways not less implausible than those earlier events.

And yet, there are the consequences of the great assembly.

The first church is real. The reality of the foundation of the first church has to be inferred. The church stands on the torah. The torah has become effectual. The reality of the establishment of the first church on the torah has to be inferred. The Priestly code completed the torah. The reality of the establishment of the first church on the torah after the Priestly code and before *Chronicles*, *Ezra*, *Nehemiah* has to be inferred.

From the consequences of the great assembly – poorly attested as it is, implausible as it is – the reality of this main event, the great assembly, has to be inferred. Even if the reality of all the auxiliary events leading to that main event and constituting it need not be inferred.

These, then, are the main event and some of the auxiliary events leading to it and constituting it.

To begin with, the genealogy of Ezra is immaculate:

Ezra was the son of Seraiah, the son of Azariah, the son of Hilkiah, the son of Shallum, the son of Zadok, the son of Ahitub, the son of Amariah, the son of Azariah, the son of Meraioth, the son of Zerahiah, the son of Uzzi, the son of Bukki, the son of Abishua, the son of Phinehas, the son of Eleazar, the son of Aaron, the

high priest (*Ezra*, 7).

Himself:

Ezra was a scribe expert in the law of Moses which the lord god gave to Israel;

Ezra had applied himself to the study of the law of the lord in order to follow the law of the lord and to teach Israel the laws and the rules;

Ezra was a priest and scribe expert in the commandments of the lord and his laws (*id.*).

Clearly, Ezra is ready to teach Israel the laws and the rules. Next, Israel is prepared to be taught the laws and the rules, in two steps. First, the great king himself commissions Ezra:

king Artaxerxes gave Ezra, the scribe steeped in the commandments and laws of the lord, this letter;

Artaxerxes, the king of kings, to Ezra, the priest, expert in the law of god in heaven;

the king commissions you, Ezra, to regulate Judah and Jerusalem according to the law of your god;

you, Ezra, by the divine wisdom which you possess, teach those, who do not know them, the laws of your god;

anyone who does not obey the laws of your god shall be punished immediately by death, banishment, confiscation of property, or imprisonment (*id.*).

Second, Ezra is coming from Babylon, and he is not coming alone. The list of those who accompany Ezra is attached, with many names and many numbers (8). The total of the numbers alone is, men and priests:

1 754 (*id.*).

Clearly, Israel as well is now prepared to be taught the laws and the rules. Ezra is armed with a letter from the great king, his troops are not less than 1 754.

Ezra arrives in Jerusalem, and goes to the house of the lord. He is told:

the people of Israel and the priests and Levites have not separated themselves from the peoples of the land; they do what is abhorrent to the lord; they do as the Canaanites, Hittites, Perizzites, Jebusites, Ammonites, Moabites, Egyptians, and Amorites do; they have taken their daughters in marriage for themselves and for their sons; the holy seed is polluted (9).

When he hears this, Ezra rents his clothes and

tears out his hair, he prostrates himself before the lord and prays:

oh lord, we have forsaken the commandments which you gave us when you said;

you shall not give your daughters to their sons in marriage, you shall not let their daughters marry your sons; and you shall do nothing for their well-being or advantage (*id.*).

While Ezra prays, weeps, and prostrates himself before the house of the lord, a large crowd gathers around him, men, women, and children:

and the people were bitterly crying;

let us make a covenant with the lord to expel the foreign wives and the children born to them;

let us obey the law;

so Ezra swore at once the priests and Levites (10).

A proclamation is issued summoning all exiles who have returned to Judah and Jerusalem. To those who do not present themselves within three days, the property will be confiscated and they will be expelled from the congregation. All the exiles present themselves. Then:

Ezra the priest and the chiefs of the tribes secluded themselves to examine them (*id.*).

They examine them. The list is attached of only the priests who are found to have foreign wives and children born to them. Then, those of priests or otherwise:

all foreign wives and the children born to them were expelled (*id.*).

The pollution is removed, and all is now ready for the great assembly.

The above events occur in *Ezra*, the following in *Nehemiah*:

on the 1st day of the 7th month the entire people gathered as one man before the water gate; Ezra the scribe was called to bring out the book of the law of Moses with which the lord charged Israel;

Ezra brought out the book of the law before the congregation, men, women, and all;

and he read to them from the law, the men and the women, so that they understand;

all the people heard the book of the law;

Ezra stood on a wooden tower, and he opened the book for all the people to see, for he was above them;

as he opened the book, they all stood up; and they

prostrated themselves before the lord with their faces to the ground;
 the Levites explained the law to the people; they read to them the book of the law of god, explaining it to them, so that they understand (8). 7 days of reading follow, and a celebration on the 8th. And:
 on the 24th day the Israelites assembled, fasting, in sackcloth, with earth on their heads;
 they confessed the sins of their fathers;
 they prostrated themselves before the lord (9);
 and they swore and pledged in writing to follow the law of god given by him to Moses, the servant of god, and given by Moses to them, and to observe faithfully all the commandments of the lord our god, his rules and his laws (10).

In particular, 24 priests, 17 Levites, and 44 elders pledge themselves in writing. Their list is attached (*id.*).

Chronicles, Ezra, Nehemiah is as fond of numbers as the Priestly code.

Hence the great assembly is dated, precisely to the day and the month, if not as precisely to the year. The day and the month are witnessed: the 24th day of the 7th month. The year is not witnessed. The great assembly occurred, however, under Nehemiah. In *Nehemiah*, Nehemiah reports:

god resolved me to assemble the elders and the people (7),

he reports earlier:

I was the cupbearer of king Artaxerxes (1),
 and:

I was governor of Judah from the 20th to the 32nd year of king Artaxerxes (5).

And presuming that king Artaxerxes is Artaxerxes, prince 465-24, and not Artaxerxes II, prince 404-358, the great assembly occurred between 445 and 433.

In *Chronicles, Ezra, Nehemiah*, also, the congregation is numbered, twice.

God resolves Nehemiah to assemble the elders and the people:

in order to record them by their families;

and I found a register of all the people who returned to Jerusalem and Judah from among those whom Nebuchadnezzar, king of Babylon, had taken in exile (7).

The register is then attached (*id.*). This is in *Nehemiah*, right before the great assembly, right before the 1st day of the 7th month when the entire people gathers as one man. And the same register, name by name, number by number, is attached to the beginning of *Ezra*. *Ezra* begins with the end of the exile in the 1st year of Cyrus (1), and then the register is attached (2).

On both occasions, name by name, number by number:

this is the entire congregation of the people (*id.*).

So this is the entire congregation of the people in the 1st year of Cyrus, 538. One century before the great assembly in the 20th to 32nd year of Artaxerxes, 445/33.

Nevertheless, on the ground that the second occurrence of the register is right before the great assembly when:

the entire people gathered as one man,
 and:

Ezra read to them, and all the people heard the book of the law;

and Ezra stood on a wooden tower for all the people to see the book,

it can be presumed that in 445/33 the entire congregation of the people was not larger.

This is the total of the register:

the entire congregation of the people numbered 42 360, not counting their slaves, male and female, which were 7 337; they also had 245 singers, male and female, 736 horses, 245 mules, 435 camels, and 6 720 asses (*id.*).

42 360, not counting their slaves, singers, horses, mules, camels, and asses. Counting their slaves, singers, horses, mules, camels, and asses, 57 888.

Either way, the number is in one way very small, but in another way very large.

At the time of the great assembly, the state of the great kings, including deep within itself the congregation, was the state of some 25 million people. By this time the state of the great kings had been mixing these people for one century. And when the congregation excluded itself from the mixing, in the great assembly, the entire congregation of the people numbered less than one four hundredth of the people in the state of the great kings. In this way the number is very small.

Also at the time of the great assembly, Sparta,

in the west, was the state of 8 000 men. By this time Sparta had dominated the states of the Greek cities for more than one century, had stopped, with Athens, the great kings, and was to vanquish Athens, too. And the Spartans did not number more than the entire congregation of the people numbered. In this way the number is very large.

And the congregation has continued long after the state of the great kings has been vanquished, and the state of Sparta has been vanquished, and in this way the first church has itself vanquished the state of the great kings, and the state of Sparta, among many other states to come, and go.

Ezra, then, is the final step in the development of the law of the Hebrew writings. Ezra enforced the law.

Ezra enforced the law as it has been completed by the Priestly code. And the building of the first church is thus complete.

The kingdom of priests and holy people.

Of the 29 writings collected in the Hebrew scriptures 23 predate the great assembly, 6 post-date it.

Of the 6 which postdate it, 4 are from the couple of generations after it, 2 are much later. In particular, there are those 4 writings in the couple of generations after the great assembly, then there is a hiatus of more than one century, then there is 1 more writing, then there is another hiatus of more than one century, then there is 1 more writing, the last.

Indicating that a couple of generations after the great assembly it is clear that the end of the writings is achieved. Having begun four and a half centuries earlier, and continued vigorously for four and a half centuries, the writings stop.

Of the 4 writings from the couple of generations after the great assembly, 1 is very important, *Chronicles*, *Ezra*, *Nehemiah*. The other 3, *Joel*, *Esther*, and *Jonah*, are not important.

Joel and *Jonah* are prophetic books. The peculiarity of *Joel*, if it is a peculiarity, is that the destruction is by locusts (1-2). The peculiarity of *Jonah* is definitely a peculiarity, the prophet is swallowed by a big fish (2), and the lord has to command the fish to spew him out (*id.*), before he can continue his prophetic labors.

In *Esther*, the Jewish maiden Esther: shapely and beautiful (2), becomes the wife of Xerxes,

and his favorite (*id.*), an official of the king plots the slaughter of all Jews (3), Esther thwarts the villain (4-8), and the Jews slaughter 75 000 of their foes (9). Needless to add, this demands a celebration: which shall never cease among the Jews (*id.*).

Chronicles, *Ezra*, *Nehemiah* rehearses the genealogies from Adam to David and the events from David to the fall of Judah, honing their significance, and adds the events through the great assembly, connecting these later events to the earlier.

But two instances, here. *Ezra* begins:

in the 1st year of king Cyrus of Persia the word of the lord spoken by Jeremiah was fulfilled, and the lord roused the spirit of king Cyrus to issue a proclamation throughout his domain; thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building him a house in Jerusalem, which is in Judah (1).

Ezra, *Ezra* reports, was the descendent of Aaron in the 17th generation. The exodus was – with ben Halaftha – 890 years before the destruction of the first temple. The great assembly was 142 to 154 years after the destruction of the first temple. The total is 1 032 to 1 044 years from the exodus to the great assembly. Which yields an average of about 65 for the age at which those ancestors of *Ezra* each begot the next.

Chronicles, *Ezra*, *Nehemiah* is very important because it attests *Ezra* and the great assembly.

And with *Ezra* and the great assembly the building of the first church is complete.

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Counting from *Ezra* back to the Yahwistic document, it takes four centuries to build the church.

And first of all, the church is built by writing. And this is extraordinary.

Counting from the Yahwistic document back to Enmebaragesi, in the valley of the two rivers, and back to Narmer, in the valley of the Nile, for twenty-two centuries many states are built, small states, great states, and greater states, and all are built by smiting. In the four centuries from the Yahwistic document to *Ezra*, too, many states are built, new states further east and further west, old

states are rebuilt, the greatest state is built, and a yet greater state is built itself the greatest now, and all are built by smiting.

Two and a half millennia of building by smiting, then the church is built by writing.

And the power of the writing – of this writing – can be explained.

To begin with, there is the quantity of the writing.

This is not extraordinary, but it is not ordinary either.

All the writings collected in the Hebrew scriptures are 29. Ignoring the last 2, composed later, the writings are 27. 11 of the 27 are sizeable writings, the Yahwistic document, *Isaiah*, *Psalms*, *Jeremiah*, *Deuteronomy*, *Ezekiel*, *Joshua*, *Judges*, *Samuel*, *Kings*, *Proverbs*, the Priestly code, *Job*, and *Chronicles*, *Ezra*, *Nehemiah*. All the writings are divided into chapters, and the total for the chapters of the 27 writings is 904.

The whole of the 27 writings is distinguished clearly by language, by the place of its production, and most important, by the time of its production. Assigning years of birth, here as everywhere for the sake of uniformity as well as perspicuity, the whole of the 27 writings is produced, beginning to end, in the not quite four and a half centuries from

860 Yahwistic document
to

429 *Chronicles*, *Ezra*, *Nehemiah*.

And through this time, writing of comparable or greater quantity – distinguished in each case clearly by language, the place of its production, and most important, the time of its production – is produced on but five other occasions. One, the Sumerian writing produced under Ur. Counting beginning to beginning, from the Yahwistic document back to the rise of Ur with Ur-Nammu, this begins thirteen centuries earlier, and counting from Ur-Nammu to Ibbi-Sin, continues for some one century. Two, the Babylonian, or middle Akkadian, writing produced under the great Babylon. Counting back to Hammurabi, this begins nine and a half centuries earlier, and counting from Hammurabi to Ammisaduqa, continues for not quite two centuries. Three, the Egyptian writing produced under the new kingdom. Counting back to Ahmose, this begins

seven and a half centuries earlier, and counting from Ahmose to Ramesses III, continues for not quite four centuries. Four, the Assyrian, or late Akkadian, writing produced under Assyria. Counting back to Adad-nirari, this begins four and a half centuries earlier, counting from Adad-nirari to Tukulti-Ninurta, flourishes for one century, then declines, counting under Tiglath-pileser, flourishes again for one generation, then declines again, counting from Adad-nirari II to Shalmaneser III, flourishes again for not quite one century – this is the century before the Yahwistic document – then declines again, and counting from Tiglath-pileser III to Ashurbanipal, flourishes again for one century – this is the second century of the Hebrew writing – and then stops. Five, the Greek writing as it begins explosively with Homer one century after the Yahwistic document, and continues in the following centuries.

Writing of comparable or greater quantity is produced under the great state of Ur, then under the great state of Babylon, then under the great state of the new kingdom, then under the great state of Assyria. And then, not under a great state now, and in this way like the Hebrew, and beginning at much the same time, that beginning with Homer.

The quantity is not extraordinary, but it is not ordinary either.

Then there is the accumulation of the writing. And this is extraordinary.

Those 27 Hebrew writings continue to accumulate for nearly four and a half centuries. Much longer than Ur. Much longer than Babylon. Longer than the new kingdom. Longer than the rise of Assyria.

Moreover, assigning years of birth, and counting centuries from the year assigned to the Yahwistic document, this is the distribution of the 27 writings,

860-759	5,
760-659	5,
660-559	6,
560-459	8,
460-359	3.

The accumulation is steady and, through the great assembly, rather steadily steadier.

The Hebrew writing is the first – some two and

a half millennia after the beginning of writing – which continues to accumulate steadily for nearly four and a half centuries. States come, and go, the Hebrew writing continues to accumulate. And it is a long time, nearly four and a half centuries. It is not longer than the old kingdom, but it is much longer than Akkad, much longer than Ur, much longer than the middle kingdom, much longer than the great Babylon, longer than the new kingdom, much longer than any of the four times when Assyria rises. When the Greek writing, too, continues to accumulate for nearly four and a half centuries, before the end of that time it will have produced both Plato and Aristotle.

The accumulation is extraordinary.

And then there is the quality of the writing, and this is very extraordinary, and then there is the accumulation of the quality of the writing, and this is the most extraordinary.

Beginning with the Yahwistic document, you shall have no other gods beside me, and in one and all the following 26 writings, you shall have no other gods beside me, and beginning with *Deuteronomy*, the lord alone is god, there is no other, and in one and all the following 17 writings, the lord alone is god, there is no other. Beginning with the Yahwistic document, I will make you a great nation, and in one and all the following 26 writings he reasserts his promise. Beginning with *Amos*, the second writing, his injunction and his promise are unified into destruction first, then salvation, with *Isaiah*, the fourth writing, this becomes his plan, and this is his plan in one and all the following 23 writings, and among the prophetic writings alone *Isaiah* is massive, *Jeremiah* is massive, *Ezekiel* is massive, and all the prophetic writings are 15. The law is in the center of the Yahwistic document, you shall have no other gods, is the first commandment, in *Deuteronomy*, the lord alone is god, this is the law, and in one and all the earlier 9 writings implicitly, in one and all the later 17 writings explicitly, the lord alone is god, this is the law. In *Amos* the cause of the fall of Judah is your wickedness, and in one and all the following 25 writings, in the earlier implicitly, beginning with *Deuteronomy* most explicitly, if you obey the law, you are blessed, if you do not obey the law, you are cursed, and the list of blessings keeps

becoming longer, the list of curses much longer. And again beginning with the Yahwistic document, his injunction, his promise, and his law are integrated into a past steered by him, and in one and all the following 19 less important writings this past steered by him is taken for granted, and in one and all the following 7 most important writings – *Amos*, *Hosea*, *Isaiah*, *Deuteronomy*, *Joshua*, *Judges*, *Samuel*, *Kings*, the Priestly code, and *Chronicles*, *Ezra*, *Nehemiah* – this past steered by him is related in more detail, and more, and more, its significance honed, and more, and more.

The end is most explicitly political in one and all the 27 writings, beginning to end, from I will make you a great nation, in the Yahwistic document, through the assembly of the entire congregation of the people as one man, in *Chronicles*, *Ezra*, *Nehemiah*.

The relentless unity of purpose of the writings is very extraordinary. And the most extraordinary is the continuous honing of that relentless unity of purpose and to perfection.

From the Yahwistic document through *Chronicles*, *Ezra*, *Nehemiah*, the writings have been relentless in their unity of purpose, honing it to perfection, for nearly four and a half centuries. Counting 1 generation 30 years, for more than 14 generations.

By comparison, for instance, the United States is not yet 9 generations old.

It can be concluded that it would have taken a miracle greater than any of those related in the writings to prevent the writings from becoming effectual.

Gibbon writes: in contradiction to every known principle of the human mind, that singular people seems to have yielded a stronger and more ready assent to the traditions of their remote ancestors than to the evidence of their own senses (*History*, 15). By the time of the great assembly, the traditions of their ancestors had continued – counting back not to Adam, not to Noah, not to Abraham, not to Moses, not to David – counting back to the Yahwistic document – the traditions of their ancestors had continued for 14 generations.

When and how the writings become effectual, the writings themselves indicate clearly. They

become effectual in three steps.

First, under Hezekiah.

Hezekiah is the prince of Judah 726-697.

By this time, the state of Judah has been ruined by the Assyrian princes.

But by this time, also, the first 5 writings have accumulated, the Yahwistic document, *Amos*, *Hosea*, *Isaiah*, and *Micah*.

Hezekiah abolished the shrines, smashed the pillars, and cut down the sacred posts. He clung to the lord. He kept the commandments of the lord given by him to Moses.

The writings, culminating in *Isaiah*, have told Hezekiah what to do, he has done it, and this is the beginning of Judaism.

This is the first attempt to implement the writings. The first attempt to achieve their political end, to establish the state on the commandments of the lord.

This first attempt to implement the writings is to implement them in the state. The state is ruined, but not yet destroyed. It is an attempt to restore the state. To establish it on the commandments of the lord, and thus, according to his promise, reverse its fortunes.

And this first attempt is not successful. The prince keeps the commandments of the lord. But the people do not yet keep the commandments of the lord. The successors of Hezekiah also revert to doing what is displeasing to the lord.

Next, under Josiah.

Josiah is the prince of Judah 640-09.

By this time now, the state of Judah has continued to be ruined, after the Assyrian princes by the Egyptian and the Babylonian princes.

But by this time now, also, the writings have continued to accumulate and are now 10, now also *Psalms*, *Nahum*, *Jeremiah*, *Zephaniah*, and *Deuteronomy*.

Josiah defiled and demolished the shrines, tore down the altars and scattered the rubble, slew the priests and burned human bones on them. So he fulfilled the law recorded in the book of the law.

And he called the men of Judah and of Jerusalem, all the priests and all the prophets, all the people, young and old, he read the entire book to them, and he made a covenant before the lord that they will obey the lord and will keep his law.

This second attempt to implement the writings

is also to implement them in the state. The state is still not altogether destroyed. It is also an attempt to restore the state. To establish it on the commandments of the lord, and thus reverse its fortunes.

And this second attempt is successful. The political end of the writings is now achieved. Now not only the prince keeps the commandments of the lord. Now the people also keep the commandments of the lord. All the priests and all the prophets, all the people, young and old.

He read the entire book to them, and he made a covenant before the lord that they will obey the lord and will keep his law.

The writings, culminating now in *Deuteronomy*, have told them what to do, they have done it, and Judaism is now successfully established.

Finally, under Ezra.

Ezra is a priest, not a prince.

The great assembly is in 445/33.

By this time now, the state of Judah has been destroyed, Jerusalem and the temple razed, the people taken in exile, then the exile has ended, exiles have returned to Jerusalem, the second temple has been built.

But by this time now, also, the writings have continued to accumulate and are now 23, now also *Habakkuk*, *Ezekiel*, *Ruth*, *Joshua*, *Judges*, *Samuel*, *Kings*, *Proverbs*, *Lamentations*, *Haggai*, *Zechariah*, the Priestly code, *Job*, *Song of songs*, *Malachi*, and *Obadiah*.

Ezra was a priestly expert in the commandments of the lord.

He was accompanied by not fewer than 1 754.

In Jerusalem he found that the people of Israel and the priests and Levites had not separated themselves from the peoples of the land. They had taken their daughters in marriage. The holy seed was polluted. But he found also that a large crowd gathered around him, men, women, and children. And the people were bitterly crying. Let us make a covenant with the lord to expel the foreign wives and the children born to them. Let us obey the law.

Not only Ezra has continued to keep the commandments of the lord. And not only also the 1 754 who accompanied him have continued to keep the commandments of the lord. The people in Jerusalem – the people, the priests, Levites,

men, women, and children – the people in Jerusalem also, at least in part, have continued to keep, at least in part, the commandments of the lord.

The state is destroyed in 587. The great assembly is in 445/33. The state is destroyed, but one and a half centuries after its destruction, the population of the state, which under Josiah has made a covenant before the lord to obey the lord and keep his law, has continued, without the state, to obey the lord and keep his law. The population of the state has become the congregation, without a state now, of a church.

Ezra brought out the book of the law before the congregation, men, women, and all. He read to them from the law. All the people heard the book of the law. And they swore and pledged in writing to follow the law of god given by him to Moses and given by Moses to them, and to observe faithfully all the commandments of the lord, his rules and his laws.

The writings, culminating now in the Priestly code, have told them what to do, they have done it, and Judaism is established unshakably.

And it is unshakably.

Under Ezra the church is reestablished much like a state. The congregation not only has its center, the temple, and administration, the priesthood. It has its domain, Jerusalem and the surrounding country of Judah, even if this domain is tiny and it is a part of the domain of another state.

But at length the second temple will also be razed, the administration will be dispersed, Jerusalem and Judah will be depopulated, the congregation itself dispersed. Undaunted, the congregation will continue to be a congregation. To follow the law of god given by him to Moses and given by Moses to the congregation.

Judaism, the first church, is a major development in religion, a major development in the law, and a major development in custom.

In religion Judaism is the most important development. Not only has Judaism itself continued for twenty-four and a half centuries now, counting back to the Priestly code and Ezra, twenty-six and a half centuries now, counting back to *Deuteronomy* and Josiah. Judaism has given rise to Christianity and to Islam, both, and Christianity has continued for twenty centuries now, counting back to st Paul, and Islam has

continued for fourteen centuries now, counting back to Muhammad.

Judaism is the most important development in religion, and so much so, Judaism shows paradigmatically what religion is, and hence, what is religion, what is not religion.

You shall have no other gods beside me. Destruction first, then salvation. It is his plan. The lord alone is god, and you keep the law, this is the law. And the cause of ruin is your wickedness. And if you obey the law, you are blessed, if you do not obey the law, you are cursed. And the list of blessings is long, and the list of curses is longer. And the past is steered by him. And first and foremost, exactly as I show you, so you shall do.

Before or after, if it is none of this, it is not religion. If it is some of this, it is religion. If it is all of this, it is Judaism, or Christianity, or Islam.

In the law Judaism is an advance, if not a great advance. The advance is the code of *Deuteronomy*. It is more elaborate than any earlier code, it is more comprehensive, regulating more relations, including warfare, kingship, prophecy, priesthood, it is more unitary. But this is not the major development in the law which Judaism is.

The major development in the law which Judaism is is the assimilation of the law into religion. The assimilation begins with the Yahwistic document, continues with *Deuteronomy*, and is complete with the Priestly code. The law protects god. God is the lawgiver. God gives the law directly to you. The center of the law is his sanctuary. The law is administered by his priesthood. Procedure is integrated into his priesthood. The punishments are sterner than ever, there are rewards, and the rewards are great, if not as great as the punishments are stern. And the law most explicitly seeks obedience. Exactly as I show you, so you shall do.

And Christianity will assimilate the law into religion, and Islam will assimilate the law into religion.

And in the transformation of custom as well Judaism is a major development.

The great state of Akkad had mixed one twelfth of humanity for one and a half centuries. The great state of Ur had mixed one twelfth of humanity for one century. The great state of

Babylon had mixed one eleventh of humanity for two centuries. The great state of Assyria had mixed one tenth of humanity for one century. The great state of the great kings mixed one fifth of humanity for two centuries. Haltingly, and yet again, and again, and again, by mixing the peoples under themselves, the great states had been generalizing the practice of the virtues which must be practiced from the men of the tribe to the men of a larger tribe, and larger, and all the way to humanity.

The first church explicitly and unconditionally separated its congregation from the rest of humanity, and legislated the exclusion, both, of the practices of the rest of humanity from its own practices and of its own practices from the practices of the rest of humanity.

And these cannot be virtues which must be practiced.

Unlike Judaism, Christianity will proselytize, and Islam will proselytize, between the two of them they will conquer much of the earth, one quarter of humanity each, and they will be most successful in mixing all tribes into its own quarter of humanity each. Like Judaism, however, they will each explicitly and unconditionally separate its congregation from the rest of humanity, and legislate the exclusion, both, of the practices of the rest of humanity from its own practices and of its own practices from the practices of the rest of humanity.

And these cannot be virtues which must be practiced.

Finally, where the acquisition of knowledge is concerned, Judaism is not an advance, mostly the contrary. Mostly, but not entirely.

Judaism is not an advance in the description of the surface of the earth. The holy writers did not concern themselves with the surface of the earth beyond the promised land, concerned themselves with the promised land only to divide it, and divided it, always prospectively, with the minimum of recourse to orientation and no recourse to distances.

Judaism is not an advance in history either. But it is a very important development in history.

The church was built on that past steered by him. That past relentlessly related in more detail, and more, and more, its significance honed to

perfection.

And how completely the holy writers succeeded in annihilating the remotest inkling of truth, is attested by the holy writer who rounded off the relation of that past, *Chronicles, Ezra, Nehemiah*. The earlier writers relate more distant portions of that past. This writer – who writes, not incidentally, some time after Herodotus, and Thucydides – relates a nearby portion of that past, this writer appreciates the importance of official documents, and this writer abounds in official documents. A proclamation of Cyrus. A proclamation of Darius. A proclamation of Artaxerxes. Another proclamation of Artaxerxes. – Thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building him a house in Jerusalem, which is in Judah. – Artaxerxes, the king of kings, to Ezra, the priest, expert in the law of god in heaven, you, Ezra, by the divine wisdom which you possess, teach those, who do not know them, the laws of your god.

Our truly trustworthy record of all time. All other historians are liars.

Thus Josephus. At the time of Josephus, the production of the truly trustworthy record of that past steered by him had abated. That judgment of Josephus was confined to his church. But at the very time of Josephus the fathers of the church, of the next church, were resuming the production of the truly trustworthy record of that past steered by him, and accelerating the production, including most particularly of truly trustworthy official documents. That judgment of Josephus became orthodoxy, and ubiquitous.

That past steered by him remained history exclusively until Spinoza.

Judaism is mostly not an advance in the acquisition of knowledge, it is mostly the contrary. But not entirely.

Like the building of the state, in general, the building of the first church, in particular, is a theoretical advance. Irrespective of any and all of the practical ends of the builders, irrespective of the fact that their deliberate ends are most explicitly practical exclusively, too, the building of the first church is a step of advance in the acquisition of knowledge.

Like Plato, soon after them, the holy writers

built a state in speech. Unlike Plato, and before him, they also implemented it.

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The task is to collect the development of the state, and of history, and more particularly in the three-odd centuries from Ashurbanipal to Alexander.

The particulars indicate 22 states, including the first church.

7 have been collected. Assyria. Babylon. Media. Egypt. Lydia. Persia. Judaism.

15 remain. Corinth. Megara. Sicyon. Miletus. Mytilene. Samos. Sparta. Athens. Thebes. Macedonia. Catana. Acragas. Syracuse. Carthage. Rome.

These are, to begin with, the continuing attempts to build the state among the Greek cities. Several of them will be spectacularly successful attempts.

And here is, first, a review of the earlier development of these attempts, as they begin in the century before the three-odd centuries at issue.

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In that century the Assyrian princes build the greatest state.

They conquer the entire valley of the two rivers. They expand in the east, beyond the Zagros. They expand in the southwest, they conquer Egypt, and after twenty-three and a half centuries of independent development of the state in the valley of the Nile and in the valley of the two rivers, unify the two valleys. They expand in the northwest, in eastern Asia Minor.

The development of the state reaches further west. Phrygia, in central Asia Minor, is an abortive attempt to build the state. But Lydia, in western Asia Minor, is a successful attempt, it becomes a powerful state.

And the development of the state crosses the Aegean, and begins in Greece.

It is a country substantially different from the countries in which the state has begun and developed until that time.

The Aegean is a small sea of many islands, on both sides the coast is long and indented, divided into small peninsulas, and the country on the far side is rugged, divided into small valleys, with a

long and indented coast on its far side as well, divided into small peninsulas, bordered by many islands.

So the state begins in this country as several small states. Several small states appear in quick succession. And the state begins, here as everywhere, with smiting.

As the country is defined substantially by the sea, by its coastline, peninsulas, and islands, so its human population is defined substantially by the sea. The human population has spread across the sea, and straddles the sea.

So this population takes vigorously to the sea.

The state becomes seagoing in Tyre, in Phoenicia, on the Mediterranean coast of the valley of the two rivers, some two centuries before the development of the state reaches Greece. In the century before the development of the state reaches Greece, Tyre and other Phoenician cities begin sending out colonies. A wave of colonization begins. When the wave reaches the Aegean, the Greeks learn colonization by sea from the Phoenicians, the Greek cities begin sending out colonies, and the wave accelerates greatly. The entire Mediterranean and Black Sea littoral is colonized, from the strait of Gibraltar to the eastern shores of the Black Sea, 4 100 km across.

This entire littoral becomes a country of small cities. There are several hundred of them. And they are connected with one another both strongly and tenuously. They are connected strongly by their recent descent from one another. But the connection is also tenuous, separated as they are from one another by vast distances across the sea.

So the state begins in this country as several small states. Among the older cities, then also among the newer cities. Among the older cities it begins with smiting. The newer cities will join the smiting. But the first attempt of the state to begin among these newer cities is with a law-giver, not with smiting.

The Greeks learn from the Phoenicians colonization by sea, as well as the alphabet.

It is a particularly propitious time to learn the alphabet. The century when the Assyrian princes build the state at its greatest is the century also of enlightenment at its brightest.

Writing is at its most massive. The Assyrian princes are great writers, their inscriptions are

more numerous than the inscriptions of any of their predecessors, by far. The Assyrian princes are a great advance in the acquisition of knowledge. They are a decisive advance in the description of the surface of the earth. They are a decisive advance in history. They are a decisive advance in the observation of the heavenly bodies. The Assyrian princes collect the first library, not less than 1 000 distinct compositions.

In that century the Hebrew writings accumulate through *Deuteronomy*.

And in that century Greek writing begins, with Homer and Hesiod.

Homer and Hesiod are very extraordinary.

Greek writing does not begin gradually, it explodes.

It does not follow the development of the state among the Greek cities, it precedes it.

Homer and Hesiod create for the Greeks their theogony. And the gods are, here as everywhere, the greatest. But the gods are also, here, secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom.

Homer and Hesiod are also a great advance in the acquisition of knowledge.

So Homer and Hesiod are a fundamental cause of the beginning and development of philosophy.

And so Homer and Hesiod – before the beginning and development of philosophy, but much in the same way in which they are a fundamental cause of the beginning and development of philosophy – Homer and Hesiod have affected substantially the beginning and development of the state.

When the development of the state reaches the Greek cities, then, and begins among them, the state begins in a different country, a country defined substantially by the sea, it begins among a different population, a population defined substantially by the sea, spread along an extended littoral, in a great number of small cities, whose connections with one another are both strong and tenuous, it begins after an explosion of writing – after the sweetest singer, and the stupid oaf to whom the muses tell the truth – it begins as the gods are secondary to poetry, secondary to a warrior and a voyager, and secondary in wisdom, and it begins amidst a great advance in the acquisition of knowledge.

The first attempts to build the state among the Greek cities are Sparta, Argos, Corinth, among the older cities, in Greece, and Locri, among the newer cities, in Italy.

Sparta. Theopompus, after incessantly fighting for nineteen years, wins Messenia, good for ploughing, good for planting. He establishes the ephorate.

Argos. Pheidon defeats the Spartans. He establishes the weights and measures of the Peloponnesians.

Corinth. Cypselus attacks the city, captures it, and rules it for 30 years in good fortune. He is a leader of the people.

Locri. Zaleucus writes the laws of the city.

So the state begins, here as everywhere, with smiting.

Theopompus wins Messenia. Pheidon defeats the Spartans. Cypselus captures Corinth.

And so the state also begins, here, differently.

Theopompus establishes a council. Pheidon establishes weights and measures. Cypselus is a leader of the people. Zaleucus writes laws.

And Argos and Locri are abortive attempts to build the state. They are thus not among the states in the three-odd centuries at issue.

But Corinth and Sparta are successful attempts. And they are among the states in these centuries.

dxiii

Corinth.

After Cypselus, tyrant c. 658-28, the particulars are 2,

Periander tyrant c. 628-588,

Psammetichus tyrant c. 588-5.

Corinth is on the isthmus connecting the Peloponnese to the mainland.

Thucydides writes: Corinth, on the isthmus, has since time immemorial been a center of trade; both those who lived in the Peloponnese and those who lived outside had to pass through Corinth, so the Corinthians grew rich and powerful; and when the Greeks took to the sea, the Corinthians built a fleet and controlled the routes on both land and sea (I, 13).

Thus, Cypselus captured Corinth, ruled the city for 30 years in good fortune, and was succeeded by his son Periander.

Aristotle writes: Cypselus was a leader of the people, Periander was a warrior (*Politics*, V, 12).

And Corinth rose under Periander.

He built the harbor of Corinth.

In the west, in the Ionian Sea, he controlled Corcyra.

In the south, in the Peloponnese, he captured Epidaurus.

In the east, in the Aegean, he arbitrated between Athens and Mytilene.

Further east, across the Aegean, he advised the tyrant of Miletus Thrasybulus.

Still further east, in Asia Minor, he maintained relations with the Lydian prince Alyattes.

And yet further east, in the valley of the Nile, he maintained relations with the Egyptian prince Psamtik. Periander's nephew and successor was named after the Egyptian prince.

Corinth, under Periander, is the first Greek city to rise. Periander's is the first attempt to built the state into the dominant power among the Greek cities.

Periander was succeeded by his nephew Psammetichus, Psammetichus was assassinated, and this was the end of the tyranny of the Cypselidae. Discussing tyranny in the *Politics*, Aristotle counts: having continued for seventy-three and a half years, the tyranny of the Cypselidae is the second longest (*id.*).

That was the end also of the preeminence of Corinth. Corinth never rose again after Periander.

In the generation after him the rise of Sparta and Athens began – the rise of Sparta under Anaxandridas, prince c. 560-20, and Ariston, prince c. 550-15, the rise of Athens under Pisistratus, tyrant 560-27 – and thereafter Corinth was dominated by Sparta and Athens.

In the Persian war the Corinthians fought – 40 Corinthian ships at Salamis (Herodotus, VIII, 43), 5 000 Corinthians at Plataea (IX, 28) – with the Athenians and the Spartans against the Persians, led by the Athenians and the Spartans.

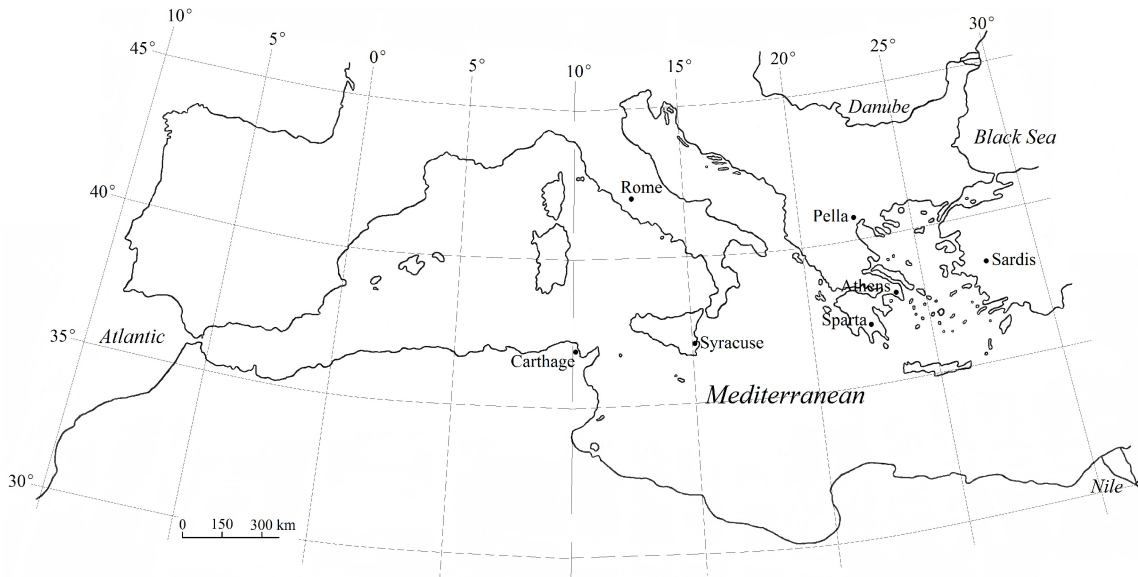
In the Peloponnesian war they fought with the Spartans against the Athenians. They precipitated the greatest war. They quarreled with Corcyra, a colony of theirs, over Epidamnus, a colony jointly of theirs and of Corcyra, Corcyra appealed to Athens for help, they appealed to Sparta for help (Thucydides, I, 24-88), and then Sparta and Athens fought the war for twenty-seven years.

In the Corinthian war – so named from the battles fought in the country around Corinth – the Corinthians fought with the Persians and the Athenians against the Spartans.

Then Thebes brought the hegemony of Sparta to an end. Then Philip conquered all Greece.

The rise of the state among the Greek cities begins with Corinth, and this brief first rise of the state already indicates four new developments.

When the Greeks took to the sea, the Corinthians built a fleet and controlled the routes on both land and sea. The attempt is at dominion on the



Lambert conic conformal projection.

sea, the Ionian in the west and the Aegean in the east. It is an attempt also at dominion by arbitration, advice, and alliances. Periander was a warrior. But he also arbitrated, advised, maintained relations with the powerful kingdoms in the east.

Corinth was a tyranny. At the time of Cypselus and Periander, tyranny was just monarchy, the rule of one. Many cities were tyrannies, other than Corinth, Megara, Sicyon, Miletus, Mytilene at that time, Athens under Pisistratus just after that time. But Cypselus was also a leader of the people. As Pisistratus in Athens was as well. And before Pisistratus already Athens had become a democracy *par excellence* with Solon's laws. Plato, later on, made tyrant a term of abuse – his life 729 times less happy than the life of the philosopher. Both, that the tyrant will be a leader of the people, a democrat, and that the bad monarch, a tyrant, will be distinguished from the good, a king, indicate that experimentation with the forms of government – the rule of one, or of several, or of all, and which is good, which is bad – is beginning.

Periander was a tyrant. He was also a wise man. He is contemporary with Solon, and with Thales, and he is, with them both, one of the seven wise men. This is one instance of his wisdom: the tyrant of Miletus Thrasybulus sent a messenger to Periander to ask him how to rule his city; Periander took the messenger to a corn field and, as they walked, struck down each ear growing taller than the rest; the messenger did not, but Thrasybulus understood the message (Herodotus, V, 92). Plato, later on, as he made tyrant a term of abuse, so he removed Periander from the list of the seven wise men (Laertius, I, 41). And that Plato did so, not because Periander was deficient in wisdom, but because his wisdom was bad, the *Republic* attests. The *Republic* begins with the call to arms: are we, Socrates asks, to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias, who said that justice is to give everyone his due, and fight against Periander, Perdiccas, Xerxes, and Ismenias, who said that justice is to do good to your friends and harm to your foes (I, 335e-6a)? We are. And the ten-book fight for the good wisdom against the bad follows.

The state turns to the sea, as well as to arbitration, advice, and alliances. Experimentation with the forms of government begins. Bad or good, the statesman is a wise man.

And the state is attested not just better than ever. Cypselus and Periander are prominent in the father of history, and hence in all his successors. Beginning with Corinth – with the first rise of the state among the Greek cities – the record of the state and its development is not just abundant, it is overabundant. The difficulty is never scarcity of evidence, the difficulty is always surfeit of evidence.

Megara.

The particular is 1,

Theagenes tyrant c. 632.

Megara is also on the isthmus, 30 km east of Corinth. 30 km further east is Athens.

Theagenes captured Salamis, just off the coast of both Megara and Athens.

He lent troops to his son-in-law to set himself up tyrant in Athens. The attempt failed.

In the generation after Theagenes, Corinth, under Periander, rose.

In the next generation, Athens, under Solon, took Salamis from Megara.

And thereafter Athens dominated Megara.

In the Persian war the Megarians fought – 20 Megarian ships at Salamis (Herodotus, VIII, 45), 3 000 Megarians at Plataea (IX, 28) – with the Athenians and the Spartans against the Persians, led by the Athenians and the Spartans.

In the Peloponnesian war they joined the Spartans against the Athenians. Too close to Athens, their city was ruined.

Thereafter Megara is altogether unimportant.

Theagenes is early, at a time when all cities are very small, and any of all these very small cities may rise. So through the time of Theagenes the record attests 1 important particular in Sparta, 1 in Argos, 1 in Corinth, 1 in Megara, 1 in Athens. But then the record attests a succession of 2 important particulars in Corinth. And then it attests a succession of many important particulars in Sparta and in Athens each.

Sicyon.

The important particular is 1, listing also his predecessors,

Orthagenes tyrant c. 665,

Andreas	tyrant c. 645,
Myron	tyrant c. 625,
Aristonymus	tyrant c. 605,
Cleisthenes	tyrant c. 585.

Sicyon is in the Peloponnese, 20 km northwest of Corinth. 40 km to the south is Argos, 60 km further south Sparta.

Aristotle counts: having continued for one hundred years, the tyranny of the Orthagenidae is the longest (*Politics*, V, 12).

But Sicyon remained very small until Cleisthenes.

Of him as well Aristotle writes: Cleisthenes was a warrior (*id.*).

Cleisthenes fought Argos in the south.

In the north, he won the first sacred war. In this war the city of Crisa was destroyed, after which the nearby sanctuary of Apollo at Delphi became the most prominent shrine of all Greeks.

Here are three more of the feats of Cleisthenes. – He won the four-horse chariot race at the Olympic games. – To find the best man for his daughter, he made a proclamation throughout Greece that whoever wanted to be his son-in-law should come to Sicyon, thirteen suitors came, and for one year Cleisthenes entertained them, watching their valor, temper, education, and character. And he found the best man for his daughter. His grandson is the Athenian Cleisthenes, next to Solon the greatest Athenian lawgiver. – And when he made war on Argos, Cleisthenes banned the contests of the rhapsodes in Sicyon, because they sang the verses of Homer, and the verses of Homer celebrated Argos. – Cleisthenes was never counted one of the seven wise men. Yet, that he was a wise man, these feats of his attest, if not all three, then the second and the third, if not the second and the third both, then positively the third.

In the generation after Cleisthenes the rise of Sparta and Athens began, and Sicyon reverted to being very small. Sparta dominated Sicyon.

In the Persian war the Sicyonians fought – 15 Sicyonian ships at Salamis (Herodotus, VIII, 43), 3 000 Sicyonians at Plataea (IX, 28) – with the Athenians and the Spartans against the Persians, led by the Athenians and the Spartans.

In the Peloponnesian war they supported the Spartans.

Thereafter Sicyon is altogether unimportant until Aratus. Two-odd generations after Alexander, Aratus became the leader of Sicyon, in 251, in the following decades he brought the northern Peloponnese in the Achaean confederacy under his leadership, and the Achaean confederacy under the leadership of Aratus became, briefly, important, if not very important.

Corinth, Megara, and Sicyon are on the mainland. They were too close to Sparta and Athens.

Miletus, Mytilene, and Samos are in the east, Miletus in Asia Minor, Mytilene and Samos on the islands in the Aegean. They were too close to Lydia and the great kings.

Miletus.

The particulars are 3,

Thrasybulus	tyrant c. 610,

– – –

Histiaeus	tyrant after c. 515,
Aristagoras	leader after c. 505.

Miletus, the city of the first philosophers, is on the coast of Asia Minor.

Alyattes, prince c. 615-560, made western Asia Minor the domain of Lydia.

Thrasybulus sent a messenger to Periander to ask him how to rule his city, and understood Periander's reply.

Thrasybulus also, when Alyattes made war on Miletus, resisted him for eleven years.

Thereafter Miletus was dominated by the Lydian princes, and then by the great kings.

Histiaeus was an official of Darius. He accompanied the king on his expedition in Thrace and Scythia, and his loyalty saved the king from disaster. In Miletus he left in charge Aristagoras.

And in 499 Aristagoras led a revolt of the Ionian cities. In 497 he was killed. In 494 the cities were defeated, and Miletus was razed, its inhabitants enslaved.

The Ionian revolt is among the causes of the Persian war. After the revolt Darius asked all Greek cities to acknowledge his supremacy, Sparta and Athens did not, and Darius began preparing an expedition against them.

After the Persian war Miletus was restored, Athens gained control of the cities on the coast of Asia Minor, and brought them, including Miletus, into an alliance under itself.

Thus, in the Peloponnesian war the Milesians

fought first with the Athenians against the Spartans, then with the Spartans – Miletus became their main naval base in the Aegean – against the Athenians.

After the Corinthian war, with the king's peace, Miletus became Persian again.

Thereafter Miletus is altogether unimportant.

Miletus never became an important state. Yet Miletus is the city of the first philosophers. Thales, the first philosopher, Anaximander, the second philosopher, Anaximenes, the third philosopher, Hecataeus, the seventh philosopher, are all from Miletus. And the first philosophers involved themselves with the state, if not very successfully.

The following is all from the father of history.

When Cyrus defeated Croesus and threatened the Ionian cities, Thales advised them to set up a joint council to decide what to do. The cities ignored the advice.

When Aristagoras began organizing the Ionian revolt, Hecataeus strongly urged the cities not to revolt against the great king, and in order to persuade them, pointed to the power of the king, enumerating for them all the peoples ruled by the king. The cities ignored this advice as well.

So Aristagoras went to Sparta to solicit help for the revolt. He took with him a map of the entire earth, drawn on a bronze tablet, showing all the seas and all the rivers. – Hecataeus had drawn the map. – In Sparta, Aristagoras pointed to the map and said to the king, Cleomenes, here, next to the Ionians are the Lydians, next to the Lydians are the Phrygians, next to the Phrygians are the Cappadocians, next to the Cappadocians are the Cilicians, next to the Cilicians are the Armenians, next to the Armenians are the Matieni, next to the Matieni is Cissia, and in Cissia is Susa where the great king has his palace, capture Susa and you will rival Zeus in wealth. How far from the sea is Susa? Cleomenes asked. Three months, Aristagoras replied. My Milesian friend, Cleomenes said, there is no argument that can take the Spartans on a three months' march from the sea.

So Aristagoras went to Athens, and spoke to the assembly of the people. The Athenians voted to support the revolt with 20 ships.

Aristagoras, the father of history adds, said the same things in Athens that he had said in Sparta,

but because it is easier, it seems, to fool many than to fool one, he did not fool Cleomenes, but he fooled 30 000 Athenians.

Defeated, the Milesians retreated to their city, and Aristagoras asked them, if they were driven from the city, too, whether they wanted to sail away to Sardinia or to Thrace. Hecataeus advised them to go to neither of these, but to the island of Leros nearby, so that staying close to their city, they may try to recapture it. The Milesians ignored this advice of his as well.

The first philosopher, and the foremost among the seven wise men, counted among the seven in all their many and various lists, also advised the cities.

The seventh philosopher, and the first geographer, was also a vigorous, if not very effectual, councilor of his city.

Mytilene.

The particulars are 2,

Pittacus tyrant c. 590,

Alcaeus leader c. 590.

Mytilene was the main city on Lesbos, one of the larger islands off the coast of Asia Minor.

Pittacus and Alcaeus jointly brought down a tyranny. Pittacus then himself became tyrant – the Mytileneans elected him tyrant, Aristotle reports (*Politics*, III, 14) – and exiled Alcaeus.

Mytilene and Athens had quarreled over Sigeum, a city on the coast of Asia Minor in the north, Periander had arbitrated between them and awarded Sigeum to Athens.

Pittacus won Sigeum back for Mytilene. All by himself. Mytilene and Athens went to war over the city, Pittacus was the general of the Mytileneans, the general of the Athenians was the Olympic victor Phrynon, the Olympic victor challenged Pittacus to a single combat, and Pittacus slew the Olympic victor.

In the next generation Pisistratus won Sigeum back for Athens.

Cyrus then conquered Asia Minor, and Persia then dominated Lesbos, including Mytilene.

In the Persian war the islanders fought with the Persians – contributing 17 ships to the king's navy (Herodotus, VII, 95) – against the Athenians and the Spartans.

After the Persian war Athens brought Mytilene as well into its alliance.

Thus, in the Peloponnesian war the Mytileneans as well fought first with the Athenians against the Spartans, then with the Spartans against the Athenians.

Soon after that Lesbos as well became once again Persian.

And Lesbos as well is thereafter altogether unimportant.

The brief attempt of Mytilene to emerge into importance is particularly dramatic, involving as it is one of the wisest wise men and one of the finest lyric poets.

Pittacus is, with Thales and Solon, counted among the seven wise men in all their many and various lists.

And his wisdom is further attested not only by his victory in a single combat with an Olympic victor.

In the *Republic*, while Periander marches in the army of the bad wisdom, Pittacus marches in the army of the good.

Aristotle notes him in his review of lawgivers in the *Politics*. He writes: Pittacus drew laws, not a constitution; and there is one law peculiar to him, that, if a drunken man commits a wrong, he should be punished more severely than if he were sober (II, 12).

As to Alcaeus, he is not only one of the finest lyric poets, in general. In particular, he abused Pittacus in fine lyric verse for being fat and a drunkard (fr. 67-72, 305-6, 348).

Samos.

The particular is 1,

Polycrates tyrant c. 538-22.

Samos is just off the coast of Asia Minor.

Cyrus had conquered Asia Minor.

And then, the father of history reports: Polycrates was the first mortal to try to master the sea (III, 122).

Polycrates built a navy of 100 fifty-oared ships.

He plundered the entire sea. He captured many islands and many coastal cities.

He repulsed a Spartan assault on Samos.

He concluded a treaty of friendship with Amasis in Egypt.

Later on, he provided Cambyses with 40 ships in his conquest of Egypt.

Later on still, he was captured by the satrap of

Lydia and crucified.

After Polycrates the tribulations of Samos are the general. It was dominated by Persia. In the Persian war it contributed ships to the king's navy. After the Persian war it was brought into the Athenian alliance. In the Peloponnesian war it fought first with the Athenians against the Spartans, then with the Spartans against the Athenians. It also became once again Persian, and it is also thereafter altogether unimportant.

Pythagoras, the fourth philosopher, is from Samos. And he was the friend and the foe of the tyrant, both. On the one hand, Porphyry reports: when Pythagoras went to Egypt, Polycrates wrote to his friend Amasis, the prince of Egypt, to present Pythagoras to him (*Pythagoras*, 7). On the other hand, Porphyry also reports: seeing that the tyranny of Polycrates was becoming so violent that a free man was in danger of falling victim to him, Pythagoras left Samos and went to Italy (9).

The attempt to build the state in Samos was not successful. But the rise of Polycrates is very important. He was the first mortal to try to master the sea. He built a navy of 100 fifty-oared ships. And he plundered the entire sea, and captured many islands and many coastal cities.

In the next generation Athens will make the next attempt to master the sea. It will build a very much greater navy. And it will build the first maritime empire.

dxxiv

Sparta.

In the three-odd centuries from Ashurbanipal to Alexander, the dual kings of Sparta, the Agiads and the Eurypontids, are,

Anaxandrus	prince c. 615,
Leotychidas	prince c. 610,
Eurycratidas	prince c. 590,
Hippocratides	prince c. 585,
Leon	prince c. 565,
Agasicles	prince c. 560,
Anaxandridas	prince c. 560-20,
Ariston	prince c. 550-15,
Cleomenes	prince c. 520-490,
Demaratus	prince c. 515-491,
Leotychidas	prince 491-69,
Leonidas	prince 490-80,

Pleistarchus	prince 480-59,
Archidamus	prince 469-27,
Pleistoanax	prince 459-09,
Agis	prince 427-00,
Pausanias	prince 409-395,
Agesilaus	prince 400-360,
Agesipolis	prince 395-80,
Cleombrotus	prince 380-71,
Agesipolis II	prince 371-0,
Cleomenes II	prince 370-09,
Archidamus III	prince 360-38,
Agis III	prince 338-0.

The important other particulars are,

Chilon	ephor 556,
Pausanias	general in 479,
Brasidas	general in 424,
Gylippus	general in 414,
Lysander	general in 408.

Sparta will be celebrated for, both, its invincibility and its constitution. The latter will also be celebrated as the cause of the former, because it had the best constitution, Sparta was invincible on the battlefield.

And Sparta emerges from obscurity with Theopompus, prince *c.* 710, one century before the three-odd centuries at issue, and emerges from obscurity with, both, very dedicated smiting and a constitutional development.

Our king Theopompus, dear to the gods, won
Messenia,
Messenia good for ploughing, good for planting,
for Messenia nineteen years incessantly fought
the fathers of our fathers.

Sparta was the main city of the country of Laconia. Messenia was the country to the west. The people of Laconia were already helots. With the conquest of Messenia good for ploughing, good for planting, its people as well became helots. The helots were, as Aristotle describes them: the producers of the Spartans (*Politics*, II, 9), or: the slaves of the Spartans (10).

Aristotle reports also: Theopompus established the ephorate (V, 11). The ephorate was a council of 5 elders.

Sparta thus begins as the state always has. With nineteen years of incessant fighting. It begins also differently. With a dual kingship and a council of 5 ephors.

But it is one and a half centuries after Theo-

pompus that the great rise of Sparta begins.

The country of Laconia is the valley of the Eurotas, bounded in the south and east by the sea, in the west by the Taygetus range. It is a small country. The Eurotas is some 80 km long, and Laconia extends less than 100 km east to west and not more than 100 km south to north. Messenia is west of Laconia, across the Taygetus, also bounded in the south and west by the sea. It is also a small country. North of Laconia and Messenia, east to west, are Argolis, Arcadia, and Elis, Argolis on the eastern coast, Arcadia in the middle, Elis on the western coast. All three are small countries as well. And further north, on the northern coast, is Achaea. And Achaea is a small country, too. All six, Laconia, Messenia, Argolis, Arcadia, Elis, and Achaea, are the Peloponnese, bounded by the sea in the east, south, west, and north, but for the 6-odd km wide isthmus of Corinth an island rather than a peninsula. And all of the Peloponnese is small, not more than 140 km east to west at its widest, not more than 200 km south to north at its longest.

Laconia was the country of Sparta. Messenia became a country of helots. Argolis was the country of Argos. Arcadia was a wild country, mountainous and poor, the country of eaters of acorns, as the Pythia described them (Herodotus, I, 66). Elis was the country of the Olympic games. Sicyon was the main city of Achaea. And Corinth was the main city on the isthmus.

So Sparta conquered Messenia. One generation-odd later, Argos defeated Sparta, and took the Olympic games from Elis. Two generations later, Corinth captured Epidaurus in the Argolis. In the next generation, Sicyon made war on Argos.

It can be concluded that there was no room in the Peloponnese for more than one state.

And in the next generation Sparta became this state, with Anaxandridas and Ariston.

Anaxandridas and Ariston defeated Argos.

And they conquered Arcadia.

Croesus, in preparation for his war against Cyrus, looking for allies, made inquiries among the Greeks, and learned that the most powerful were the Athenians and the Spartans (Herodotus, I, 56). The reign of Croesus is at the time of Anaxandridas and Ariston.

The first Spartan venture beyond the Peloponnese was the assault on Samos under Polycrates. The reign of Polycrates as well is at the time of Anaxandridas and Ariston.

Under Anaxandridas and Ariston Sparta became the mistress of not less than one half of the Peloponnese, and began venturing beyond the Peloponnese.

By this time the constitutional development of the state was also complete.

Council should come from the kings
and the elders; according to their decrees,
the people should say and do what is right;
victory and power will then attend the people;
this is what Apollo said to the city.

In particular, council came from the 2 kings and a council of elders presided by the 5 ephors.

Chilon was ephor at this time. Chilon yoked the ephors alongside the kings (Laertius, I, 68).

Chilon was also one of the seven wise men. The wisest of the Spartans said that the Spartans should rather drown at sea than float on it (Herodotus, VII, 235). So the Spartans did not build a navy. And remained invincible on land, counting from the beginning of the reign of Anaxandridas c. 560 to Leuctra in 371, for nearly two centuries.

And as Apollo said to the city, victory and power attended the people.

In the next generation, under Cleomenes, Sparta became the mistress of the entire Peloponnese, and the dominant power among the Greek states.

In the Peloponnese, Cleomenes defeated Argos decisively. Argos was so widowed of men that the slaves took over the government of the city (VI, 83).

Beyond the Peloponnese, Cleomenes intervened twice in Athens, to remove and to install its rulers. He intervened in Boeotia, north of Athens. He intervened in Aegina, in the sea between the Peloponnese and Athens.

So, Sparta became the mistress of the Peloponnese. Argos continued to look for opportunities to defy Sparta. But such opportunities were not many. And other than that, the entire Peloponnese was brought firmly into a formal Peloponnesian league under Sparta. Those of the Peloponnesians who were not helots became the allies of the

Spartans. The helots were the producers, or the slaves, of the Spartans. And the helots marched under the Spartans against the foes of the Spartans. The allies of the Spartans marched under the Spartans against the foes of the Spartans, and were protected by the Spartans against the foes of the Spartans.

Beyond the Peloponnese, Cleomenes not only made Sparta the dominant power among the Greek states. He tried to dominate Athens, too. The rise of Athens had begun in the two generations before Cleomenes, and the rise of Athens continued after Cleomenes. Rather than drown at sea, the Athenians most successfully floated on it. And the rise of Sparta and Athens, both, stopped the great kings, and it is very unlikely that the rise of only one of them can have stopped the great kings. And the continuing rise of Athens and Sparta, both, led to the greatest war, and nothing but the continuing rise of both can have led to the greatest war.

Cleomenes was the Agiad king. The Eurypon-tid king was Demaratus. Demaratus repeatedly obstructed Cleomenes. Cleomenes coerced the Pythia to pronounce Demaratus illegitimate, and Demaratus was deposed and replaced by his cousin Leotychidas.

Looking for help for the Ionian revolt, Aristagoras came to Sparta. Capture Susa and you will rival Zeus in wealth, he told Cleomenes. How far from the sea is Susa? Cleomenes asked. Three months, Aristagoras replied. My Milesian friend, there is no argument that can take the Spartans on a three months' march from the sea, Cleomenes said.

The revolt was crushed.

And the Ionian revolt is among the causes of the Persian war.

To acknowledge the supremacy of the great king, countries and cities surrendered to him a token of their earth and water. After the suppression of the revolt Darius sent heralds throughout Greece to ask the cities to submit earth and water (48).

Most cities complied (49).

Athens and Sparta did not. The Athenians threw the heralds in jail and later killed them (VII, 133). The Spartans threw them into a well to fetch earth and water for the king (*id.*).

So in 490 Darius sent an army under Datis against Athens and Sparta. It sailed across the Aegean, pillaged the islands, and landed in Attica, on the eastern coast of the country of Athens. At Marathon, under Miltiades, Athens defeated Datis.

Darius began preparing an expedition to lead against Athens and Sparta himself. In 486 he died. Xerxes continued the preparation.

In 480, the great king embarked on the expedition. He led 1 700 000 men and more than 1 207 ships.

The Greeks made their first stand on land at Thermopylae, a pass between the mountain and the sea north of Boeotia, and on the sea at Artemisium, off the coast of Euboea.

At Thermopylae, the Greeks were led by the Spartans, under Leonidas. When their lines were breached, the other Greeks retreated. The 300 Spartans stood. 298 fell.

The deposed Demaratus was now advising the great king. Xerxes watched the 300, and asked, how many are men like that? Demaratus replied, there are 8 000 men in Sparta and they are all men like that; the rest of the Laconians are not equal to them, but they are good men, too (234).

Simonides wrote their epitaph,
stranger, tell the Spartans,
we lie here, obedient to their word.

At Artemisium, an indecisive battle was fought, and the Greek navy retreated.

The Athenians evacuated their city, moving *en masse* to Salamis. Xerxes entered Athens, and offered terms. The terms were refused.

At Salamis, the Greek navy led by the Athenians, under Themistocles, defeated decisively the great king's navy.

Mardonius, left in command of the Persian army by the great king, entered Athens again, and offered terms again. The councilor who proposed considering the terms, the Athenians stoned to death (IX, 5).

In 479, at Plataea, the Greek army led by the Spartans, under Pausanias, defeated decisively the great king's army.

At the same time, a Greek force led by the Spartans, under Leotychidas, defeated the Persians on land and sea at Mycale, across the Aegean, just north of Asia Minor.

The victory of Sparta and Athens was decisive and complete.

It was won in battles of unprecedented size, greater than any earlier battle by not less than an order of magnitude. At Salamis Themistocles led 380 ships against 1 207. At Plataea Pausanias led 110 000 men against 300 000 (30-2).

And the victory of Sparta and Athens in the Persian war is a divide in the development of the state. The great acceleration in the development of the state, which begins with the Assyrian princes, continues with the great kings, and through Darius the center of the acceleration remains where it has always been, in the east. Those are the most dynamic states, Assyria, and then the state of the great kings. With the victory of Sparta and Athens in the Persian war the center of the acceleration in the development of the state moves west, with Sparta and Athens now. These are the most dynamic states now. And their rise continues and continues to accelerate.

Herodotus writes of Plataea: Pausanias won the fairest victory of all that we know (64).

Pausanias was a nephew of Leonidas, and after the death of Leonidas, during the minority of his son Pleistarchus, the scion of the Agiad house.

After the defeat of the army and the navy of the great king, Sparta and Athens pressed hard their advantage. Pausanias captured Byzantium, on the Bosphorus, and ventured into Asia Minor.

Thucydides writes: Pausanias was the first Greek to adopt Persian dress and Persian custom and to aspire to become the king of all Greeks; he offered his services to Xerxes, Xerxes offered him his own in return (I, 128-35).

There was no cause any longer for Sparta and Athens to remain allies. And Sparta was invincible on land, but Athens was the mistress of the sea. Cimon became the leader of the people in Athens, in 478 he began bringing the cities on the islands and along the Asian littoral into a formal alliance under Athens, and soon after expelled Pausanias from the east.

Athens continued to bring more cities into its alliance, and more. Its attempt to extend its control on land in the mainland, in Boeotia, was repulsed, and in 446 Sparta and Athens concluded a thirty-year peace. Athens continued to bring more cities into its alliance, and more.

So in 431 the greatest war came.

Thucydides writes: the real cause of the war, and what made it inevitable, was the growth of the power of Athens and the fear which this caused in Sparta (23).

Archidamus, Brasidas, Agis, Gylippus, and Lysander won the greatest war.

Beginning in 431, Archidamus confined Athens on land to its walls. Athens continued to dominate the sea and to assault the coasts of the Peloponnese.

Beginning in 424, Brasidas, levying troops locally, began operations on the northern Aegean coast. The country north of the Aegean was the main source of timber for the Athenian ships. By 422, when he fell, Brasidas had won the northern Aegean coast from the Athenians.

In 421 the belligerents concluded a peace.

In 418 an Athenian force supported by Argos advanced in the Peloponnese. Agis defeated it.

In 415 Athens embarked on an expedition to conquer Sicily. The Syracusans appealed to Sparta for help. Sparta sent Gylippus. Gylippus organized the Syracusans, and destroyed the Athenian expedition. 6 000 Athenians surrendered to Gylippus (VII, 82).

Beginning in 413, Agis resumed the land siege of Athens, again confining it on land to its walls.

In 412 Sparta brought the great king in the war. The great king undertook to supply Sparta with money in exchange for the recognition of his right over the Greek cities of Asia Minor (VIII, 18). The Greek cities of Asia Minor were at this time all in the Athenian alliance.

Beginning in 408, Lysander began operations on the coast of Asia Minor. He levied troops locally, and turned the allies of the Athenians one after the other against the Athenians. In 405 he destroyed the Athenian navy at Aegospotami, and blockaded Athens on the sea as well.

In 404 Athens surrendered to Lysander.

Thucydides writes: this was the greatest war ever among the Greeks; it affected many of the barbarians as well, and indeed all of humanity (I, 1); the greatest earlier war was the Persian; yet that war was decided quickly, in two sea battles and two land battles; this war, on the other hand, not only lasted a long time; it brought suffering to all Greece greater than ever before; never before

were so many cities devastated; never before were so many exiled from their homes; never before was there such a loss of life (23); down to the time when the Spartans destroyed the empire of Athens and occupied the city, the war lasted twenty-seven years (V, 26).

It was the greatest war ever, and not only among the Greeks. And it has affected all of humanity.

The Peloponnesian war is a very major advance in the development of warfare.

All the following are major advances.

Sparta brought the development of the heavy infantry – of the hoplite – to perfection.

Sparta developed superb generalship. Brasidas, Gylippus, and Lysander levied troops in persistently hostile territory, and organized them, to lead them to victory after victory.

Sparta discovered that wars are won by lines of communication. It deprived Athens of the surrounding country, then deprived it of its bases in the north, then stopped its attempt to acquire new bases in the west, then deprived it of its bases in the east, then deprived it of its bases on the sea. Athens capitulated. Sparta's victory in the Peloponnesian war is the first unambiguous anticipation of strategy.

Sparta led an alliance in the war. As did Athens. All states within the reach of Sparta had to become the allies of Sparta against Athens. As all states within the reach of Athens had to become the allies of Athens against Sparta. These allies of Athens against Sparta, also, had to become in the course of the war the allies of Sparta against Athens.

The immediate consequences of the war reached beyond the reach of the belligerents, too. In the east, the alliance of Sparta with the great king restored the great king to the position of arbiter of the Greek cities of Asia Minor and the Aegean islands. In the west, the Sicilian expedition enfeebled Syracuse, and Carthage, expelled from Sicily two-odd generations earlier, returned forcefully to the island.

And the most far-reaching consequences are the general.

It was a war not of one battle, or two, one campaign, or two, fought in one place, or two, in one year, or two. It was the first war of many

dozens of battles, many dozens of campaigns, fought on land and on sea, across 1 000 km from Sicily to Asia Minor, over twenty-seven years. And this kind of war has since been decisive in the development of the state. The Peloponnesian war, in 431-04, was the greatest ever. Then the first Punic war, in 264-41, was the greatest ever. Then the second Punic war, in 220-02, was the greatest ever. Then the wars of the Romans in 88-31^{BC}, civil and otherwise, were the greatest ever. And so through the greatest ever, so far, world wars one and two, in 1914-45^{AD}.

It was a war also of constitutions. Athens was a democracy. Sparta was an aristocracy. And Athens supported democracies among its allies and imposed democracies on the cities it conquered. Sparta supported aristocracies among its allies and imposed aristocracies on the cities it conquered.

After the war, the philosophers generally and uniformly admired the Spartan constitution. Had Athens won the war, they would have, presumably, generally and uniformly admired the Athenian constitution. In any case, whatever the philosophers either admired or would have admired, democracy lost the war. Aristocracy won the war.

Thucydides himself is a very important consequence of the war, too. He begins: Thucydides of Athens wrote down the war of the Athenians and the Spartans, beginning to write at the very outbreak of the war, because he saw that it was going to be a great war and more important to write down than any earlier war (I, 1). Incidentally, Thucydides was one of the generals defeated by Brasidas in the north. Not incidentally, his *History* is a very important historical treatise. One generation after the father of history, the *History* of Thucydides has virtues which the father of history does not have, and it has vices which the father of history does not have. And for good and ill, and mostly ill, their successors have emulated Thucydides very much more than they have the father of history.

In 404 Lysander forced the surrender of Athens. And he installed an aristocracy. In 403 the democracy was restored.

In 400 Agesilaus became king. Agesilaus and Lysander began operations in Asia Minor, with

the proclaimed end, now, of liberating the Greek cities of Asia Minor from the great king. Athens, Corinth, and Thebes joined this war of Sparta against the great king, on the side of the great king against Sparta. Lysander fell in 395. In 394 Agesilaus defeated Thebes, Athens, and Corinth at Coronea. In 388 Sparta allied itself again with the great king, established control of the sea, and forced its foes to accept, in 386, the king's peace. All Greek states recognized the king's right over the cities of Asia Minor, the king undertook to maintain the right of each of the Greek states to rule itself (Xenophon, *History*, V, 1).

The king's peace excluded Sparta from Asia Minor, but left it the hegemon of Greece. In 382 Agesilaus occupied Thebes.

In 371 at Leuctra and in 362 at Mantinea Thebes vanquished Sparta. Epaminondas had discovered tactics. Sparta lost even Messenia, first won by Theopompus three and a half centuries earlier.

Agesilaus fought at Mantinea. After Leuctra already, and again after Mantinea he fought as a mercenary in Asia Minor and in Egypt, in an attempt to find allies and rebuild the prestige of Sparta, until the age of 84.

After that Sparta is not important.

Cleomenes III, prince 235-22, and then Nabis, prince 207-192, will try to rebuild Sparta into a powerful state. The attempt of Cleomenes III will be arrested by the Macedonian princes, that of Nabis by the Romans.

Sparta is a very important state.

To begin with, Sparta, too, like all great states, is a great advance in the development of warfare.

Battles had always been won by numbers. Beginning with Sargon – 5 400 men ate bread daily before Sargon – and through the great kings – Xerxes led 1 700 000 – all states had risen with large armies, and larger, and larger.

Sparta discovered that determination will vanquish numbers.

At Thermopylae, 300 Spartans stood. 298 fell. Of the 2 who returned home: one hanged himself in shame; to the other, called the coward, no one spoke (Herodotus, VII, 231-2).

Thermopylae shows best the quality of the determination. Plataea shows best its quantity.

How many are men like that? Xerxes asked.

Demaratus replied, there are 8 000 men in Sparta and they are all men like that.

At Plataea, Pausanias led 5 000 Spartans. Out of the city of 8 000 men. Pausanias led out of the city all able-bodied men of the city.

So the city of 8 000 men became the mistress of the Peloponnese, not less than 500 000 people, the city of 8 000 men vanquished the empire of the great kings, an empire of not less than 25 000 000 people, the city of 8 000 men became the dominant power among the Greek cities from Sicily to Asia Minor, over not less than 3 000 000 people.

Determination will vanquish numbers.

Determination also became art. Sparta developed the heavy infantry to perfection.

An army is an army because, and until, it fights as a unit. And so all armies had been since Sargon.

It is with the Spartan heavy infantry, however, that the army begins fighting in a body, the army itself becoming one single massive weapon.

The hoplites, the heavy infantry, arranged in lines, the best men in the front line, shield in the left hand, sword in the right, fought in a body, pressing forward, the men behind stepping in for the fallen men in front, pressing steadily harder to the right, wheeling the left flank of the foe, and until the foe turned to flight.

It remained an invincible weapon for two centuries. Until the discovery of the more powerful weapon of tactics.

Determination can always be the feat of one man. In Sparta, determination became the feat of all men, and of every man.

The heavy infantry cannot be the feat of one man, it can only be the feat of many, of the army. And this can explain why the determination of the Spartans, the feat of every one of them, and the heavy infantry, its perfection by the Spartans, developed simultaneously.

The heavy infantry became a massive weapon. And determination all by itself became a weapon.

Determination became the law of Sparta. Hence, and more fundamentally, determination became the custom of Sparta. And, hence, determination became the feat of every Spartan.

As Thermopylae dramatically shows, and with the 2 who returned home more dramatically than

with the 298 who fell.

As Plataea even more dramatically shows, with the 5 000 marching out of the city of 8 000.

As the greatest war yet more dramatically shows, fought by the city of 8 000 over 1 000 km for 27 years.

And as most dramatically, as well as picturesquely, the saying of the Spartan mother shows, sending off her son to battle, handing him his shield: with it, or on it (Plutarch, [*Sayings*], 241).

With it, or on it.

The law of Sparta, and more fundamentally the custom of Sparta, determination became a weapon all by itself. Wielded by the Spartan. And dreaded by his foe. Nothing else, nothing but determination as a weapon all by itself, can explain the feats of Brasidas, Gylippus, and Lysander. Granted in each case superior generalship, yet in each case victory is rather miraculous. And it is the victory not only of Brasidas, but also of Gylippus, and not only of Brasidas, and of Gylippus, but also of Lysander. Each of the three won a major campaign – Brasidas won the north Aegean coast, Gylippus defeated the Sicilian expedition, Lysander turned the Athenian allies in Asia Minor against the Athenians – each of the three single-handedly. Clearly, none of the three was just one man. Each of the three was one of the Spartans. And they were all men like that.

The heavy infantry became a massive weapon. Determination all by itself became a massive weapon.

In general, the state itself became a weapon.

They were all men like that.

They all marched out.

And more than that, much more.

At Plataea, the 5 000 Spartans were accompanied by 7 helots each (Herodotus, IX, 10).

How many are men like that? Xerxes asked. Demaratus replied, there are 8 000 men in Sparta and they are all men like that, the rest of the Laconians are not equal to them, but they are good men, too.

Sparta levied a force of 35 000 good men from its producers, or slaves. The producers, or slaves, of the state were very much part of its army.

The rest of the Peloponnese Sparta brought into a formal Peloponnesian league under itself.

At Plataea, the entire Greek force was

110 000. Not less than one half were Peloponnesians. Out of a population of some 500 000, not less than one quarter of all able-bodied men fought at Plataea. Not bad men either. The allies of the state were very much part of its army as well.

In the Peloponnesian war, out of any men, anywhere, Brasidas, Gylippus, and Lysander made fighting men. Victorious fighting men, too. The state became capable of making any men part of its army.

Nor did the state lose its determination with the victory in the Peloponnesian war. It undertook without pause the liberation of the Greek cities of Asia Minor. And the next general war came less than a decade after the Peloponnesian.

Sparta is an advance in the development of warfare more radical than any earlier.

And of all the radical advances the most radical is the discovery of the citizen-soldier. Sparta – and Athens – discovered the citizen-soldier.

In Sparta, the soldier became a citizen. And the citizen-soldier became – as he still is – the most powerful weapon. Because the soldier became a citizen, determination became the law, and more fundamentally, determination became custom. With it, or on it. And because the soldier became a citizen, the state, the state of the citizen-soldier, itself became a weapon.

The philosophers generally and uniformly admired Sparta. Admired its invincibility, its constitution, and its constitution as the cause of its invincibility. The philosophers have also generally and uniformly, if not quite so generally and uniformly, described its constitution. And the best historian among them has described it best.

Polybius writes:

under the Spartan constitution no citizen could own more land than any other, money was despised and the contention for wealth was more or less completely eliminated;
the kings were hereditary and the council of elders was elected for life (VI, 45);
a state depends for its preservation on two things, bravery in the face of the enemy and concord among the citizens; and in Sparta, when the striving for wealth was eliminated, civil strife was eliminated; and free of this evil, the Spar-

tans excelled all Greeks in the conduct of their internal affairs and their unity (46);

the equal division of property and the common meals tempered and disciplined the citizens and protected the community from internal strife;

the training in endurance, hardship, and dangers produced a breed of noble and courageous men;

and in this way the Spartans secured their country and have left to posterity a lasting heritage of freedom (48).

The state was under hereditary dual kings and a council of elders elected for life, presided by five ephors.

No citizen could own more land than any other. Money was despised and the contention for wealth was more or less completely eliminated. When the striving for wealth was eliminated, civil strife was eliminated.

Free of this evil, the Spartans excelled in their unity.

The equal division of property and the common meals disciplined the citizens.

And the training in endurance, hardship, and dangers produced a breed of noble and courageous men.

The state of Sparta was an army. Free of the evils of civil life, the contention for wealth and civil strife. In constant quarters, in constant training, in constant readiness. Excelling in unity. Disciplined. A breed of noble and courageous men.

So the state campaigned as often as necessary against its producers, or slaves, to maintain them producing, as well as to maintain them, its auxiliaries, in readiness themselves. It campaigned with its allies, its auxiliaries also, as well as, and as often as necessary, against its allies, too, to maintain them its allies, and maintain them in readiness themselves, too. And it was always ready to campaign and always did campaign against its foes.

And the power of the weapon, the citizen-soldier, can all by itself explain its discovery.

Aristotle defines the citizen: a citizen is who shares in the deliberative or judicial government of the state.

And the Spartan was a citizen *par excellence*.

He shared in the deliberative or judicial government of the state. In particular, he elected the council of elders and was elected to the council of elders.

The Spartan was a citizen. He was also a soldier.

And not the citizen became a soldier. The soldier became a citizen.

In general, there had been soldiers for twenty-three centuries by this time. At this time, in Sparta – and in Athens – the soldier for the first time became a citizen-soldier, and *ipso facto* a citizen.

In particular, Sparta begins with Theopompus, our king Theopompus, dear to the gods, won

Messenia,

for Messenia nineteen years incessantly fought the fathers of our fathers.

And then,

council should come from the kings
and the elders; according to their decrees,
the people should say and do what is right;
victory and power will then attend the people.

First victory and power, and after nineteen years of incessant fighting. Then council from the kings and the elders. Then more victories and more power, and more, and more.

And everything in the Spartan constitution indicates that the soldier became a citizen, not the citizen a soldier.

Money was despised. The striving for wealth was eliminated. Civil strife was eliminated.

Property was divided equally. Meals were common.

And what the citizen, or the citizen-soldier, and rather the soldier, did, was train himself in endurance, hardship, and dangers.

With it, or on it, became not just the law, it became custom.

The citizens, or the citizen-soldiers, and rather the soldiers, were in constant quarters, in constant training, in constant readiness.

And the soldiers, or the citizen-soldiers, and not the citizens, became a breed of noble and courageous men.

So the constitution of Sparta was celebrated as the cause of its invincibility. And, once developed, the constitution of Sparta was the cause, the very powerful cause, of its invincibility.

The power of the weapon, the citizen-soldier, its power from the first, and its power maintained, continuously enhanced, and irresistible for two centuries, can all by itself explain the discovery of the weapon, and its development to perfection. Why it was discovered, and why, once discovered, it continued to be developed to perfection.

And there are, moreover, the peculiar circumstances of the beginning of the state among the Greek cities, which could not but encourage, and encourage powerfully, the development of the constitutions of the Greek cities, in general, and of the Spartan constitution, in particular.

The Spartan constitution was uniformly ascribed to Lycurgus. In the *Spartan constitution*, for instance, Xenophon writes: I wondered why Sparta, although the least populous, is the most powerful of all Greek states; then I considered its constitution, and I wondered no longer; for Lycurgus gave the Spartans their laws, and he was the wisest (1). After Xenophon, the Spartan constitution is ascribed to Lycurgus by Plato, by Aristotle, by Polybius, too, by Plutarch.

Lycurgus cannot be burdened with the presumption of reality. He is not attested in the first three centuries of the development of Sparta. He is first attested after three centuries of Spartan victories and power, and three centuries in which the constitution of Sparta is attested without Lycurgus. The conclusion is unavoidable. First victories and power came. Then the need to explain the good laws which brought victory and power came. Then the need to ascribe the good laws to the wisdom of Lycurgus came.

Lycurgus is not real.

But Homer and Hesiod are real.

Homer and Hesiod created for the Greeks their theogony. And the gods created by Homer and Hesiod for the Greeks, in general, and for the Spartans, in particular, are secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom. Homer and Hesiod are also a great advance in the acquisition of knowledge.

The oldest attested public celebration of Homer, with the singing of his verses, is in Sparta, at the Carneia, in 676/3. This is one century-odd before Anaxandridas and Ariston, under whom Sparta became the mistress of not less than one half of the Peloponnese, and began

venturing beyond the Peloponnese. By that time the constitutional development of the state was also complete.

The state of Sparta attests no development in religion. But it attests a major development in the law, with the very fact of the development of a new form of constitution.

And what the Spartan constitution produced was a breed of noble and courageous men. A breed of Homeric heroes. With this difference, that these Homeric heroes are real. With this difference also, that these Homeric heroes are rather greater than the fictional.

It is real as well that, when the development of the state crossed the Aegean, and began in Greece, it began in a country substantially different from the countries in which it had begun and developed until that time. Small valleys, long indented coastline, many small peninsulas, many islands, it was the country of many small cities. When the state began, it began in quick succession in several cities. And the cities began smiting one another.

But when Sparta rose, and became a great state, it became a great state different from the earlier great states. It was the state of the country of Laconia, and it conquered and subdued outright the neighboring country of Messenia. And this is not different. Further afield, however, it did not conquer and subdue outright the rest of the Peloponnese, it vanquished it and brought it into a formal Peloponnesian league under itself. And this is different. Still further afield, it did not conquer and subdue outright the cities beyond the Peloponnese either, it dominated them, variously, some by vanquishing them as often as necessary, others by forcing them as often as necessary to fight under itself. And this is also different.

Hence, the breed of noble and courageous men made their producers good men, too, made their allies good men, too, and made fighting men, and indeed good men, too, out of any men, anywhere.

Sparta is thus a major development also in custom. All Greeks did not become men like that. But all Greeks rather became good men, too.

As to the form of the government, it can be presumed that victory and power established it. The Greek states begin, as all states have begun, and all states have continued, with the rule of

one, one king in Argos, one tyrant in Corinth, one tyrant in Megara, one tyrant in Miletus, one tyrant in Sicyon. Sparta itself emerges from obscurity with but one king. But then the great rise of Sparta begins with the dual kings, with the victories of Anaxandridas and Ariston, in particular, and with the ephors, with Chilon, in particular, the wisest, who yoked the ephors alongside the kings. Council should come from the kings and the elders, according to their decrees, the people should say and do what is right, victory and power will then attend the people. This is what Apollo said to the city. So victory and power attended the people, the people became a breed of noble and courageous men, more victories and more power attended the breed, and council continued to come from the kings and the elders.

As to what exactly the form of the government is, as the greatest war became a war of constitutions, too, against the paradigmatic democracy Athens, Sparta became liable to appear the paradigmatic aristocracy, to its friends, the paradigmatic oligarchy, to its foes.

In fact – as Polybius first argues, too (VI, 10) – the form of the government of Sparta is a mixture of elements of all three, monarchy, aristocracy, and democracy. The element of monarchy are the hereditary kings. The element of aristocracy is the council of the elders, elected for life, presided by the five ephors. The element of democracy is the election of the council and to the council, and the element *par excellence* of democracy is the citizen-soldier.

In any case, it is this constitution which won the greatest war. Plato established that distinction, too, the rule of the few is aristocracy, when good, it is oligarchy, when bad. And given that distinction, to the degree to which it is not monarchy and democracy, the Spartan constitution cannot be oligarchy, if only because it won the greatest war, it can only be aristocracy. Indeed, with the words, too, it cannot be *ὀλιγαρχία*, the rule of the few, it can only be *ἀριστοκρατία*, the power of the best.

So, Sparta won the Persian war. And it is the fairest victory of all that we know. The city of 8 000 vanquished the empire of 25 000 000. On the other hand, had the Persians won the war, and continued the mixing of all peoples under them-

selves including the Greeks, how many wars might humanity, for good and ill, have spared itself?

Sparta fought, and won, the greatest war ever. And this kind of war, the greatest ever, has since been decisive in the development of the state. On the other hand, some of these wars, the greatest ever, not all of them, yet some, have been decisive in advancing, not retarding, the development of the state.

And one way or another, Sparta is a lesson in philosophy.

Plato writes: philosophy had its first beginning among the Cretans and the Spartans; and philosophy is still practiced most among them, and it is they that have the best education in philosophy; indeed, it is a great secret, though well known to the wise, that the true virtue of the Spartans is not fighting prowess but wisdom; indeed, to be a Spartan is to be a philosopher more than it is to be a fighter (*Protagoras*, 342a-3c)

They have the best education in philosophy. The true virtue of the Spartans is wisdom. To be a Spartan is to be a philosopher.

And in the *Republic* – a council of philosophers, life-long training of guardians, no property, common meals, producers – Plato builds the best state, in speech, modeling it, as he ought to, on the state built, in fact, by the philosophers.

Polybius writes: the Spartans have left to posterity a lasting heritage of freedom.

And so the Spartans have.

Plutarch writes: for those who doubt that it is possible, Lycurgus showed that a whole city can practice philosophy (*Lycurgus*, 31).

Philosophy is theoretical and practical. And the whole city of Sparta did not practice theoretical philosophy. It did not practice physics, and it did not practice mathematics. But the whole city of Sparta did practice practical philosophy. The whole city of citizen-soldiers practiced politics. And the whole city of noble and courageous men practiced ethics.

Sparta was a great state.

dxxv

And so was Athens.

Athens.

The particulars are,

Cylon

attempt at tyranny
c. 632,

Draco

laws in 621,

Solon

laws in 594,

Pisistratus

tyrant 560-27,

Hippias

tyrant 527-10,

Miltiades

archon 524,

Cleisthenes

laws in 508,

Themistocles

archon 493,

Aristides

archon 489,

Cimon

leader after 479,

Ephialtes

leader after 465,

Pericles

leader after 463,

Cleon

leader after 431,

Nicias

leader after 424,

Alcibiades

leader after 420,

Thrasybulus

leader after 411,

Timotheus

leader after 378,

Demosthenes

leader after 354,

Aeschines

leader after 347.

Athens discovered democracy and developed it to perfection. Athens greatly advanced warfare. Athens built the first maritime empire. Athens became the seat of philosophy.

Each of the four singly is a great and magnificent feat. The more so are the four jointly. And the more so still, because they are, all four, one another's causes and effects.

Athens was a turbulent state.

Aristotle defines constitution: constitution is the arrangement of magistracies and especially the highest.

And in *The constitution of Athens* he counts 11 changes of its constitution. For two-odd centuries Athens changed the arrangement of its magistracies and especially the highest continuously. The changes produced the perfect democracy. Democracy greatly advanced warfare. Democracy built an empire, and then lost it. Democracy, when it built its empire, became the seat of philosophy, and philosophy rose to political prominence, when it lost its empire, philosophy retreated into schools, and into political irrelevance.

Aristotle counts 11 changes of the constitution of Athens. He writes:

the first change of constitution was when Ion brought the people together in a city, divided them into 4 tribes, and set up kings to rule the tribes; Theseus then established a single king-

ship (41).

And pace Aristotle, this first change cannot be burdened with the presumption of reality. For neither Ion, the eponymous progenitor of the Ionians, and the son of Apollo, nor Theseus, the slayer of many monsters, including the Minotaur in the labyrinth, and a Homeric hero himself, can be burdened with that presumption.

Instead, in Athens as everywhere in Greece, there are the peculiar circumstances of the beginning of the state, which could not but encourage, and encourage powerfully, the development of the state among the Greek cities, in general, and in Athens, in particular.

There are Homer and Hesiod.

The gods created by Homer and Hesiod for the Greeks, in general, and for the Athenians, in particular, are secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom. Homer and Hesiod are also a great advance in the acquisition of knowledge.

Athens celebrated its mistress Athena at the Panathenaea with the recitation of Homer. It became the law, too, that at the Panathenaea Homer alone be recited. And if all Greeks celebrated the poet, the Athenians, always prone to drama, also took the poet with them to court and to war. In court, the poet proved that Salamis belonged to Athens. In war, in the Persian war, the poet proved that the Athenian is the best man to order the host.

The state of Athens, like the state of Sparta, attests no development in religion. But the state of Athens, like the state of Sparta, attests a major development in the law. Like the state of Sparta, with the very fact of the development of a new form of constitution. Also, the new form of the Athenian constitution was developed in continuous legislation, generation after generation after generation, and until every Athenian became prone to be a lawgiver.

So the Athenian constitution, like the Spartan, produced citizen-soldiers. Not quite as determined in Athens as in Sparta, yet more of them, and shrewder. All of them prone to be lawgivers, too.

A breed of Homeric heroes themselves. In Sparta the breed was more like Achilles. In Athens the breed was more like Odysseus.

Also, when the development of the state crossed the Aegean, and began in Greece, it began in a country substantially different from the countries in which it had begun and developed until that time.

Athens is the city of the country of Attica. And Attica is a promontory, bounded in the east, south, and west by the sea, separated in the north by the Parnes range from the country of Boeotia. It is a very small country, not more than 40 km east to west at its widest, not more than 80 km south to north at its longest. But right off the coast of the city of Athens is the island of Salamis. Just further southwest is the island of Aegina. Along the northeastern coast of Attica is the island of Euboea. The promontory terminates in cape Sunium, in the southeast, and just beyond the cape begins a series of islands, one next to another, Ceos, Cythnos, Syros, the sacred island of Delos, among many others. Attica is a very small country turned very powerfully toward the sea.

Aristotle counts 10 changes of the constitution of Athens after the first, and very much with Aristotle, these 10 changes are real. He writes:

the second change was of Draco, who drew the first code of laws;
the third was of Solon, when democracy began;
the fourth was the tyranny of Pisistratus;
the fifth was the constitution of Cleisthenes, which strengthened democracy;
the sixth, after the Persian war, gave the rule to the Areopagus;
the seventh was the constitution of Aristides, completed by Ephialtes, which overthrew the rule of the Areopagus; it was under this constitution that, under the sway of leaders of the people, the state committed the gravest errors in pursuit of mastery of the sea;
the eighth was the oligarchy of the 400;
the ninth restored democracy;
the tenth was the tyranny of the 30;
the eleventh overthrew the 30 and continues to this day; the people made themselves the masters of everything, ruling everything by their votes in the popular assembly (*id.*).

That day is at the end of the three-odd centuries at issue, in the time of Alexander.

And the 10 changes divide the development of

the state of Athens clearly into three parts.

One. Through the fifth change, the constitution of Cleisthenes, in 508. In this first one century-odd of the development of the state, democracy was built. And expansion began.

Two. Through the tenth change, the tyranny of the 30, in 404, set up by Lysander after the defeat of Athens in the greatest war. In this one century, democracy was brought to perfection. Warfare was advanced greatly. The first maritime empire was built. Philosophy flourished. Drama flourished. All art flourished.

Three. Beginning with the last change, the overthrow of the 30, in 403, and continuing to that day. In these two-odd generations, democracy continued. The people made themselves the masters of everything, ruling everything by their votes in the popular assembly. But the empire had been lost, and the attempts to rebuild it were ineffectual. And nothing flourished as it had flourished earlier.

Athens emerges from obscurity c. 632, with an attempt to set up a tyranny, instigated by Megara.

Both Herodotus (V, 71) and Thucydides (I, 126) record the event. Cylon was an Olympic victor and the son-in-law of the tyrant of Megara Theagenes. Theagenes lent Cylon troops to set himself up tyrant in Athens. Cylon captured the Acropolis, the hill in the city with the sanctuary of Athena. But the Athenians came out in force, led by the 9 archons who governed the city, and besieged Cylon and his followers. Cylon escaped, his followers, though suppliants at an altar, were slaughtered.

And that Athens emerges from obscurity with an attempt to set up a tyranny is a matter of course. By this time, c. 632, Sparta has emerged from obscurity with a king, Argos with a king, Corinth with a tyrant, Sicyon with a tyrant, Megara with a tyrant.

That the attempt is instigated by Megara is a matter of course as well. Megara is 30 km west of Athens. And one of the two will rise, either Megara or Athens, not both.

But this attempt failed. It is not the first recorded attempt to set up a tyranny, but it is the first recorded failed attempt.

Also, Athens was governed by 9 archons. This is also first. It is the oldest record of a city gov-

erned by several, not one.

The attempt to set up a tyranny failed. And a decade or so later, Draco drew the first code of laws.

And this is also first, and very dramatically so, the first code of laws among the Greek cities.

This was in 621.

By this time the colonization of the Mediterranean littoral had continued for some two centuries. The entire littoral had become a country of small cities. The new cities were connected with the old both strongly, by recent descent, and tenuously, separated by vast distances across the sea. And the first of the new cities to emerge from obscurity emerges from obscurity with a lawgiver. The laws of a colony were first written down, the laws of a new city founded by an old city. In 663 Zaleucus wrote the laws of Locri.

And one generation-odd later, Draco's are not just laws. Draco's is a constitution.

Aristotle's research first attests Draco.

He writes in the *Politics*:

Draco accommodated his laws to the existing constitution, and there is nothing worth noting in them, except the severe punishments (II, 12).

There is, however, never mind the severe punishments, very much worth noting in them. Upon further research, presumably, Aristotle writes in *The constitution of Athens*:

Draco drew the first code of laws (41);

he enacted his laws in 621;

he gave the franchise to all men who armed themselves;

the election of the 9 archons he gave to those who owned 100 minae or more and had legal children over 10 years of age;

the Areopagus became the guardian of the laws (4).

Democracy, then, begins with Draco, in 621.

In 621 Draco established the two precedents, of changing the laws, and of extending the franchise. And in 594 Solon will be appointed to change the laws, and he will extend the franchise. In 508 Cleisthenes will be appointed to change the laws, and he will extend the franchise. And thereafter, to be part of Athenian politics will be to vie for the leadership of the people, and the leader of the people, every leader of the people,

will vie to change the laws, and to extend the franchise.

Draco drew the first code of laws.

And this has to be a consequence of the convergence of three developments. The general, that the precedent of writing down the laws of a city had been established. And the two particular. That Athens had been governed by 9 archons, by several, not one. And that in Athens, as elsewhere, there had been an attempt to set up a tyranny, and in Athens alone this attempt had failed. Aristotle writes in the *Politics*: Draco accommodated his laws to the existing constitution. In *The constitution*, however, not only does he affirm, and show, that Draco changed the constitution. His report demands the further conclusion that, in order to accommodate, and rather to protect, the existing government, Draco changed the constitution.

Draco gave the franchise to all men who armed themselves.

The oldest number for the population of Athens is in Herodotus. Shortly before the Persian war, Athens was the state of 30 000 citizens (V, 97). This is not quite one and a half centuries after Draco. In the meantime Athens had risen greatly. It had risen from small beginnings, but not too small. It can be concluded that Draco gave the franchise to not less than one thousand men who armed themselves, probably a couple of thousand.

What this first extension of the franchise more particularly entailed is not recorded. It can be concluded from the legislation of Solon, in the next generation, that with Draco's constitution all men who armed themselves became a popular assembly, and that this assembly concerned itself with the general matters of war and peace, as well as with all the more particular matters which the citizens would bring against one another.

Draco gave the election of the 9 archons to those who owned 100 minae or more and had legal children over 10 years of age.

The state thus continued to be governed by 9 archons.

The 9 archons were elected. Plutarch, writing about Solon's laws, notes that at that time 1 sheep sold for 1 drachma and 1 bushel of grain also for 1 drachma (*Solon*, 23). 1 mina equaled 100

drachmae. One generation before Solon, then, Draco gave the election of the 9 archons to those who could buy 10 000 sheep or more, or 10 000 bushels of grain or more. It can be presumed that such were not less than one hundred, probably a couple of hundred.

And the Areopagus became the guardian of the laws.

The Areopagus was the council of all former archons (Aristotle, *Constitution*, 3).

Draco's constitution is thus radically new. There is in it no element of monarchy at all. It is a mixture of elements of aristocracy and democracy. Elements of aristocracy are the highest magistracy of the 9 archons, and the Areopagus, the council of all former archons guarding the laws. The election of the highest magistrates is a mixture of aristocracy and democracy. Draco gave the election only to the rich. Yet the highest magistrates were elected. And the decisive element is democratic, and radically democratic. Draco gave the franchise to all men who armed themselves. He gave the franchise to all.

Thus, also, the discovery of democracy in Athens is *ipso facto* the independent discovery of the weapon, the citizen-soldier.

And in Athens, as in Sparta, the soldier becomes a citizen, not the citizen a soldier. And while this fact, that the soldier becomes a citizen, not the citizen a soldier, in Sparta has to be inferred from the evidence, in Athens this fact is attested by the evidence – by Aristotle – directly and unambiguously. Draco did not arm all men who had the franchise. He gave the franchise to all men who armed themselves.

And in the next generation, with Solon, the expansion of Athens begins, the development of democracy accelerates greatly, and Athens becomes the state of the wisest, all three.

Megara, under Theagenes, had captured Salamis. Athens, under Solon, took Salamis from Megara. And thereafter Athens will dominate Megara. At the same time Athens won Sigeum, across the Aegean on the coast of Asia Minor in the north. And thereafter Athens will lose Sigeum, but will regain it, and will come to dominate the Aegean and the coast of Asia Minor.

Solon was a general in the war with Megara

over Salamis, and when the war failed to decide who will have the lovely island, and the case was submitted to the arbitration of Sparta, Solon won the case.

Soon after that, and less than one generation after the legislation of Draco, in 594, Solon was appointed to change the laws.

Many of Solon's more particular laws are recorded. Among them:

he abolished all dowries (Plutarch, *Solon*, 20);

he forbade anybody to speak ill of the dead;

he allowed a man who had no children to bequeath his property to whomever he chose outside his family (21);

he abolished the obligation of a son to support his father, if he had not been taught a trade (22);

he made it illegal to kill an adulterer;

he made it illegal for a man to sell his daughter or sister (23);

he made citizens those exiled from their cities, and those who had come to Athens to practice a trade (24).

Solon's more particular laws – the abolition of dowries, the abolition of obligations of sons, the removal of restrictions on bequests, the extension of citizenship to exiles and tradesmen – strengthened his more general laws, those that established the new constitution. Still, Solon's more particular laws are not a great advance in the development of the law. With the exception of those concerning citizenship, these laws regulate relations which have long been regulated by codes of laws – have been regulated for fifteen-odd centuries, counting back to Ur-Nammu – and regulate these relations in ways not radically different from the ways in which they have been regulated. The great advance in the development of the law are Solon's more general laws, those that established the new constitution. With these laws Solon is the most important lawgiver of any of the Greek states, and the most important lawgiver in the eighteen centuries between Hammurabi and the Roman jurists.

Aristotle reports in *The constitution*:

Solon divided the people into four classes by property, five-hundred-bushel men, cavalrymen, infantrymen, and laborers;

to the first three classes he gave all magistracies, to each class a number proportionate to the

value of their property;

to the fourth class he gave nothing but a place in the popular assembly and in the juries (7);

he abolished debt bondage;

he established the right of claiming redress;

and he established the right of appeal to a jury court (9).

The five-hundred-bushel men were the men who built, equipped, and maintained the ships.

Radical as Draco's constitution is, Solon's is very much more radical.

Draco gave the franchise to all men who armed themselves.

Solon gave the franchise to all men who armed themselves – the men in charge of the ships, the cavalrymen, and the infantrymen – as well as the laborers. He did not give the magistracies to the laborers, but he did seat the laborers in the popular assembly.

Nor could these new members of the popular assembly be sold in bondage. Solon abolished debt bondage.

Nor was the property bar to the highest class high. Earlier in the highest class had belonged those who could buy 10 000 bushels of grain. Now in the highest class belonged those who could buy 500 bushels of grain.

Most radically, Solon gave to all men who armed themselves all magistracies. The state continued to be governed by 9 archons, and the Areopagus remained the council guarding the laws. But the franchise now entailed not just sitting in the popular assembly. The franchise now entailed not just electing the highest magistrates either. The franchise now entailed being elected one of the highest magistrates. Any man who armed himself could now be elected archon, any man who armed himself could now become a member of the Areopagus. Any man who armed himself could now be elected one of the highest magistrates. Any man who armed himself could now be elected one of the highest magistrates with the vote of any laborer, too.

The popular assembly thus continued to concern itself with the general matters of war and peace, as well as with all the more particular matters which the citizens would bring against one another. The popular assembly was now liable, however, to concern itself also with the

matter of changing the laws, and extending the franchise. And it was now liable to concern itself most vigorously of all with the matter of electing the magistrates and especially the highest, and especially the matter of being elected to the magistracies and especially the highest. The popular assembly was now liable to become the assembly of lawgivers all, leaders of the people all.

One century later Athens was the state of 30 000 citizens. In Solon's time all men who arm themselves cannot be fewer than a couple of thousand. With the laborers, they cannot be fewer than 10 000.

There is no element of monarchy in Draco's constitution already. But in Draco's constitution the elements of aristocracy are still strong. In Solon's constitution the elements of aristocracy are very nearly abolished. Even the highest magistracies are open to all men who arm themselves. Even the laborers sit in the popular assembly. The last vestige of aristocracy are the property qualifications. Solon gave all magistracies to the first three classes, and to each of them a number proportionate to the value of their property. Cleisthenes will remove this last vestige.

Victory was first, then, constitutional development followed. First the lovely island and the city across the Aegean were won, then Solon changed the laws. So Solon extended the franchise of the soldiers who had become citizen-soldiers with Draco's constitution. With Solon's constitution the laborers also became citizens. But the citizen-soldiers will continue to win victory after victory, and those citizen-not-soldiers, the laborers, will themselves become citizen-soldiers *par excellence*. They will man the ships with which the Athenians, all of them citizen-soldiers, will win an empire.

Solon is a soldier, a general in the war with Megara. Solon is a lawgiver, the greatest since Hammurabi. Solon is also a fine poet.

He sings of Salamis:

let us go to Salamis,

let us fight for the lovely island (fr. 3).

Of the elements:

drifting clouds send snow and hail,

thunder bursts out of lightning (fr. 9);

and the sea is lashed to fury by the wind,

yet remains, when sleeping,

the gentlest of the elements (fr. 12).

Of men:

I love the gifts of Aphrodite,

and the blessings of Dionysus,

and of the muses,

these are the delights of men (fr. 26).

Solon is also the wisest.

He is one of the seven wise men. He is an older contemporary of Thales, and he is, like Thales, counted among the seven in all their many and various lists. On Plato's authority, too: Solon was the wisest of the seven wise men (*Timaeus*, 20d). The stories and sayings attesting Solon's great wisdom accordingly abound. Many have been told above.

Yet Solon's wisdom is attested best by what he did to Homer, and with Homer.

To Homer, Solon fixed his text and celebrations. Cicero reports: Pisistratus first arranged the books of Homer in the order in which we now have them (*On the orator*, III, 137). Laetius reports: Solon did more to throw light on Homer than Pisistratus; and he ordered the public recitations of Homer to follow a fixed order (I, 57).

With Homer, Solon won the lovely island. Aristotle reports: in the proceedings over Megara, Solon produced as evidence two Homeric lines showing that Salamis had always belonged to the Athenians (*Rhetoric*, I, 15). Strabo reports: the critics think that Solon himself inserted the second of these lines in the poem (IX, 1.10), and Plutarch: most writers think that Solon inserted these two lines in the *Iliad* (*Solon*, 10).

The soldier, lawgiver, poet, wise man appreciated the poet.

Because the poet, in the first place, has encouraged, and encouraged powerfully, soldiering, lawgiving, poetry, and wisdom. And, dramatically, their convergence in one man, in one state. And with Solon Athens becomes the seat of soldiering second only to Sparta, of lawgiving second to none, of poetry second to none, and of wisdom second to none.

Having changed the laws of Athens, Solon left the city, to avoid, he said, being forced by the Athenians to change the laws (Herodotus, I, 29).

Democracy fostered faction, as it still does. The people split into three factions. The leader of

one of the factions was Pisistratus. Pisistratus was, Aristotle reports: an extreme democrat (*Constitution*, 14). The extreme democrat won the factional strife, and set himself up a tyrant.

The extreme democrat tyrant Pisistratus built Athens into the other, next to Sparta, dominant power among the Greek states. The extreme democrat tyrant Pisistratus gave democracy in Athens permanence. The extreme democrat tyrant Pisistratus made the citizen-soldiers Athenians lovers of poetry. Needless to add, the extreme democrat tyrant Pisistratus was a wise man, too.

Pisistratus won the civil strife and set himself up a tyrant in 560. Expelled by the other factions, he returned and set himself up a tyrant again. Expelled by the other factions again, in 546 he returned again, with a large force this time, and set himself up a tyrant again. And this time Athens remained a tyranny under Pisistratus, and after his death under his son Hippias, until 510.

This is how Pisistratus entered the city in 546. Herodotus reports: there was this Phya, very tall and very beautiful; Pisistratus dressed her in full armor, put her in a chariot, and drove her into the city with heralds preceding him, shouting, Athenians, receive with good grace Pisistratus whom Athena herself brings back to you (I, 60). Herodotus adds: and the Athenians were the shrewdest of all men (*id.*).

Athens had won Sigeum, then lost it. Pisistratus recaptured Sigeum, on the northeastern Aegean coast. He captured Naxos, in the middle of the Aegean. He established a base on the Strymon, on the northern Aegean coast. The island of Delos, just north of Naxos, was, next to Delphi, the most sacred shrine of all Greeks. And Pisistratus took over the festivals of Delos.

Pisistratus established all bases whose control will make the Aegean an Athenian sea.

Croesus, in preparation for his war against Cyrus, looking for allies, made inquiries among the Greeks, and learned that the most powerful were the Athenians and the Spartans. The reign of Croesus is at the time of Pisistratus.

Thucydides reports: Pisistratus ruled by the previously established laws (V, 54), Aristotle: the government of Pisistratus was government by law rather than a tyranny (*Constitution*, 16), and Plutarch: Pisistratus retained most of the laws of

Solon, he observed them himself, and he made his followers observe them (*Solon*, 31).

Aristotle reports further:

Pisistratus was temperate in every respect; he gave money to the poor and helped them in their labors; he greatly increased the revenues of the city; this is why his tyranny is known as a golden age (*id.*).

Athenian coinage begins with Pisistratus.

Massive building in Athens begins with him as well.

Democracy began with the constitution of Draco. The constitution of Solon extended and strengthened democracy. The tyranny of Pisistratus gave democracy permanence.

By the end of his rule, in 527, democracy had continued strongly for two-odd generations, counting back to Solon's legislation. It had continued for more than three generations, counting back to Draco's legislation. Most important, Pisistratus greatly increased the revenues of the city, and gave money to the poor and helped them in their labors. Pisistratus established the precedent of the state maintaining the citizens. And no precedent can be more democratic, or will be more eagerly urged as the essentially democratic. The franchise entailed now, if not yet by the letter of the law, if still only by interpretation of the law, being paid for being a citizen. And being paid for being a citizen will become, shortly, the letter of the law.

Pisistratus was not a poet. But he also appreciated the poet. And he did make all Athenians lovers of poetry.

Cicero reports: Pisistratus first arranged the books of Homer in the order in which we now have them.

The already lavish celebration of Athena at the Panathenaea, with the recitation of Homer, too, Pisistratus made spectacularly splendid.

And he set up the even more spectacularly splendid celebration of Dionysus at the Dionysia. The Dionysia was a long series, over many days, of processions, festivals, and recitations. And both tragedy and comedy were born in the Dionysia. Tragedy under Pisistratus already. Thespis discovered tragedy. Thespis was the first poet who, when reciting his poems, began playing

different characters differently. Thespis did so in 536/3 (*Suda*, s. v.), under Pisistratus. Not two generations later, the Athenians will watch in the theater, at the Dionysia, Aeschylus.

The whole city of Athens already sat in the popular assembly. Under Pisistratus the whole city of Athens began also going to the theater.

Pisistratus as well was counted one of the seven wise men.

Pisistratus's tyranny was known as a golden age. It was a golden age.

And the golden age continued.

The next is the generation of Miltiades and Cleisthenes. Miltiades was a great general, Cleisthenes was a great lawgiver. It is the generation also of Darius. The great kings had build the greatest empire, and it is at this time that the rise of Persia and the rise of Athens encountered one another. It is the generation also of Cleomenes. Sparta had become the dominant power among the Greek states, and it is at this time as well that the rise of Sparta and the rise of Athens encountered one another.

In 527 Pisistratus was succeeded as tyrant by his son Hippias.

Miltiades was archon in 524. Soon after that, he sailed north and captured the Chersonesus, the peninsula on the European side of the Dardanelles. Athens began controlling the passage between the Aegean and the Black Sea. North of the Aegean was the country of the Thracians. Miltiades married a daughter of a Thracian king. In the following years he established his control over much of the northern Aegean coast. The north was the main source of timber. Athens began controlling the timber. In the following years Miltiades captured Lemnos, one of the larger islands in the northern Aegean. Athens began controlling the entire northern Aegean.

The country north of the Aegean, however, which Miltiades brought under the dominion of Athens, Darius then brought in his domain. And on the great king's expedition in Thrace and Scythia Miltiades accompanied the great king.

In the meantime, democracy continued to foster faction. The leader of one of the factions was Cleisthenes. Cleisthenes was the son of Megacles, who had been the leader of one of the factions vanquished by Pisistratus. Cleisthenes

was also the grandson of the tyrant of Sicyon Cleisthenes, whom, Herodotus writes: Cleisthenes emulated (V, 67).

In 510 faction brought Cleomenes to Athens to expel Hippias. Cleomenes expelled Hippias, and this was the end of the tyranny of the Pisistratidae. A few years later Hippias tried to capture the city and set himself up tyrant again unsuccessfully. Later on still, in the service of Darius now, Hippias accompanied the great king's army, which, had Miltiades not defeated it at Marathon, would have set him up tyrant again.

Cleomenes expelled Hippias, and Cleisthenes was appointed to change the laws. Faction brought Cleomenes back, to expel Cleisthenes now.

Cleomenes intervened twice in Athens to remove and to install its rulers, intervened in Boeotia north of Athens, intervened in Aegina off the coast of Athens. Sparta was unquestionably the dominant power. But the rise of Athens will continue, and continue to accelerate.

Cleomenes expelled Cleisthenes. In 508 Cleisthenes returned, and his constitution was promulgated.

Aristotle reports in *The constitution*:

in order to mix the people and give the franchise to more of them, Cleisthenes divided the people into 10 new tribes in place of the 4 ancestral tribes;

he divided the country into 30 municipalities, and assigned 3 of them to each tribe by lot;

he enlarged the council to 500 members, each tribe contributing 50 (21);

his constitution made the state much more democratic than it had been under Solon's constitution; the rabble now decided everything (22).

In the *Politics* Aristotle adds:

Cleisthenes enrolled in the tribes many foreigners, and both free and slaves (III, 2).

With Cleisthenes the building of democracy is complete.

There are no elements of monarchy, there is not even a vestige of aristocracy any longer. The constitution of Cleisthenes is democratic through and through.

Shortly after that time Athens was the state of 30 000 citizens. In the time of Cleisthenes it was the state of close to 30 000.

All the close to 30 000 sat in the popular assembly. By law. And in fact, if they chose to.

The state continued to be governed by 9 archons, a council continued to be the guardian of the laws. But all magistracies and especially the highest were now open to all citizens, all the close to 30 000. All the close to 30 000 now elected all magistrates and especially the highest. Any of the close to 30 000 could now be elected to any of the magistracies and especially the highest. To sit in the council, enlarged to 500, residence alone now qualified the citizens.

Most radically, Cleisthenes abolished the ancestral tribes, created new tribes, and assigned the people to each of the new tribes by lot.

Residence alone became the qualification for citizenship.

Foreigners, and both free and slaves, became citizens.

So, now, to be the leader of Athens was to be the leader of the people, and to be the leader of the people was to be the leader of Athens. And to be the leader of the people was not to hold office, it was to hold sway in the popular assembly.

So, the leaders of the people will become orators, and orators will become the leaders of the people. So, further, teachers will appear to make the young into orators, and thus into the leaders of the people.

The people now decided everything. Or, as Aristotle has it, the rabble now decided everything.

And Athens will become yet more democratic, and yet more, and yet more. But no other state will ever become nearly as democratic as Athens became with the constitution of Cleisthenes already.

Again, victory was first, constitutional development followed. The campaigns of Miltiades in the north – continuing the expansion which had begun under Solon and accelerated under Pisistratus – were first. Then Cleisthenes – continuing the legislation which had begun with Draco, and accelerated with Solon – once again changed the laws.

In a little over a century Athens had produced three great lawgivers. Building on one another's labors, too.

And the rise of Athens continued, and contin-

ued to accelerate.

Looking for help for the Ionian revolt, Aristagoras went to Sparta. He did not fool Cleomenes. So he went to Athens, spoke to the assembly of the people, said the same things that he had said to Cleomenes, and because it is easier to fool many than to fool one, he fooled 30 000 Athenians. The Athenians voted to support him with 20 ships.

There was another reason the Athenians were fooled. The rise of Sparta rested on its dominion of the Peloponnese, and the Peloponnese was far from the great king. The rise of Athens had come to rest on expansion in the Aegean, and the Aegean bordered the great king's domain. Thrace, too, where Miltiades had campaigned, had become a tributary of the great king.

The Ionian revolt was crushed.

Darius sent heralds throughout Greece to demand earth and water. The Athenians threw the heralds in jail and later killed them. The Spartans, shrewder on this occasion than the Athenians, threw the heralds into a well to fetch earth and water for the king.

So in 490 Darius sent an army under Datis against Athens and Sparta. It sailed across the Aegean, pillaged the islands, and landed in Attica.

Miltiades, at Marathon, defeated Datis.

It is the first victory unambiguously anticipating tactics.

The source is Herodotus (VI, 110-3).

Miltiades faced numerically superior foe. He arranged his men in a line, but thinned his center, and put his best men on both his flanks, right and left. And as his foe broke his center, both his flanks fell on the flanks of his foe, and destroyed him.

It is the first pincer movement.

The citizen-soldier had become a weapon as formidable in Athens as in Sparta.

Victorious over the great king, Athens now rivaled Sparta in the field.

And Athens was already unrivaled on the sea.

Thucydides writes: Themistocles first told the Athenians that their fortune is on the sea (I, 93).

Themistocles had been archon in 493, and had begun the expansion and fortification of the harbor at Piraeus.

In 483, Aristotle reports in *The constitution*: the silver mines in Thrace were discovered, and the state made a profit of 100 talents; some wanted to divide the money among the people; Themistocles took the money, and had 100 triremes built (22).

Athens became the greatest naval power on earth, by far.

One generation earlier, the tyrant of Samos Polycrates was the first mortal to try to master the sea. He had 100 fifty-oared ships.

Thucydides reports: triremes were first built just before the Persian war (I, 14).

The trireme was a one-hundred-and-seventy-oared weapon, armed with a bronze ram, of mass of 40 tons and speed, in the hands of seasoned oarsmen, such as the Athenian citizens all became, of 9 knots.

Athens discovered this weapon.

And Athens welded that other weapon, the citizen-soldier, into this weapon.

The trireme required a crew of 200. Themistocles built 100 triremes. 100 triremes required crews of 20 000. 20 000 was two thirds of all able-bodied men in the state, or what was the same in this state, two thirds of all members of the popular assembly.

After Marathon, Darius began preparing an expedition to lead against Athens and Sparta himself. He died, and Xerxes continued the preparation.

In 480 the great king embarked on the expedition. He led 1 700 000 men and more than 1 207 ships.

He vanquished the 300 at Thermopylae. The Greek navy retreated from Artemisium.

The Athenians evacuated their city, moving *en masse* to Salamis.

Xerxes entered Athens, pillaged it, and offered terms. The Athenians refused the terms.

At Salamis, the Greek navy, under Themistocles, defeated decisively the great king's navy.

It is the second victory unambiguously anticipating tactics.

The source is again Herodotus (VII, 75-91).

Xerxes had 1 207 ships. Themistocles commanded 380 ships. He had the advantages of a more unified command, and of seasoned crews, experienced in ramming and boarding. But he

faced vastly superior numbers. Themistocles tempted his foe into the narrow channel between Salamis and the mainland, where his foe lost the advantage of numbers, was congested and disordered, and Themistocles destroyed him.

Herodotus reports: the Athenians thought Themistocles wise before the victory at Salamis already, after the victory they thought him the wisest (VIII, 110); indeed, all Greece thought him the wisest of all Greeks; the Spartans awarded him the finest chariot for his wisdom (124).

And it was an Athenian victory. The wisest of all Greeks led the Greek navy. The 380 ships in the Greek navy were led by 180 Athenian triremes. And the 180 Athenian triremes required crews of 36 000. Themistocles led in battle all members of the popular assembly, not one less.

The state of Athens, too, is a major step of advance in the development of warfare.

After Salamis, Mardonius entered Athens again, and again offered terms. The Athenians stoned to death the councilor who proposed considering the terms.

In 479, Pausanias defeated the Persians at Plataea. Leotychidas defeated them at Mycale.

The victory of Athens and Sparta was decisive and complete.

And the following couple of generations are the peak of Athens. An empire was built. Democracy was brought to perfection. Philosophy flourished. Poetry flourished. All art flourished.

After the victory, Sparta and Athens both pressed hard their advantage, and Athens very much harder.

Pausanias captured Byzantium, on the Bosphorus, and ventured into Asia Minor.

In Athens, Cimon, the son of Miltiades, became the leader of the people. In 478 Cimon brought several of the cities on the islands and on the coast of Asia Minor, just liberated from the great king, or to be liberated, into a formal alliance, its treasury to be kept on the sacred island of Delos. Thucydides writes: the Athenians decided which city will contribute money, which city will contribute ships (I, 96). In particular, the Athenian Aristides assessed the tribute which each ally owed to the alliance. Armed with the Delian alliance, Cimon expelled Pausanias from the east. He brought more cities into the alliance,

and more. In 466 Cimon defeated the Persians at the Eurymedon, in southern Asia Minor. The entire Aegean littoral, east, north, and west, and all the islands were now firmly in the Delian alliance.

After 463 Pericles was the leader of the people. All attempts of the allies to leave the alliance Athens suppressed. It began planting among its allies colonies of its own citizens retaining their Athenian citizenship. It began leading its allies in operations in Cyprus, in Egypt, in Libya, in the Black Sea. In 454 Pericles transferred the treasury of the alliance from the sacred island of Delos to the secular city of Athens. Athens began operations to extend its alliance on land in Boeotia, and further north in Thessaly. The attempt was repulsed, and in 446 Sparta and Athens concluded a thirty-year peace. Athens continued bringing more cities into its alliance. By 431, when the greatest war came, Athens had brought some 200 cities into its alliance.

The citizen-soldiers manned the ships, fought on sea and on land, gained allies, and more allies, suppressed all attempts of their allies to secede, planted armed colonies among their allies, kept leading their allies further and further afield.

Democracy flourished. It became the law: that the generals leading the army be elected (Aristotle, *Constitution*, 22);

that the crews of the triremes be paid (23); that service in the courts be paid (24).

In 462 Ephialtes changed the constitution:

he stripped the Areopagus of its powers, and divided them between the popular assembly, the council of 500, and the courts (25).

By this time it had become the law that:

20 000 people be maintained by the state (24).

A coveted benefit for some time, Athenian citizenship became too coveted a benefit. In 451 Pericles changed the law:

to the franchise were admitted only those born to both a citizen father and a natively born mother (26).

But the empire continued to expand, democracy continued to man the ships, and to the benefit of the Athenian franchise more continued to be admitted, and more. By 431, when the greatest war came, Athens was the state of some 100 000 citizens.

The number is an inference from the following facts. Aristotle reports:

the money collected from the allies maintained

20 000 people;

6 000 jurymen,

1 600 archers,

1 200 cavalrymen,

500 members of the council,

500 guards of the docks,

50 guards of the Acropolis,

700 magistrates at home,

700 magistrates abroad,

2 500 infantrymen,

as well as 20 guard ships,

as well as the ships collecting the tribute, with crews amounting to 2 000,

as well as indigent people, orphans, jailers, and others;

it was in this way that the people earned their livelihood (24-5).

Thucydides reports:

Athens entered the great war collecting 600 talents annually from its allies, with 6 000 talents in its treasury; there were

16 000 infantrymen in garrisons abroad,

13 000 infantrymen guarding the city,

1 200 cavalrymen,

1 600 archers,

as well as 300 triremes in active service (II, 13).

300 triremes in active service required crews of 60 000.

Aristotle writes: a citizen is who shares in the deliberative or judicial government of the state. And the Athenian shared in the government of the state in the most direct of ways, by holding an office. Without insisting too much on either the deliberative or the judicial character of the office, every Athenian held an office. And it may seem that some of the offices were more civil than military, say, jurymen, members of the council, magistrates at home, magistrates abroad. That others were more military than civil, say, infantrymen, cavalrymen, archers. That yet others were more indeterminate, say, guards of the docks, guards of the Acropolis, jailers. But such distinctions have to be judged altogether irrelevant for the citizen-soldier, and rather soldier-citizen. The citizen-soldier, and rather soldier-citizen, was first and foremost the crew of a trireme, paid by

the state, and exercising indiscriminately the more civil duty of collecting the tribute from the allies and the more military duty of distributing the tribute among the citizens.

Athens entered the great war collecting 600 talents annually from its allies. At the same time the great king collected 14 560 talents annually from his empire. The great king's was the empire of some 25 000 000 people. The citizen-soldier's was the empire of some 1 000 000 people. Proportionately, then, the citizen-soldier collected from his empire a little more, a little, yet more, than the great king collected from his.

In 454 Pericles transferred the treasury of the alliance from the sacred island of Delos to the secular city of Athens. And he put the treasury to good use. Pericles built Athens into the most magnificent city on earth, its magnificence still attested, after the ravages of two and a half millennia, by its ruins.

The whole city manned the ships. And the whole city went, at the Dionysia, to the theater.

To watch tragedy. To watch Aeschylus. And Sophocles. And Euripides.

To watch also comedy. To watch Aristophanes. And to laugh at the leaders of the city, past, present, and aspiring. The audience of Aristophanes were after all politicians, members of the popular assembly all. To laugh also at the poets, Homer, Hesiod, Aeschylus, Sophocles, Euripides. The audience of Aristophanes, the politicians, were after all also lovers of poetry, they had all been going to the theater for more than one century. To laugh also at the philosophers. At Thales (*Clouds*, 180; *Birds*, 1009), at Protagoras (*Clouds*, 658-79, 889-1104), at Gorgias (*Birds*, 1700-2), at Hippodamus (*Knights*, 327), at Antiphon (*Wasps*, 1267), at Meton (*Birds*, 992-1020), at Prodicus (*Clouds*, 360; *Birds*, 692), at Socrates (*Clouds*, *passim*), at Thrasy Machus (fr. 206), at Diogenes of Apollonia (*Clouds*, 227). The audience of Aristophanes, the politicians, the lovers of poetry, were also, if not lovers of philosophy, very well versed in philosophy.

And there is, at this time, in Athens, a major development in philosophy. The philosophers had been scattered throughout the cities. At this time, the philosophers came to Athens. Philosophy had been theoretical, physics and mathematics. At this

time, in Athens, philosophy became also practical, politics and ethics.

And the relation of democracy, and its empire, on one side, and the beginning of practical philosophy, and its rise to political prominence, on the other side, is of cause and effect.

The philosophers came to Athens to teach. Protagoras, Gorgias, Hippias, Prodicus all came to Athens, all to teach. Protagoras told the young man: young man, if you come to study with me, from the day you come, you will go home every day a better man than the day before (Plato, *Protagoras*, 318a-b). In particular, you will go home every day a better speaker than the day before. The philosophers taught the young man to speak. To become an orator, and hence the leader of the people.

And political philosophy begins with Protagoras. Protagoras first wrote on the state.

At this time, Athens itself produced Socrates. And ethics begins with Socrates. Socrates first said: earth and air and other such things are not the true causes of things; the true cause of things is what is for the best.

And Socrates also taught. And Socrates did not just teach the young man. As the Platonic dialogues dramatically attest, Socrates taught the whole city, one and all Athenians.

Socrates, the citizen-soldier, served with distinction at Potidaea in 432, at Delium in 424, at Amphipolis in 420.

This is how he describes the duty to philosophize: wherever one is stationed by the general, there one must remain and face danger without thought for death or anything else except disgrace (*Apology*, 28d-e). Clearly, had civil and military duties been distinct, to philosophize would have been military duty. As it was, it was civil and military duty indiscriminately.

And the city was taught successfully by the philosophers.

Pericles praises the Athenians: our city is the schoolmistress of all Greece (Thucydides, II, 40-1).

Later on, Plato will argue that philosophers should rule the city. At this time, philosophers did rule the city.

Thucydides, who wrote the *History*, was a general in 424.

Antiphon, who made the first attempt to square the circle with an anticipation of the method of exhaustion, was a leader of the oligarchy – the 400 – which took over the city in 411. He was executed when the oligarchy was overthrown.

Critias, who said that a wise man discovered the fear of gods to frighten evildoers in their thoughts, was a leader of the oligarchy – the 30 – which took over the city in 404. He fell leading the cavalry in the battle which overthrew the oligarchy.

And that, indeed, the whole city was successfully taught by the philosophers the fact shows, if negatively, that the whole city, the popular assembly, no less, concerned itself to indict for impiety Anaxagoras and jail him (Plutarch, *Pericles*, 32), to indict for impiety Protagoras and burn his books (Cicero, *Gods*, I, 63), to indict for impiety Socrates and put him to death.

In his defense, at his trial, Socrates told the Athenians that for the service of teaching them how to live they should honor him as they honor Olympic victors (Plato, *Apology*, 36d-e). That was in 399, after the Athenians' defeat in the greatest war. So the Athenians put him to death. Had they won the greatest war, they may well have honored him for the service of teaching them how to live as they honor Olympic victors.

The greatest war began in 431.

Beginning in 431, Archidamus besieged Athens on land. Beginning in 424, Brasidas won the northern Aegean coast. In 418 Agis defeated an Athenian advance in the Peloponnese. In 415 Athens embarked on an expedition to conquer Sicily, two years later Gylippus had defeated the expedition. Beginning in 413, Agis resumed the land siege of Athens. In 412 Sparta allied itself with the great king. Beginning in 408, Lysander began turning the Athenian allies in Asia Minor and on the islands, in 405 he destroyed the Athenian navy at Aegospotami, and blockaded Athens on the sea as well. In 404 Athens capitulated.

Sparta won the greatest war.

The decisive cause is generalship. Athens produced fine generals. Cleon, Nicias, and Alcibiades were the leaders of the people during the war, and all three were fine generals. Cleon fell in Thrace. Nicias fell in Sicily. Alcibiades fell in Asia Minor. Sparta produced more fine generals,

and finer generals.

It was the greatest war ever, the first war of many dozens of battles, many dozens of campaigns, fought on land and on sea, across 1 000 km from Sicily to Asia Minor, over twenty-seven years.

That this kind of war has since been decisive in the development of the state is one consequence.

Athens, the state of 100 000 citizens, entered the war with an empire of 200 cities, collecting a tribute of 600 talents annually, with 6 000 talents in its treasury, with 31 800 soldiers on duty, with 300 triremes in active service. Athens entered the war with substantially greater resources than its foe, and substantially greater capability to maintain its substantially greater resources. Sparta, the city of 8 000 men, entered the war with greater determination, and greater capability to maintain its greater determination. They were all men like that.

Determination vanquished resources. And that determination will vanquish resources is another consequence.

It was a war also of constitutions. And democracy in Athens proved very resilient. In 411, when the war was beginning to be lost, democracy was overthrown and an oligarchy set up, the oligarchy of the 400. In 410, the oligarchy was overthrown, democracy restored. In 404, when Athens capitulated, Lysander again set up an oligarchy, the tyranny of the 30. In 403, Thrasybulus overthrew the oligarchy, and restored democracy. This restoration of democracy Aristotle counts the eleventh change of the constitution of Athens, the constitution under which: the people made themselves the masters of everything, ruling everything by their votes in the popular assembly, and the constitution which continued to the day of Aristotle's writing.

Democracy withstood defeat in the war, and continued after the war. Democracy yet lost the war. And that democracy lost the war is another consequence. Had democracy won the war, the philosophers may have admired it more. More important, had democracy won the war, it will have had to continue to extend the franchise. And there has never since been a franchise like the Athenian before the war.

Athens built an empire of 200 cities. It was the closest all the hundreds of Greek cities – the cities of Homer and Hesiod, of the poets, of the wise men, of the philosophers – came to unity. Athens lost the war, and the empire. And this is another consequence. All the hundreds of Greek cities will never unite themselves. They will be united by the barbarians, the Romans.

And it is yet another consequence that philosophy lost its political prominence. For good.

The greatest war ended in 404.

Sparta had won the war with the great king as an ally. After the war Sparta continued operations in Asia Minor, against the great king now, with the proclaimed end of liberating the Greek cities from the great king. Athens, with Thebes and Corinth, joined the war on the side of the great king. In 394 Agesilaus defeated Athens, Thebes, and Corinth at Coronea. In 388 Sparta allied itself again with the great king, and forced its foes to accept, in 386, the king's peace. The king's peace excluded Sparta from Asia Minor, but Sparta remained the hegemon of the Greek cities.

Athens began the attempt to rebuild its empire. In 378 Timotheus brought 6 cities into an Athenian alliance. In the following years he continued to campaign on the sea, to bring more cities into the alliance.

The attempt to rebuild the empire proved ineffectual. Thebes, not Athens, destroyed the dominion of Sparta. Then Macedon rose, and conquered all Greece.

In 371 at Leuctra Thebes defeated Sparta. Epaminondas had discovered tactics. Athens allied itself with Sparta. In 362 at Mantinea Epaminondas defeated Sparta and Athens.

Athens continued to campaign on the sea. In 357 its allies revolted, and in 355 vanquished Athens.

In 359 Philip had become the regent, and in 356 the king of Macedon. By 354 he had conquered the north Aegean coast. By 352 he had conquered Thessaly, further south. By 346 he was in control of Delphi, further south, menacing now Thebes and Athens. Philip had developed very greatly logistics and tactics.

In Athens leaders of the people were Demosthenes and Aeschines. They were both great orators, and Demosthenes was the greatest. The

pressing issue in the popular assembly, and steadily more pressing, was the Macedonian menace, Philip. The speeches of Aeschines were more pacific, the speeches of Demosthenes more bellicose. In the *Third Philippic*, for instance, in 341, Demosthenes exhorts the Athenians: not only is Philip not a Greek, or related to the Greeks, he is not even a barbarian from some place one would mention with respect; he is a pestilential knave from Macedon, where one cannot even buy a decent slave (31).

In 338 at Chaeronea Philip vanquished Athens and Thebes, and this was the end of the independence, and importance, of the states of the Greek cities. Aeschines and Demosthenes were both great orators, and Demosthenes was the greatest. Philip was a great general, and in fact the greatest.

Defeat in the Peloponnesian war thus proved irreversible. In the two-odd generations after the war the state of Athens was reduced, by Sparta, Thebes, and Macedon, to insignificance.

And Athens will never be an important state again.

Democracy continued in those two-odd generations. As Aristotle, a foreigner resident in Athens at that time, describes its constitution at that time: the people made themselves the masters of everything, ruling everything by their votes in the popular assembly. But there was ever less of which the people made themselves the masters, ever less which they ruled by their votes in the popular assembly.

There was no Aeschylus in the theater any longer, no Sophocles, no Euripides. No Aristophanes.

Philosophy continued to flourish in Athens. This was the time of Xenophon. Of Plato. The time also when Diogenes came to Athens. Eudoxus came to Athens. Aristotle came to Athens. Indeed, all philosophers came to Athens. But philosophy now retreated into schools. Plato founded the Academy c. 385. Aristotle founded the Lyceum in 335. The philosophers had taught the whole city. Now they taught one another. Philosophers had ruled the city. Now they argued that they should rule the city. And philosophy has always since been produced by schools.

And yet, as it was being reduced to insignifi-

cance, Athens, the schoolmistress, had one last lesson to impart.

The Alexandrian grammarians, when they compiled the canons of the epic poets, of the lyric poets, of the tragic poets, of the comic poets, compiled also the canon of the Attic orators. 'Attic' does not refer to Attica. It refers to a style, in opposition to Asiatic, the mixed style, Attic is the pure style, the best. And the canon of the Attic orators, the best, are these 10, in chronological order:

Antiphon	leader after 411,
Lysias	court speeches,
Andocides	leader after 403,
Isocrates	leader after 380,
Isaeus	court speeches,
Hyperides	leader after 362,
Demosthenes	leader after 354,
Aeschines	leader after 347,
Lycurgus	leader after 338,
Dinarchus	leader after 322.

All 10 wrote court speeches. 8 of the 10 were leaders of the people. 1 of the 10, Demosthenes, was an important leader of the people. 1 of the 10, Antiphon, is a very important philosopher.

As to the time of the 10, Athens was a great state for two-odd centuries, from the legislation of Draco to the greatest war. And the 10 best orators are all after the two-odd centuries of Athenian greatness. But the 10 best orators are all in the following one century. None of the 10 best orators is after that century. And their canon is in Quintilian (X, 1.76-80), four centuries after that century, and in Hermogenes (*Kinds*, II, 11), one and a half centuries later still. As it was being reduced to insignificance, the schoolmistress yet produced the best orators.

Athens discovered democracy and developed it to perfection. It discovered the trireme and manned 300 triremes. It built the first maritime empire. It discovered tragedy and comedy. It discovered politics and ethics.

Athens was a great state.

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Thebes.

The particulars are,

Pelopidas	leader 378-64,
Epaminondas	leader 371-62.

Thebes was the birthplace of Heracles. Oedipus was the king of Thebes. West of Thebes is mt Helicon, the home of the muses.

In fact, Thebes is the main city of the country of Boeotia, another small country, and just north of the country of Attica. Thebes is but 50 km northwest of Athens.

And this explains why – until 371 – Thebes remains not important.

10 km south of Thebes, still in Boeotia, is the city of Plataea, and beginning in the time of Pisistratus, Athens controlled Plataea.

In the Persian war, the Thebans supported the great king, and at Plataea fought in the Persian army to the end (Herodotus, IX, 31-67).

After the Persian war, Athens made a sustained attempt to expand its alliance in Boeotia. The attempt was repulsed, and in 446 Sparta and Athens concluded a thirty-year peace. Thebes brought the smaller Boeotian cities into a confederacy under itself.

In 431 Thebes tried to seize Plataea, Athens repulsed the attempt, garrisoned Plataea, and the greatest war began. Thebes was an ally of Sparta in the war.

After the war, Sparta dominated Thebes. Sparta was now fighting the great king to liberate the Greek cities of Asia Minor. Thebes, with Athens and Corinth, joined the war on the side of the great king. In 394 Agesilaus defeated Thebes, Athens, and Corinth at Coronea. In 388 Sparta allied itself with the great king, and forced its foes to accept the king's peace.

In 386 Sparta imposed on Thebes the dissolution of the Boeotian confederacy. In 382 Agesilaus occupied Thebes.

In 379 Thebes reestablished the Boeotian confederacy. Sparta demanded its dissolution, and in 371 Cleombrotus marched against Thebes to enforce the dissolution.

One of the leaders of Thebes, and hence of the Boeotian confederacy, was Epaminondas.

In 371, at Leuctra, Epaminondas defeated Sparta.

In 370 Epaminondas invaded the Peloponnese, in 369 he invaded it again, in 367 he invaded it again. He dissolved the Peloponnesian league, first built by Cleomenes one and a half centuries earlier. He detached from Sparta even Messenia,

first won by Theopompus three and a half centuries earlier.

Beginning in 369, Pelopidas campaigned in Thessaly, north of Boeotia, and defeated Macedon, further north, forcing it to surrender hostages. One of the Macedonian hostages was Philip. In 364 Pelopidas fell in Thessaly.

Athens allied itself with Sparta.

In 362, at Mantinea, Epaminondas defeated Sparta and Athens.

He fell at Mantinea.

In 359 Philip became the regent, in 356 the king of Macedon. By 352 he had conquered Thessaly, by 346 he was in control of Delphi, west of Thebes, in 338 he defeated Thebes and Athens at Chaeronea, and became the master of all Greece.

The rise of Thebes is the most meteoric.

Before 371 Thebes is a state of little consequence, of no consequence at all a few decades earlier. After 362 Thebes is again a state of little consequence, of no consequence at all a few decades later. In nine years, between 371 and 362, Thebes becomes the undisputed hegemon of all Greek states. It destroys Sparta. It vanquishes Athens. It defeats Macedon, too.

The cause is the discovery of tactics. Epaminondas discovered tactics.

The Spartans had been invincible in the field for two centuries. The hoplites, arranged in lines, the best men in the front line, shield in the left hand, sword in the right, fought in a body, pressing steadily harder to the right, wheeling the left flank of the foe, and until the foe turned to flight.

Clausewitz writes: tactics is the theory of the use of troops in battle (*War*, II, 1).

And this is how Epaminondas used troops in battle.

The sources for Leuctra are Xenophon (*History*, VI, 4), Siculus (XV, 51-6), and Plutarch (*Pelopidas*, 20-3).

Cleombrotus led 10 000 men, Epaminondas faced him with 6 000. Cleombrotus arranged his men in a line, 12 men deep, his best men on his right. Epaminondas arranged his men obliquely, his left close to his foe, his right further behind. He thinned his right and massed his forces on his left, 50 men deep. He left his best men, the 300 of the sacred band under Pelopidas, in reserve.

When the battle engaged, the mass of Epaminondas's left stopped the advance of Cleombrotus's right, prevented its wheeling, pinned it, Pelopidas with the 300 charged its flank, and Epaminondas won a crushing victory.

The sources for Mantinea are Xenophon (*History*, VII, 5), Polybius (IX, 8), and Siculus (XV, 84).

Agesilaus led the Spartans and their allies. He again arranged his men in a line. Epaminondas had integrated his heavy infantry, light troops, and cavalry. He massed his forces on his left in a wedge, and, led by a cavalry charge supported by light troops, the wedge broke the line of his foe, turned it, and won a crushing victory.

Marathon, in 490, and Salamis, in 480, are the major steps toward the discovery of tactics. These are the first battles in which the deliberate use of troops vanquished numbers.

Leuctra, in 371, and Mantinea, in 362, are the discovery of tactics. These are the first battles in which the systematically deliberate use of troops vanquished both numbers and determination. With these battles the theory of the use of troops in battle begins.

Epaminondas fell at Mantinea.

Philip was a hostage in Thebes. Trogus reports: Philip lived for three years in the house of Epaminondas, the great philosopher and general (VII, 5).

And Philip developed tactics, as well as logistics, very greatly further.

Which is in turn the cause of, both, the meteoric rise of Macedon, which had never been a state of any consequence, and the catastrophic fall of all the Greek states, which had been for two centuries of the greatest consequence, including Thebes.

And the cause of the discovery of tactics are war and history jointly.

For two centuries Sparta and Athens had greatly advanced warfare. They had discovered and brought to perfection the heavy infantry. They had discovered and brought to perfection the trireme. They had discovered and brought to perfection that most formidable of weapons, the citizen-soldier. They had produced a long series of fine generals and very fine generals. They had vanquished the great kings. They had fought the

greatest war. Nor had they relented after the greatest war. By 371 they had been at war continuously, counting back only to the beginning of the greatest war, for two-odd generations.

And these two-odd generations are the time of the greatest advance in history. The time of Herodotus and then of Thucydides. And the *Histories* is a textbook of war, it is the history of the expeditions of the great kings and of the Persian war, and in great detail of the battles of Marathon, Thermopylae, Artemisium, Salamis, Plataea, Mycale. And the *History* is a textbook of war, it is the history of the greatest war, and in great detail of its battles and campaigns, the land siege of Athens, the assault on the Peloponnese, the fight for the north Aegean, the renewed assault on the Peloponnese, the Sicilian expedition, the renewed land siege of Athens, the beginning of operations in Asia Minor, throughout the operations on the sea.

It has to be concluded that nothing can have prevented the discovery of tactics.

And Epaminondas – with Trogus: the great philosopher and general – discovered tactics.

It is at this time, also, the time of Epaminondas, that Xenophon wrote the *Cavalry commander*, the first treatise concerned specifically with the conduct of war. In the next generation, Aeneas Tacticus wrote the next treatise concerned specifically with the conduct of war, *On the defense of fortified positions*.

What the constitution of Thebes was, such as it was, is not important.

Trogus writes also: the glory of Thebes was born and died with one man (VI, 8).

Polybius writes: the rise of Thebes was not due to its constitution, but to the excellence of its leading men; its success began with Epaminondas and Pelopidas and ended with them (VI, 43).

dxxvii

Macedon.

The particulars are,

Amyntas	prince c. 512-498,
Alexander	prince c. 498-54,
Perdiccas	prince c. 454-13,
Archelaus	prince c. 413-399,

Amyntas	prince c. 393-70,

Philip prince 359-36,

Alexander prince 336-23.

The country of Macedon is in the north. North of Attica is Boeotia, north of Boeotia are Phocis and Locris, north of Phocis and Locris is Thessaly, Thessaly is bounded in the north by mt Olympus. Mt Olympus is the throne of Zeus. And beyond mt Olympus is the country of Macedon.

The country of Macedon is also inland. The littoral was colonized by the Greek cities.

And the development of the state was slow to reach the inland countries in the north. Macedon, as well as Thrace, east of Macedon, as well as Illyria, west of Macedon, all long remained countries, which could be described, as Demosthenes describes Macedon in 341, where one cannot even buy a decent slave.

The 7 princes in the enumeration – 5 not important, 2 very important – are not all princes of the house of Macedon. This royal house, like all royal houses, and more than most, begins long before it emerges into fact, and continues undisturbed through all calamities. So the first Amyntas in the enumeration is the successor – as the Macedonians tell the story, Herodotus notes (VIII, 138-9) – of 5 earlier kings. One of these is a Philip (*id.*). The second Amyntas in the enumeration was, in fact, the father of Philip, the great Philip, in the enumeration. In the 6 years or so before this Amyntas, Macedon descended into great disorder, yet there are in the house of Macedon 6 kings or so in these 6 years or so. In the 11 years between Amyntas and his son Philip, Macedon again descended into great disorder, yet there are in the royal house not fewer than 3 kings in these 11 years as well. So, when all those kings, who either cannot be burdened with the presumption of reality, or, if burdened with that presumption, cannot be burdened with the presumption that they were real kings, when all those kings are counted, as they always are for the sake of obfuscation, and are all indexed, the second Amyntas, the father of Philip, becomes Amyntas III, his son Philip, the great Philip, becomes Philip II, and his son Alexander, the great Alexander, becomes Alexander III.

Macedon, then, emerges from obscurity under Darius. And in the following one and a half

centuries, until Philip, Macedon remains very small, emerging from obscurity now and again, now as a tributary, now as a minor ally, now of one state campaigning nearby, now of another.

In particular, Macedon emerges from obscurity with Amyntas. Darius sent envoys to the countries north of the Aegean, too, to demand earth and water. And Herodotus has two things to report about Amyntas. One is a story of debauchery and murder (V, 18-20). The other is that Amyntas gave the envoys earth and water (*id.*).

Next his successor Alexander emerges from obscurity. Xerxes invaded Europe. When he reached Macedon, the Macedonians joined his army (VII, 185). Later in the expedition, Alexander was the envoy sent by the Persians to the Athenians to offer terms (VIII, 136-43). The Athenians refused the terms.

Next his successor Perdiccas emerges from obscurity. – The source is now Thucydides. – Just before the Peloponnesian war, Perdiccas became the ally of the Athenians. When Brasidas began operations in the north, Perdiccas became the ally of the Spartans. When the Athenians tried to reestablish their position in the north, Perdiccas became again the ally of the Athenians. – Perdiccas also marches in one of Plato's motley armies. Are we, Socrates asks, to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias, who said that justice is to give everyone his due, and fight against Periander, Perdiccas, Xerxes, and Ismenias, who said that justice is to do good to your friends and harm to your foes? And they are motley armies. In the army of the good march two of the seven wise men and a fine poet, in the army of the bad march the great king, the tyrant of Corinth, Perdiccas, and a Theban politician less consequential even than Perdiccas.

His successor Archelaus: built fortresses and roads, and organized the cavalry and infantry, making his country stronger than it had been under his predecessors (Thucydides, II, 100).

But not too strong yet. Archelaus was murdered, and Macedon descended into internecine strife.

Amyntas restored order. – Xenophon is now the main source. – Amyntas fought the Illyrians in the west, and the Dardanians in the north. Sparta continued to be the hegemon of the Greek

states, Athens was now trying to rebuild its empire. Amyntas became the ally of the Athenians, then the ally of the Spartans, then again the ally of the Athenians. When the Thessalians, under Jason of Pherae, assaulted Macedon, he became the ally of Jason.

After Amyntas Macedon descended into disorder again, on the verge of destruction this time. The Illyrians continued to assail the country from the west, the Dardanians from the north. Thebes was now the hegemon of the Greek states. Pelopidas defeated Macedon, and forced the surrender of hostages. One of the hostages was Philip.

As Polybius writes of Philip and Alexander: with their indefatigable energy they built a petty kingdom into the greatest and most glorious kingdom on earth (VIII, 10).

It was a petty kingdom. It was indefatigable energy. And it was the greatest and most glorious kingdom on earth.

The sources are now very many.

Philip lived for three years in the house of Epaminondas, the great philosopher and general.

And Philip became a greater philosopher and general. He advanced further tactics, the theory of the use of troops in battle. He greatly advanced logistics, the theory of the mustering, training, and maintenance of troops for battle. He won very many battles. And he built a great and glorious kingdom, if not yet the greatest and most glorious.

Philip is a synthesis of all earlier advances in warfare. The Spartans had developed the heavy infantry into a single massive weapon, fighting in a body, pressing forward, wheeling its foe. Philip armed the heavy infantry, the phalanx, with 6-m pikes, and built it into a tighter body, pressing evenly forward, difficult to wheel, quick to pin its foe. The phalanx was also readily divided and deployed into smaller units. He enlarged the cavalry, and trained it to fight in a body as well. He enlarged the light infantry. And he integrated the three, heavy infantry, cavalry, and light infantry. He trained the light infantry to guard the flanks of the phalanx, and to support the charges of the cavalry. He trained the cavalry to penetrate the heavy infantry of the foe pinned by the phalanx.

With Philip troops become a systematically built weapon of sophistication and complexity, ready to be deployed in battle with much greater flexibility and force than any earlier weapon. They become the weapon demanded by tactics. And they become a weapon deployed, in fact, by superb generalship, with much greater flexibility and force than any earlier weapon.

So Philip's were not citizen-soldiers. But his were many soldiers, mustered and trained for determination, armed with tactics, and armed with superb generalship, too.

So they became a weapon, when deployed as a single unit, irresistible on even ground, when deployed into smaller units, irresistible in rugged terrain.

So the poorly organized troops of the neighboring peoples in the west, north, and east, which had always assailed Macedon, the weapon swept away without even exerting itself. The better organized armies of the states in the south, which had always dominated Macedon, the weapon destroyed without exerting itself too much either. The same weapon took Alexander to the Ganges.

In 359 Philip became the regent of the minor king of Macedon.

In 358 he defeated the Illyrians in the west.

In 357 he captured Amphipolis and Pydna, and gained access to the Aegean coast.

In 356 he installed himself the king of Macedon.

In 356 as well he captured Potidaea, in 354 he captured Methone, and gained control of the north Aegean coast.

In 352 he conquered Thessaly in the south.

In 346 he concluded the second sacred war, and gained control over Delphi, south of Thessaly.

Between 346 and 342 he defeated again the Illyrians in the west and the Epirotes south of the Illyrians, and gained access to the Adriatic coast.

Between 343 and 341 he defeated the Thracians in the east, and reached the Black Sea coast.

In 340 he besieged Byzantium, on the Bosphorus.

In 338, at Chaeronea, he defeated the alliance of the Greek states led by Thebes and Athens, and became the master of Greece.

At Chaeronea, Philip massed his phalanx on

his right, thinned his center, and massed his cavalry, led by Alexander, at 18, on his left. He feigned retreat of the phalanx, when his foe advanced in pursuit, the phalanx pinned him, the cavalry charged his flank and broke his line, the phalanx advanced, and destroyed him.

In 336 Philip was assassinated.

In 359 Macedon was besieged on all sides, on the verge of destruction. Its authority had never extended more than 100 km west, or north, or east, or south of the city of Pella. Twenty-three years later, in 336, Philip was the master of the Balkan peninsula. His undisputed authority extended more than 700 km north to south, from the Balkan mountains to the Peloponnese, more than 700 km west to east, from the Adriatic to the Black Sea. In twenty-three years Philip enlarged the domain of Macedon by substantially more than an order of magnitude.

And he organized his domain. In the conquered territories he installed military governors, stationed garrisons, and planted military colonies. After Chaeronea, he garrisoned Thebes, in Boeotia, Euboea, in the Aegean, Corinth, on the isthmus, and Ambracia, on the Adriatic, the four garrisons controlling all Greece. He built cities, Philippi, on the north Aegean littoral, controlling the littoral, Philippopolis, in the middle of the Thracian plain, controlling Thrace.

When he conquered Thessaly, he installed himself the archon of Thessaly. After Chaeronea, he assembled the Greek states into a formal league, with a joint council. The joint council elected him the hegemon of the league of the Greek states.

Alexander succeeded.

And Alexander advanced tactics more than any of his predecessors or successors. He campaigned further than any of his predecessors or successors. He conquered the greatest state and began building it into a yet greater state. Alexander is a cause also of a substantial advance in geography. He is a cause also of a major development, if not in this case an advance, in history.

He was educated by Aristotle.

In 336 Philip was assassinated, and he succeeded, at 20.

In 335 he pacified Thrace and Greece. In the north he campaigned to the Danube. In the south

he crushed an attempt of the Greek states to reassert themselves, razed Thebes, reassembled the league of the Greek states, and was elected the hegemon of the league. His base thus secured, he was ready to embark on the expedition in the east.

In 334 he embarked on the expedition, with the proclaimed end to conquer the state of the great kings.

Darius III was the great king.

Alexander crossed to Asia with 35 000 men, 30 000 foot and 5 000 horse.

He established his superiority on land immediately, defeating a large Persian force at the Granicus, in northwestern Asia Minor. He advanced down the Aegean littoral. The superior Persian navy controlled the coast, and thus his lines of communication. Alexander demobilized his navy, and pressed on land. He advanced through western Asia Minor. He ignored a Persian naval counteroffensive in the Aegean, and continued his advance in eastern Asia Minor.

In 333, at Issus, in southeastern Asia Minor, he defeated a very large Persian force, mobilized from the entire empire, led by Darius III himself. He reached the Euphrates. He then turned back to the coast. He invested Tyre, the main base of the Persian navy, and continued the siege for seven months. When Tyre fell, he had eliminated the threat to his rear on the sea.

In 332 he entered Egypt without resistance. Further west Libya submitted. He was now the master of the western half of the domain of the great kings.

In 331, at Gaugamela, across the Tigris, he defeated a yet larger Persian force, mobilized from the eastern half of the empire, led by Darius III. And he was now the master of the entire domain of the great kings. He entered Babylon, then Susa, then Persepolis. He burned Persepolis, in revenge for the sack of Athens by Xerxes in 480.

In 330 Darius III was murdered, and his body delivered to Alexander. Alexander, himself the great king now, buried his predecessor with all royal honors. His generals crushed the remaining pockets of resistance.

In 329 he marched east. Cyrus had reached the Amu Darya. Alexander reached the Syr Darya,

further north. He then turned south. Darius had conquered the Indus valley. Alexander crossed the Indus, defeated an Indian force, and continued further east.

In 326 he reached the Ganges.

He then turned back. Darius had sailed down the Indus, then west on the ocean. Alexander built a fleet, sailed down the Indus, sent part of his army with the fleet west on the ocean, and himself marched the rest of his army west on land.

In 324 he was back in Babylon, and organized his state.

In 323 he died, at 33.

Alexander very greatly advanced warfare.

He advanced logistics.

He invaded Asia with 35 000 men, 30 000 foot and 5 000 horse. These are the numbers recorded by Arrian (*Alexander*, 11). Plutarch writes: the lowest count puts the strength of his army at 30 000 foot and 4 000 horse, the highest count puts it at 43 000 foot and 4 000 horse (*Alexander*, 15).

Larger forces had been led. Not more victoriously, not further. Alexander led a force of some 35 000, and maintained it continuously, and recruited it continuously, an invincible weapon from the Danube to the Ganges, from the Danube to the Tigris in persistently hostile territory, from the Tigris to the Ganges at first in poorly explored territory, then in altogether unexplored territory.

Alexander is a decisive step toward the discovery of strategy.

Sparta's victory in the Peloponnesian war is the first unambiguous anticipation of strategy. Alexander's conquest of the empire of the great kings is the second and more unambiguous anticipation of strategy.

Alexander secured his base. In the field, he established immediately his superiority on land. He ignored the loss of his lines of communication on the sea, and pressed forward on land. He ignored the naval counteroffensive in his rear, threatening him with encirclement if defeated. He pressed forward, and delivered a crushing defeat on his foe. He turned back, invested the main naval base of his foe, and eliminated the threat to his rear on the sea. He established his authority in

all territories in his rear. He pressed forward, and delivered the decisive defeat on his foe. It had taken him 4 years to conquer the greatest empire that had ever been.

Tactics Alexander advanced more than any other general before or after.

At the Granicus, he set the phalanx on his left, the cavalry on his right. The cavalry attacked, feigned retreat, when the Persians advanced in pursuit, the phalanx fell on their right, the cavalry resumed its attack, and Alexander annihilated his foe. It is a modification of Philip's tactics at Chaeronea.

At Issus, Darius III had vast superiority in numbers. Alexander set the cavalry again on his right, the phalanx to the left of the cavalry. When the battle engaged, the phalanx pinned its foe, the cavalry rounded the Persian lines, charged their left, wheeled them, the phalanx charged as well, and Alexander achieved a crushing victory. It is the first battle of encirclement.

At Gaugamela, Darius III again had vast superiority in numbers. His army was arranged in a line. Alexander arranged his army in a short oblique line, his right in advance, and all his force massed on his right. When his foe advanced and engaged his left, Alexander charged with his right, with local superiority penetrated through the left of his foe, reached his rear, turned left, and attacked him in his rear. It is the paradigmatic battle of penetration.

Alexander very greatly advanced generalship.

The continuously victorious campaigns of Philip and Alexander from 358 to 324, over thirty-four years, produced a long series of fine generals, as well as politicians. The following are only those who, after Alexander's death, continued to campaign from the Danube to the Indus, at first to win Alexander's domain, then to divide it. The less successful, Polyperchon, Craterus, Perdikkas, Eumenes. Three of the four, Craterus, Perdikkas, and Eumenes, fell fighting. The more successful, Antipater, Antigonos, Cassander, Lysimachus. Three of the four, Antigonos, Cassander, and Lysimachus, became kings. The most successful, Ptolemy and Seleucus. Ptolemy won the African inheritance, Seleucus won the Asian inheritance. The European inheritance the successors of Antigonos eventually won.

Philip was a superb general, as well as politician.

And Alexander was the finest general, as well as politician. Appreciated as such by the finest generals, as well as politicians, since. Caesar, reading the history of Alexander, burst into tears; at my age, he said, Alexander was the king of so many peoples, and what have I done (Plutarch, *Caesar*, 11)? Napoleon said: read and reread the campaigns of Alexander, Hannibal, Caesar, Gustav II, Turenne, Eugene, and Frederick II; model yourself on them; this is the only way to become a great general and to discover the secrets of the art of war (maxims, 78).

More generally, Alexander is one of the most important steps in the development of the state.

Cyrus, Cambyses, and Darius built the greatest state. Xerxes and Artaxerxes gave it permanence. By 331, when Alexander completed its conquest, the greatest state had continued, counting back to the beginning of the reign of Cyrus, for 228 years.

Alexander conquered the greatest state, and made it substantially greater.

He became its highest magistrate, himself the great king now.

He established his court in Babylon. He adopted the ceremonial of the great kings.

The great kings his predecessors unified the domain from Asia Minor and Libya in the west to India in the east. The great king Alexander unified the Balkan peninsula into this domain.

4 900 km along the parallel.

The great kings his predecessors brought under one and the same state Ionians, Magnesians, Aeolians, Carians, Lycians, Milyans, Pamphylians, Mysians, Lydians, Lasonians, Cabalians, Hyttenians, Hellespontines, Phrygians, Bithynians, Paphlagonians, Mariandyni, Syrians, Cilicians, Phoenicians, Cypriots, Egyptians, Libyans, Sattagydae, Gandarians, Dadicae, Aparytae, Persians, Cissians, Babylonians, Assyrians, Medes, Paricanians, Orthocorybanthians, Caspians, Pausi, Pantimathi, Daritae, Bactrians, Aegli, Pactyes, Armenians, Sagartians, Sarangae, Thamanaei, Utians, Mycians, islanders in the Persian Gulf, Sacae, Parthians, Chorasmians, Sogdians, Arians, Paricanians, Matieni, Saspies, Alarodians, Moschi, Tibareni, Macrones, Mos-

synoeci, Mares, Indians, Ethiopians, Colchians, Arabs. The great king Alexander brought under the same one state Thracians, Paeonians, Dardanians, Macedonians, Illyrians, Epirotes. And all Greeks this side of Italy. Philip first unified Athenians and Spartans and Thebans, too, when he became the hegemon of the Greek states. Alexander, the hegemon of the Greek states, first unified Athenians and Spartans and all Greeks this side of Italy, when he became the great king, into the one and the same state of Egyptians and Babylonians and Phoenicians and Assyrians and Medes and Persians and Indians and Athenians and Spartans.

Some 35 million people, not less than one quarter of humanity.

The great kings his predecessors built an administration of many thousands, incorporating massively into it local officials. A smoothly functioning administration, too, collecting a tribute of 14 560 talents annually under Darius, and continuing to collect it one and a half-odd centuries later. In 331, when he entered Susa, Alexander found in the kings' palace 40 000 talents in coin, next to other treasures of incalculable value (Plutarch, *Alexander*, 36). The great king Alexander retained the administration intact, and began enhancing it by the massive incorporation into it of Macedonian and Greek officials.

He founded 70 cities, from Alexandria at the mouth of the Nile to Alexandria at the mouth of the Indus.

Alexander is not a development in religion.

He became a god. But his predecessors had been gods, in the valley in which he established his court, since Naram-Sin, in the other valley, since Narmer.

He is not a development in the law either.

The form of the government of Macedon was monarchy, a petty monarchy at first, the most powerful monarchy at length, assimilated into the greatest monarchy, itself the successor and culmination of the monarchy which the state had been for two and a half millennia, ever since its beginning. Philip and Alexander ignored the experiments of the Greek states with other forms of government. Wisely, it has to be concluded. If theirs was a war of constitutions, monarchy annihilated all other forms of government.

Not a development in religion, or in the law, Alexander is a most important development in custom.

Pax Persica, for two-odd centuries under the great kings his predecessors, greatly accelerated the mixing of peoples. As Plato, at the time of Philip, writes: had the Persians won the war, we would have been all mixed together, Greek with Greek, Greek with barbarian, barbarian with Greek, as we now see the peoples ruled by the Persians all mixed together. The great king Alexander undertook the deliberate and systematic mixing of the peoples.

In 324, back from the east, he organized his state.

He married Barsine, the daughter of Darius III (Arrian, *Alexander*, VII, 4). He married 80 of his officers and 10 000 of his soldiers to Persian and Mede wives (5). He had 30 000 Persian boys brought up and trained in Macedonian ways (6). He enlisted in his regiments Persians, Medes, Bactrians, Sogdians, Arachosians, Zarangians, Arians, Parthians, under their own officers (*id.*).

In 323 the domain from the Adriatic coast in Europe and the coast of Libya in Africa to the valley of the Indus in Asia was Alexander's one and only one state. And the unity of the domain was under Alexander unshakable. The unity of the Asian and African parts of the domain was forged and cemented by the two-odd centuries of victories and rule of the great kings his predecessors. The unity of the European part of the domain was forged by the victories of Philip. The unity of the entire domain was forged and cemented by the invincible march of Alexander from the Danube to the Ganges. In 323 the entire domain was pacified. One quarter of humanity was unified, the mixing of much of that quarter had accelerated for two-odd centuries, and the mixing of the entire quarter Alexander undertook deliberately and systematically.

In 323 he died at 33. Had he lived longer, humanity would have fared better, very much better.

Zeno of Citium, in the generation after Alexander, wrote the *Republic*. Plutarch reports: the argument of Zeno's *Republic* can be summed up in a single principle, the inhabitants of this earth should not live divided into different states and

different peoples, each with its own rules of justice, all men should be one people and one state with a common life and common order, like a herd grazing together in a common field (*Fort. Alexander*, 6). Plutarch adds: this was Zeno's idea of a well-governed philosophical state; Alexander, however, realized this idea (*id.*).

In the generation before Zeno, Alexander realized this idea.

The inhabitants of this earth should not live divided into different states and different peoples, each with its own rules of justice. In 323 one quarter of the inhabitants of this earth did not live divided into different states and different peoples, each with its own rules of justice. All men should be one people and one state with a common life and common order, like a herd grazing together in a common field. In 323 one quarter of all men was one people and one state with a common life and common order, like a herd grazing together in a common field.

In 324, as he was coming back from the east, word was brought to him that embassies were waiting for him in Babylon from Carthage, Sicily, Italy, Sardinia, Gaul, and Spain; so far had the terror of his name pervaded the earth, all peoples wanted to do him homage, believing that he was destined to be their king (Trogus, XII, 13).

Back from the east, he began building a harbor for 1 000 ships and collecting sailors and pilots from all countries (Arrian, *Alexander*, VII, 19; Plutarch, *Alexander*, 68).

He said, when we march to the ocean in the east, all Asia will be ours, when we next sail south from the Persian Gulf and come back through the strait of Gibraltar, all Africa will be ours, and the limits of our empire will then be the same as the limits Zeus set on the earth (Arrian, *Alexander*, V, 26).

As it is, he died at 33.

Another of the many precedents which Alexander established is the scientific expedition. He marched east leading in his wake a train of philosophers. Hence, for instance, in the next generation, in the *History of plants* and *Causes of plants*, Alexander's expedition is Theophrastus's main source for exotic plants.

Alexander is a cause also of a substantial advance in geography.

Megasthenes served Alexander's governor of Arachosia, the country bordering the Indus, and later led an embassy to India for Seleucus (Strabo, II, 1.9; Arrian, *Alexander*, V, 5). Megasthenes wrote an *Indian history*. It is the main source for India of Strabo in his *Geography*, three centuries later, and of Arrian in his *Indian history*, one and a half centuries later still. – Onesicritus was the pilot of Alexander's fleet which sailed down the Indus, then west on the ocean (Strabo, II, 1.9; Plutarch, *Alexander*, 66). Onesicritus wrote a *History of Alexander*. It is a minor source for India of Strabo and Arrian. Onesicritus first notes Sri Lanka (Strabo, XV, 1.15). – And, other than Ptolemy, Strabo and Arrian, depending on Megasthenes and Onesicritus, depending on Alexander's expedition, remained the main sources for India until da Gama.

Alexander is a cause also of a major development, and not an advance, in history.

Callisthenes, a student of Aristotle, was one of the philosophers who followed Alexander east in his train. He wrote *The deeds of Alexander*. He said: without my history Alexander will be forgotten (Arrian, *Alexander*, IV, 10).

Not really.

It is with Alexander that history becomes an industry. Alexander's deeds launched the industry of writing down Alexander's deeds, great deeds, petty deeds, real deeds, fictional deeds, more deeds, and more deeds.

On Alexander's clearly very important deed of meeting the queen of the Amazons alone, Plutarch lists 14 authorities: Clitarchus, Polyclitus of Larissa, Onesicritus, Antigenes, Ister, Aristobulus of Cassandreia, Chares the royal usher, Ptolemy, Anticlides of Athens, Philo of Thebes, Philip of Theangela, Hecataeus of Eretria, Philip of Chalcidon, and Duris (*Alexander*, 46).

1 of these 14 authorities is very important. Ptolemy was one of Alexander's finest generals, after Alexander's death he won the African inheritance and became the king of Egypt, he founded the Alexandrian library, the first and the greatest library, and he wrote the history of Alexander. Ptolemy's history is the main source of Arrian's history of Alexander, and Arrian's is the most important history of Alexander.

4 of those 14 authorities are not important

rather than very not important. – Aristobulus of Cassandreia was an officer of Alexander, and wrote his history. – Onesicritus was his pilot, and also wrote his history. – Duris, in the next generation, wrote 23 books of history, continuing Xenophon. – Clitarchus, in the same generation, also wrote a history of Alexander.

9 of those 14 authorities are very not important, Polyclitus of Larissa, Antigenes, Ister, Chares the royal usher, Anticlides of Athens, Philo of Thebes, Philip of Theangela, Hecataeus of Eretria, and Philip of Chalcedon.

Not among those 14, but among Plutarch's authorities elsewhere, Nearchus has to be noted, too, the admiral of the fleet which sailed down the Indus, then west on the ocean, who also wrote a history of Alexander.

A little more has to be said also of Callisthenes, who also wrote *The deeds of Alexander*, also among Plutarch's authorities elsewhere. Callisthenes wrote also a *Greek history*, in 10 books, recording events from 386 to 346. And Callisthenes disapproved when the king began demanding prostration in his presence, and he was later executed as part of a plot against the king (Plutarch, *Alexander*, 54-5; Arrian, *Alexander*, IV, 10-4). Not too many of the Greeks in the king's retinue, and not too many of the philosophers either, approved either of the king's adoption of the ceremonial of his predecessors or of the mixing of Greeks and barbarians.

And the industry breaks new ground not just by being an industry.

Polybius writes of a later historian: in his eagerness to arouse the pity of his readers, he draws graphic pictures of women tearing their hair and baring their breasts, of crowds of men and women, with their small children and aged parents clinging to them, led away in captivity; and he does this again and again, pictures of horrors after horrors; but it is not the task of the historian to arouse his readers with dramatic scenes like the tragic poets; it is his task to record what happened; the goals of tragedy and history are not only not the same, they are incompatible; the tragic poet seeks to thrill and charm by plausibility for the moment; the task of the historian is to instruct by truth for all time; the goal of tragedy is to create an illusion, the goal of history is

truth (II, 56). – Among the not important rather than very not important, above, is Clitarchus. And to Clitarchus belongs the honor of pioneering that kind of history of Alexander.

Cardinal de Retz reports: once, while in the study of the great Condé, I saw some of those histories written by servile and venal souls, who, born in the servants' room and never allowed beyond the antechamber, pretend to know everything that goes on in the master's quarters; these wretches, the great Condé remarked, make us, you and me, act as they would have acted in our place (*Memoirs*, II). – Among the very not important, above, is Chares the royal usher. And to Chares the royal usher belongs the honor of pioneering that kind of history.

The important historians of Alexander are,

89 - 16 Siculus,
67 Trogus,
65^{BC}- 29^{AD} Strabo,
48^{AD}- 125 Plutarch,
87 - 177 Arrian.

Concluding *The march of Alexander*, Arrian writes: the success of Alexander was extraordinary, the undisputed master of two continents, who spread the power of his name over the entire earth (30). And adds: as to those who would belittle him, they should first consider themselves, if their own pettiness and the insignificance of their pursuits would not make them incapable even of that (*id*).

After Alexander's death, the wars for the succession in its entirety continued for seventeen years. The state was not broken apart until 306, when Antigonus proclaimed himself king, and next Ptolemy and Seleucus proclaimed themselves kings. The African inheritance, under Ptolemy, king 306-282, became a state of its own, and the Asian inheritance, under Seleucus, king 306-281, became a state of its own. The wars for the European inheritance continued two-odd decades longer. Antigonus II, king 283-39, the grandson of Antigonus, eventually won it, and not quite in its entirety.

And so the greatest state, the greatest for nearly two and a half centuries, from Cyrus through Alexander, and at its greatest at the end, under Alexander, was no more.

dxxviii

In the three-odd centuries from Ashurbanipal to Alexander, 5 states remain to be collected, in the west, Catana, Acragas, Syracuse, Carthage, and Rome. Catana and Acragas are abortive attempts to build the state, Syracuse is a successful attempt, Carthage and Rome are very successful attempts.

The cities of Catana, Acragas, and Syracuse are on the island of Sicily, all 3 the outcome of colonization.

Thucydides reports:
 the Sicels, who came from Italy, occupied the best parts of the island for some 300 years, until the Greeks came;
 the Phoenicians occupied the headlands and the smaller islands all around Sicily; but when the Greeks came in large numbers, they retreated to the parts of the island which are closest to Carthage;
 the first Greeks to come to Sicily were Chalcidians from Euboea, they founded Naxos;
 the following year Corinthians came and founded Syracuse; they drove out the Sicels from the site where the city is now;
 5 years after that the Chalcidians founded Catana; at the same time colonists from Megara came, and they settled first on the river Pantacyas, but the Chalcidians drove them out, and they then founded Megara Hyblaea; they lived there for 245 years, until Gelon drove them out;
 Gela was founded by Rhodians and Cretans 45 years after the foundation of Syracuse;
 Acragas was founded by people from Gela to the best of our reckoning 108 years after the foundation of Gela (VI, 2-4).

Gelon, tyrant 491-78, seized Syracuse in 485, defeated Carthage at Himera in 480, and captured Megara Hyblaea and drove out its citizens in the years in between.

This yields the dates, Syracuse was founded c. 735, Catana was founded c. 730, Acragas was founded c. 580.

So, the Greeks came in large numbers. The Carthaginians retreated to the parts of the island which are closest to Carthage. The new cities drove out the aboriginal population, then began driving out one another. In general, smiting was in Sicily as vigorous as anywhere.

Catana.

The particular is 1,
 Charondas laws in the generation
 around c. 570.

The city of Catana is on the eastern coast of Sicily.

One and a half centuries after its foundation, it emerges from obscurity with Charondas.

This is still before the rise of Sparta and Athens among the older cities in the east, and before the rise of Persia further east.

And, on the one hand, the philosophers are agreed in counting Charondas one of the best lawgivers. Plato's list of the best lawgivers is: Lycurgus, Solon, and Charondas (*Republic*, X, 599d-e). Aristotle's is the same: Lycurgus, Solon, and Charondas (*Politics*, IV, 11). Cicero's is longer: Lycurgus, Solon, Charondas, Zaleucus, and our Twelve tables (*Laws*, I, 57).

On the other hand, why they will count Charondas one of the best lawgivers, the philosophers are not very explicit. Aristotle writes: there is nothing worth noting in the laws of Charondas, except the suits for perjury; he first instituted these; his laws are also more precise than even those of lawgivers today (*Politics*, II, 12). And that is that about the laws of Charondas in the record.

By this time, then, lawgiving was becoming routine in the Greek cities. Zaleucus had written the laws of Locri in 663. Draco had changed the constitution of Athens in 621, Solon had been appointed to change it again in 594. And Charondas gave laws to Catana in the generation around c. 570.

Charondas is thus important, if not very important. He attests the continuing accumulation of lawgiving in the Greek cities, and in particular, in the new cities in the west. – One century-odd later, in the west, Rome will emerge into fact with laws, with: our Twelve tables, promulgated in 451-49.

Catana is not important. Sicily is small, too, some 260 km east to west at its longest, some 160 km south to north at its widest, and in Sicily, too, there was no room for more than one state. Catana is 50 km north of Syracuse.

So, after Charondas, Catana emerges again from obscurity when the rise of Syracuse begins.

In 476, Hiero, tyrant of Syracuse, captured Catana and drove out its citizens, to plant a colony of his soldiers. In 461 the citizens drove out these new colonists and regained their city. In the Peloponnesian war, during the Sicilian expedition of the Athenians, in 415-3, Catana was their base for operations against Syracuse. In 403, Dionysius, tyrant of Syracuse, captured Catana again, and after that Catana was part of the domain of Syracuse.

Acragas.

The particulars are,

Phalaris tyrant c. 550,

Theron tyrant 489-73.

The city of Acragas is further west, close to the southern coast of Sicily.

One generation after its foundation, it emerges from obscurity with Phalaris.

Phalaris gathered troops and set himself up tyrant of the city.

He captured Himera on the northern coast.

There is also, as Polybius writes: the well-known story of the brazen bull; Phalaris had a brazen bull in which he shut his enemies; he would light a fire under the bull, and as the brass grew hot and the man inside was roasted, the bull was so constructed that the cries of the man came out as the roar of a bull (XII, 25).

This is still before the rise of Sparta and Athens, and Persia. By this time, however, in the Greek cities in the east the attempts to set up a tyranny had become routine. The attempts to dominate the neighboring cities were becoming routine as well. In the west, Phalaris's is the first tyranny, and the first attempt to dominate the neighboring cities.

Acragas is not important. After Phalaris, it emerges again from obscurity two generations later with Theron. Theron was also a tyrant, he also captured Himera. In the east, by this time Persia had risen very greatly, and Sparta and Athens had risen greatly. In Sicily, it was the time of Gelon, and with Gelon the rise of Syracuse began. In Acragas, in the next generation Empedocles involved himself in politics: a democrat, he brought down an aristocracy (Laertius, VIII, 66). In the next generation Carthage returned powerfully to the island, and in 406 Himilco destroyed

Acragas.

Syracuse.

In the three-odd centuries from Ashurbanipal to Alexander, the particulars are,

Gelon tyrant 491-78,

Hiero tyrant 478-66,

Hermocrates leader after 424,

Diocles leader after 412,

Dionysius tyrant 405-367,

Dionysius II tyrant 367-57,

Dion leader after 357,

Timoleon leader after 344.

Syracuse was founded c. 735. After its foundation, it emerges from obscurity two and a half centuries later.

Then, in the following two-odd centuries – from 485, when Gelon captures Syracuse and sets himself up its tyrant, to 263, when, early in the first Punic war, Rome begins to dominate Sicily – Syracuse is a strong state.

A strong state, and a very turbulent state.

By 485, among the Greek cities in the east, the time of tyrants is over. Sparta and Athens dominate the cities. And Athens is a flourishing democracy, Sparta is a flourishing aristocracy, or in any case appears to be, in opposition to Athens, an aristocracy. In the west, in Syracuse, in those two-odd centuries, tyrants repeatedly set themselves up, and the state rises under them. The tyrants are also repeatedly brought down, then civil strife predominates, democracy and aristocracy vie to establish themselves, and the state declines. Then tyrants set themselves up again, and the state rises again. Constitutionally, those are two-odd centuries of civil strife, then tyranny, then democracy and civil strife, then again tyranny, then again civil strife, then aristocracy, then again civil strife, then again tyranny.

So, 90 km west of Syracuse, on the southern coast, was the city of Gela. C. 498 Hippocrates became the tyrant of Gela, built up his troops, and campaigned over much of the east of the island. Gelon was his cavalry commander. In 492 Hippocrates defeated Syracuse, but failed to capture it. In 491 he was killed.

Gelon became the tyrant of Gela.

90 km to the east, in Syracuse, there was civil strife, aristocrats and democrats vying for the government of the city.

In 485 Gelon seized Syracuse. He moved most of the people of Gela to Syracuse, and made it the center of his domain. He built up his troops, campaigned throughout the east of the island, and by 480 he was the master of the eastern half of the island. He moved more people from the captured cities to Syracuse, and Syracuse became the largest Greek city. In 480 Gelon defeated the Carthaginians at Himera, in the west, and became the master of the entire island. Gelon led at Himera, Siculus reports: 50 000 foot and 5 000 horse (XI, 21).

This was the time of the expedition of Xerxes. Herodotus reports: his war with the Carthaginians prevented Gelon from taking sides in the war of Xerxes against the Spartans and the Athenians; he yet sent envoys to Greece with money, earth and water, and instructions to watch the war, and if the barbarian wins, to give him the money and earth and water, if the Greeks win, to bring back the money and earth and water (VII, 163).

Gelon died in 478. His brother Hiero succeeded him as tyrant. And Syracuse was at its peak under Hiero. He subdued resistance on the island. He crossed the strait of Messina and captured Rhegium, in Calabria. He captured Locri further north, Croton further north, Sybaris further north. He captured the island of Ischia, further north, off the coast of Campania, and planted a colony on it. In 474 he defeated the Etruscans at sea.

Syracuse was beginning to build an empire. Ischia is 420 km northwest of Syracuse.

Hiero's was also a magnificent court. Herodotus writes: the tyrants of Sicily were the most magnificent among all Greeks (III, 125). Philosophers and poets frequented Hiero's court, Xenophanes, Simonides, Aeschylus, Pindar, all stayed at his court. It was when Hiero's wife asked him whether it is better to be rich or wise, that Simonides replied, rich, it is the wise who while away their days at the doors of the rich (Aristotle, *Rhetoric*, II, 16).

Gelon and Hiero distributed land to their soldiers, and settled them in colonies in the conquered countries. Aristotle writes: before Gelon democracy was held in contempt (*Politics*, V, 3). After Gelon and Hiero it was not held in contempt. It was also flourishing greatly at the

time in Athens.

Hiero died in 466. Another brother succeeded him as tyrant. But this brother was brought down, and democracy established.

The people began sitting in a popular assembly, and electing a council to govern the city.

Unlike the Athenian, however, the Syracusan democracy lost the conquests of the tyranny. It retreated from Italy, and lost its dominion over the island.

Athens was now the mistress of the sea, vigorously building its empire. It was increasingly present in Sicily. And when the Peloponnesian war began, in 431, Athens greatly intensified its presence on the island.

In 424 the leader of Syracuse Hermocrates tried to bring the Sicilian cities into a league to resist Athens. The attempt was not effectual. Civil strife also resumed in Syracuse.

In 415 Athens invaded Sicily in force, and confined Syracuse to its walls. Syracuse appealed to Sparta for help, Sparta sent Gylippus, Gylippus organized the Syracusans, and by 413 he had destroyed the Athenian expedition.

Civil strife intensified. In 412 Diocles introduced radically democratic legislation. The more aristocratic Hermocrates was expelled. The Carthaginians, defeated by Gelon in 480, returned to Sicily in 409, and defeated the Syracusans led by Diocles. In 408 Hermocrates returned with troops paid by Persian money, tried to capture the city, and was killed in the attempt. Diocles was also expelled.

In 405 Dionysius seized the city, and set himself up a tyrant. And Syracuse rose again.

By 399 Dionysius had subjugated the eastern half of the island. From 397 to 392 he fought the Carthaginians. Peace divided the island, the west to Carthage, the east to Syracuse. In 387 Dionysius captured Rhegium, across the strait of Messina. From 383 to 375 he again fought the Carthaginians. Peace confirmed the division of the island. In the following years Dionysius conquered Calabria north to Locri. In the east, Thebes had defeated Sparta, and Dionysius sent troops in support of Sparta. In 368 he resumed the war with Carthage. Peace in 367, at his death, reconfirmed the division of the island, the west to Carthage, the east to Syracuse, and so the island

remained, divided and contested by Carthage and Syracuse, in the following one century-odd. Rome then won the island.

Aristotle writes of Dionysius: like Cypselus in Corinth, and Pisistratus in Athens, Dionysius in Syracuse was a leader of the people before becoming a tyrant (*Politics*, V, 10). Also: Dionysius was thought worthy of the tyranny, because he denounced the rich, and his enmity to the aristocrats won him the confidence of the people (5). And this is one of the many recorded instances of his collaboration with the popular assembly: Dionysius wanted to build ships, and needed money for that; so he called the popular assembly and told them that some city was about to be betrayed to him and he needed money to capture it; so the citizens gave him 2 staters each; in a few days he called them again, told them that he had failed, and gave every man his money back; so he gained their confidence, and when later he asked them again, they gave him money; and this time he kept the money and built the ships (Aristotle, [*Economics*], II, 2).

Dionysius also wrote tragedies, and in 367 he won the prize for tragedy in Athens.

His son Dionysius II succeeded him as tyrant, and remained tyrant for ten years. Dionysius II was not a warrior. Rather, it was Dionysius II whom Plato undertook to educate into a philosopher king. Plato came to Syracuse twice to this end. The outcome was, where the philosopher was concerned, his imprisonment by the prospective philosopher (Plutarch, *Dion*, 20). Archytas saved Plato's life (*id.*). Where the prospective philosopher was concerned, the outcome was his downfall.

Dion, an official of the elder Dionysius, had spent many years in Athens, frequented the newly founded Academy, and become a follower of Plato. Dion brought Plato to Syracuse. And after the failure to educate the tyrant, in 357 Dion seized Syracuse and brought down the tyrant. Forced out of the city, Dion seized it again in 355. In 353 he was assassinated. Dionysius II continued to try to recapture the city, and in 346 succeeded. His opponents appealed to Corinth, the mother city, for help, and Corinth sent Timoleon.

In 344 Timoleon arrived with a force of 700,

seized Syracuse, and expelled Dionysius II. He established his control over the eastern half of the island. In 341 he defeated the Carthaginians at the Crimisus. Timoleon organized Syracuse under a more aristocratic constitution, repealing the more democratic laws of Diocles (Siculus, XVI, 82). He also brought the cities in the eastern half of the island into a formal league.

C. 335 Timoleon resigned the highest magistracy of the city (Plutarch, *Timoleon*, 37).

Civil strife followed.

Then – after the three-odd centuries at issue – tyranny again followed. Then civil strife again followed. Then tyranny again followed. Then Rome conquered Syracuse.

Syracuse is an important state.

As a constitutional experiment it was an unmitigated failure. It nevertheless became the dominant state among the Greek cities in the west. Yet it did not become a very powerful state. It rose, declined, rose again, declined again, rose again, declined. And it can be concluded that those are one another's cause and effect. The state kept rising under warriors, and kept declining, as well as descending into civil strife, when the warriors were succeeded by feeble rulers. Tyranny, both, kept asserting itself and kept failing to produce a strong succession. Aristocracy and democracy, for their part, in the spells between tyranny, produced nothing more durable than the import of Timoleon.

The state of Syracuse is an important mediator in the transmission of experience from the east to the west, from Sparta and Athens to Carthage and Rome. Syracuse not only emulated the older and greater states in the east. It was even taught directly by the mistresses themselves during the Peloponnesian war, assaulted by Athens, defended by Sparta. It was taught directly also, such as this lesson was, by Plato himself. The transmission of experience from Syracuse to Carthage, and vice versa, too, was from the first, and after 409 the transmission was continuous, through the tightest of bonds, the battlefield. The transmission of experience from Syracuse to Rome, and again vice versa, too, will begin later, but will be through that same tightest of bonds, the battlefield. Syracuse will become first the foe of Rome, than its ally, then again its foe, and then, when

Rome sacks it, in 212, it will be the sack of Syracuse that will provide the Romans with their first instruction in Greek refinement, too.

dxxix

Carthage.

In the three-odd centuries from Ashurbanipal to Alexander, the particulars are,

Malchus	prince c. 550,
Mago	prince c. 520,
Hamilcar	general in 480,
Hannibal Mago	general in 410,
Himilco	general in 406,
Mago	general in 396,
Hanno	general in 368.

The city of Carthage is in Africa, on the Mediterranean coast, far in the west. It is some 210 km southwest of the western coast of Sicily.

It was founded by Tyre. The distance from the mother city to the colony is 2 300 km.

And it was founded in 814.

Five-odd centuries after the fact, Timaeus first records the date of the foundation of Carthage (fr. 60). Five-odd centuries after that fact, Timaeus first records also the story of the foundation of Carthage by: Elissa or, as she was called by the Libyans, Dido (fr. 82).

Elissa or, as she was called by the Libyans, Dido, cannot be burdened with the presumption of reality. The fact that she emerges in the record five-odd centuries after herself precludes the possibility. Never mind her subsequent prominence in the poetic record, including the *Aeneid*, where her lover is Aeneas, who, himself, when he became her lover, had the Trojan war been real, and occurred when by Virgil's time an indefinite number of historians and poets had said it did, would have been, like the Hebrew patriarchs, well over 300 years old.

The date of the foundation of Carthage, on the other hand, even if it also emerges in the record five-odd centuries after itself, can be burdened with the presumption of reality.

The colonization of the Mediterranean littoral starts from Tyre, and in the one century-odd beginning with Hiram, prince c. 969-35. This is the *terminus post quem*.

Thucydides, dating explicitly the beginning of the Greek colonization of Sicily c. 735, writes:

the Phoenicians occupied the headlands and the smaller islands all around Sicily, but when the Greeks came in large numbers, they retreated to the parts of the island which are closest to Carthage. This is the *terminus ad quem*.

Carthage was founded in 814.

And two and a half-odd centuries after its foundation, it emerges from obscurity with Malchus.

Malchus conquered part of Sicily, and fought with great success against the Africans (Trogus, XVIII, 7). The Carthaginians also invaded Sardinia, but were defeated (*id.*).

Malchus was succeeded by Mago (*id.*).

Mago increased the wealth of Carthage, extended its boundaries, and brought it military renown (*id.*). Mago organized the army, and established the empire of the Carthaginians, by courage and skill he greatly increased the power of the state (XIX, 1).

This was the time of the great rise of the great kings. And as they conquered much of the earth, the great kings conquered Tyre, the mother city. Tyre became the base of their navy.

Herodotus reports: Cambyses ordered his navy to conquer the Carthaginians, but his captains refused, because they had sworn an oath not to fight the Carthaginians who were Phoenicians like themselves; and the king did not force the captains, because the Phoenicians had submitted to him of their own will, and because his navy depended entirely on the Phoenicians (III, 19).

Carthage was only the greatest Tyrian colony. Tyre had planted some dozens of colonies, and all the way to Gades beyond the strait of Gibraltar. And when the mother city came under the great kings, Carthage acquired the dominion over the Phoenician colonies along the coasts of Africa and Spain west of the domain of the great kings. In the west, the domain of the great kings reached to the Greek city of Barca on the coast of Libya. Carthage acquired the dominion over the Phoenician colonies from the city of Leptis, on the coast of Libya, in the east, to the city of Gades, beyond the strait of Gibraltar, in the west.

And Carthage began building an empire. It conquered part of Sicily, it fought with great success against the Africans, it invaded Sardinia.

At about this time the Carthaginians also

fought, allied with the Etruscans, Greek colonists on Corsica (Herodotus, I, 166-7), north of Sardinia.

Polybius, discussing the causes of the first Punic war, writes: to help historians avoid partisanship and errors in debates about the war, I will record all treaties between Rome and Carthage (III, 21).

The first treaty was concluded in 508. This is the time when Mago organized the army, and established the empire of the Carthaginians.

Polybius records the treaty (22-3), and sums up its provisions: the treaty shows that the Carthaginians considered Africa and Sardinia to belong to them absolutely (*id.*).

The African coast from Libya to the Atlantic belonged to them absolutely, and Sardinia belonged to them absolutely.

For one century-odd after Mago his descendants dominated Carthage.

In the generation after him, Trogus reports: envoys came to the Carthaginians from Darius ordering them not to make human sacrifices, and asking them for support against the Greeks, on whom the king was about to make war; the Carthaginians complied with the king's order, but did not send support for his war, because, they said, they were themselves constantly waging war on their neighbors (XIX, 1).

At this time, in particular, they were waging war on: the Numidians and the Mauritanians (2).

In Africa, this side of the domain of the great kings, there was no state to stand against the Carthaginians. There was no state to stand against them in Sardinia either. In Sicily there was.

In 480 Hamilcar invaded Sicily with a large force. Gelon, leading 50 000 foot and 5 000 horse, defeated Hamilcar at Himera. Hamilcar fell in the battle. Gelon became the master of the entire island.

In the next two-odd generations Carthage did not return to the island.

In 415-3 the Peloponnesian war engulfed Syracuse, and in 409 Carthage returned forcefully to the island.

In 409 Hannibal Mago – Mago, as he is also a descendent of Mago, and to distinguish him from the greatest Hannibal, two centuries later – Hannibal Mago landed in the west. He razed Selinus,

razed Himera, and by 406, when he died, he had brought the west of the island under Carthaginian control.

Himilco succeeded him in command. He razed Acragas. Syracuse was now under Dionysius. In 397 Dionysius advanced against the west. Himilco drove him back, and in 396 invested Syracuse on land and sea. Plague among his troops, to which Himilco also succumbed, prevented the capture of Syracuse. Himilco was succeeded in command by Mago. In 393 Dionysius defeated Mago. Peace in 392 divided the island, the west to Carthage, the east to Syracuse.

And the Carthaginians now considered western Sicily to belong to them absolutely as well.

War with Syracuse resumed in 383. Mago fell early in this war. Peace in 375 confirmed the division of the island.

War resumed in 368. Hanno was the commander now. Peace in 367, after the death of Dionysius, reconfirmed the division of the island.

Timoleon then became the leader of Syracuse. When he established his control over the eastern half of the island, he began plundering the Carthaginian half (Siculus, XVI, 73). The Carthaginians mustered a strong force (*id.*). In 341 Timoleon defeated them at the Crimisus (79), in the western half. But Carthage was now firmly established in the west. And peace reconfirmed the division of the island.

By the end of the three-odd centuries at issue, then, Carthage had become an empire. Africa, Sardinia, and western Sicily belonged to it absolutely. Its domain extended from the northern coast of Sardinia in the north to Leptis in Libya in the south, and from Gades beyond the strait of Gibraltar in the west to Leptis in the east, 1 000 km along the meridian, 1 900 km along the parallel.

It was an empire of the sea. Carthage was the greatest maritime power on earth.

And Carthage had not built its empire very deliberately. Not nearly as deliberately – or spectacularly – as the great kings had built their empire, or the citizen-soldiers of Athens had built their empire, or Philip and Alexander had built a petty kingdom into the greatest and most glorious kingdom on earth. Carthage inherited the colonies of the Phoenician cities. It never encountered

much resistance in Africa. The aboriginal populations, Libyans, Numidians, Mauritanians, were not under a state. It never encountered much resistance in Sardinia either. The aboriginal population of Sardinia was not under a state either. And as Sardinia is further away from the Greek cities in the east than Sicily, or southern Italy, and is separated from the coast by more open sea, the Greeks never came in large numbers to this island. Carthage encountered resistance in Sicily. Expelled from this island in 480, it returned to it in 409 and conquered much of it, yet it had to fight continuously to maintain its dominion.

As to its constitution, Aristotle, writing toward the end of the three-odd centuries at issue, describes it. He writes:

the Carthaginians are considered to have an excellent form of government, in some ways different from others, in some ways like the Spartan;

it resembles the Spartan in that the Carthaginians also have common meals;

they also have a council of 104 members, like the Spartan ephorate; but while to the ephorate anyone can be elected, the Carthaginian councilors are elected according to merit;

the Carthaginians also have kings like the Spartans; their kings, however, are not hereditary, but elected from any of the distinguished families;

the constitution is neither exactly oligarchic nor exactly aristocratic either, because the rule of wealth is characteristic of oligarchy, the rule of merit is characteristic of aristocracy, and the Carthaginians elect their kings and other officials with an eye to both merit and wealth; the state also avoids the evils of oligarchy by sending parts of the people one after another to colonies; in this way they maintain the state stable (*Politics*, II, 11).

Polybius, writing not quite two centuries later, agrees with Aristotle's assessment. He writes:

the constitution of the Carthaginians seems to me to have been well devised at first;

their state was much like those of the Romans and the Spartans; like them, the Carthaginians had kings, an assembly of elders had aristocratic power, and the people were supreme in

the matters proper to them (VI, 51).

Polybius notes also this fundamental difference:

for their army the Carthaginians hired mercenaries; thus, to maintain their prosperity, the citizens depended on mercenaries (52).

The form of the government of Carthage is thus also a mixture of elements of all three, monarchy, aristocracy, and democracy. The element of monarchy are the kings, who also lead the army. The element of aristocracy are the assembly of elders and the council of 104. The element of democracy is the election of the kings and other officials. With an eye to both merit and wealth, too. It is an element of democracy as well that the citizens are not soldiers, they hire their soldiers.

The first great state in the west, Carthage is important also in the development of the description of the surface of the earth. The state of Carthage opened the Atlantic.

Necho, the prince of Egypt 610-595, Herodotus reports: first dispatched a fleet of Phoenicians to circumnavigate Africa (IV, 42). After that, Herodotus adds: the Carthaginians also said that Africa is surrounded by the sea (*id.*).

And to about the end of the three-odd centuries at issue belongs the *Description of the sea*, composed in Greek in the century before 269. It is the first attempt to describe the Atlantic coast of Africa. It begins:

it pleased the Carthaginians to send out Hanno to found cities beyond the strait of Gibraltar (*id.*), and then recounts the voyage of Hanno down the Atlantic coast of Africa. As nearly all the localities which Hanno notes, Hanno himself named: we called it Caricus (*id.*), we called it Gytta (*id.*), we called it the Chariots of the gods (*id.*), and as it was a long time after Hanno before his feat was emulated, there is some difficulty in ascertaining how far down the coast Hanno reached. Nevertheless, at length Hanno reached: a very great river, full of crocodiles and hippopotami (*id.*), and it can be concluded that this has to be the Senegal, the first river of any size down the coast. Beyond that river Hanno reached: a great bay, the land next to which, the natives told us, is called the Horn of the west (*id.*), and it can be concluded that this has to be cape Vert. And if so, Hanno

reached more than 2 600 km down the Atlantic coast of Africa.

So, Carthage built an empire. In Sicily it had to fight continuously to maintain its dominion.

And in the following centuries Carthage will have to continue to fight continuously to maintain its dominion. First to continue to fight Syracuse, under Agathocles, tyrant 317-289. Then to fight Rome. In 264-41, in the first Punic war. Rome will learn naval warfare from Carthage, and will defeat Carthage. Then in 220-02, in the second Punic war. Rome will learn strategy from Hannibal, and will again defeat Carthage. Then in 149-6, in the third Punic war. Rome will have nothing more to learn, from Carthage or any other state, and will raze Carthage.

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Rome.

In the three-odd centuries from Ashurbanipal to Alexander, the particulars are,

Twelve tables promulgated in 451-49,

Camillus tr. mil. 403,

Sextius Lateranus cos. 366,

Licinius Stolo cos. 364,

Marcus Rutilus cos. 358,

Valerius Corvus cos. 348,

Manlius Torquatus cos. 347,

Publilius Philo cos. 339.

The city of Rome is in Italy, in the west and in the north, far from Sparta and Athens, far from Carthage, far from Syracuse.

The development of the state was slow to reach that far.

And the beginning of the state in Rome not only poses the difficulty, what is real? what is not? as the beginning of the state elsewhere, earlier, poses it, in Egypt, in the Sumerian cities, in Assyria, in Sparta, in Athens, in Carthage. As also, for a different reason, the beginning of Judaism poses it, and the beginning of Christianity poses it. The beginning of the state in Rome poses the difficulty, what is real? what is not? more acutely than the beginning of the state elsewhere, earlier, in Egypt, or in the Sumerian cities, or in Assyria, or in Sparta, or in Athens, or in Carthage. If not quite as acutely as the beginning of Judaism, or the beginning of Christianity.

Timaeus dated the foundation of the city of

Rome to the year of the foundation of the city of Carthage, 814. As Dionysius of Halicarnassus reports: Timaeus, I do not know on what grounds, sets the foundation of Rome at the same time as the foundation of Carthage in the 38th year before the first olympiad (*Antiquities*, I, 74).

Two and a half centuries after Timaeus, Varro fixed the date of the foundation of Rome at 753. It is clearer on what grounds. Varro wrote the *Antiquities*, in 41 books, 25 books on things human, 16 books on things divine. But not too clear. There are numerous fragments from the *Antiquities*, and neither these make it too clear, nor can anything make it too clear, how Varro reached more than seven centuries before the time of writing to establish that that thing human, or thing divine, the foundation of Rome, occurred in 753. One way or another, Varro's date, 753, remained the base of the chronology of Rome, *ab urbe condita*.

Two generations after Varro, Livy wrote *From the foundation of the city, Ab urbe condita*, in 142 books. And the early history of Rome is substantially and essentially Livy. No other historian has anything substantial or essential to add to the early history of Rome, and but a couple have a little insubstantial and inessential to add. Polybius begins in 264. And the history of Rome before 264 – and if it is to begin in 753, the history of Rome in the not quite five centuries from 753 to 264 – is substantially and essentially Livy.

Livy writes in the preface:

the traditions before the foundation of the city are poetic lore rather than true deeds; it is the privilege of antiquity, in order to add dignity to the beginning of the city, to mix human things with divine (pr.).

The traditions before the foundation of the city are poetic lore. The difficulty, however, is that the traditions after the foundation of the city are for a very long time poetic lore as well. As it became the greatest state on earth, and began writing its history, Rome rather more vigorously than other great states exercised that privilege of antiquity, adding dignity to its past.

The difficulty is to separate the true deeds.

And nothing but the historians can be the ground on which to try and do so, and first and

foremost Livy. The early history of Rome is Livy, and Livy is the early history of Rome.

These, then, are the historians.

First, these are the father of history and four of his most important successors, with, on the right, the date of the latest event described by each,

Herodotus	430,
Thucydides	404,
Ephorus	340,
Theopompus	320,
Timaeus	264.

The father of history researched the great and magnificent deeds of Greeks and barbarians, and his research attests Sardinia (I, 166), Corsica (*id.*), further west and north Massalia (V, 9), and in some detail the Etruscans (I, 57, 94, 163, 166-7; VI, 17, 22). The neighbors of the Etruscans, the Romans, his research does not attest. – Thucydides researched the greatest war, and the Etruscans supported the Sicilian expedition of the Athenians with 3 fifty-oared ships from the first (VI, 102), and the Etruscans stayed with the Athenians to the end two years later (VII, 57). Their neighbors the Romans, if they noticed the greatest war, were not noticed by the greatest war. – Ephorus wrote 30 books of general history, on Greeks and barbarians. There are numerous fragments, and Ephorus is a source of Strabo for Italy, in particular (VI, 1.7, 1.8, 1.12, 3.3). Ephorus did not notice Rome either. – Theopompus also wrote a general history, also: on Greeks and barbarians (fr. 25). When it was epitomized, the epitome alone was in 15 books (fr. T31). There are numerous fragments from it as well. And one of the fragments attests that Theopompus noticed Rome. First noticed Rome. Pliny reports: of the foreign writers none before Theopompus mentions the Romans; and all he says is that the Gauls took Rome (III, 57). – Timaeus not only noticed Rome, he dated the foundation of the city.

If Rome begins before 340, and if there is a development of Rome before 340, this beginning, and development, is very small. Certainly not great and magnificent.

Next, these are the first Roman historians, the immediate predecessors of Livy, with the time, within a decade or so either way, when each wrote,

Fabius Pictor	200-180,
Coelius Antipater	120-00,
Quadrigrarius	85-65,
Valerius Antias	85-65.

Fabius Pictor is the first Roman historian, writing, like the masters, in Greek. Coelius Antipater, Quadrigrarius, and Valerius Antias wrote in Latin. These are Livy's three main sources. Livy quotes Valerius Antias 36+ times, Coelius Antipater 11+ times, Quadrigrarius 10+ times. And Livy superseded all three so completely, as they had earlier superseded Fabius Pictor, that there are not many fragments from any of the four.

The beginning of Rome, if Rome began before 340, and the development of Rome before 340, if there was a development of Rome before 340, was not researched by the Romans themselves for one and a half centuries after 340.

Himself, Livy wrote under Augustus. In particular,

Livy from before 27/5 to 9^{BC}.

Livy was already writing between 27 and 25 (I, 19), and *From the foundation of the city* ends, in its 142nd book, in 9^{BC}.

Finally, these are all the sources for the early history of Rome, with dates of birth now, entailing the times of writing,

378 - 315	Theopompus,
350 - 259	Timaeus,
200 - 118	Polybius,
116 - 27	Varro,
89 - 16	Siculus,
67	Dionysius of Halicarnassus,
67	Trogus,
59 ^{BC} - 17 ^{AD}	Livy,
48 ^{AD} - 125	Plutarch.

Theopompus and Timaeus write three centuries before Livy, when Rome has not risen yet, and although it is important that they note Rome, that Theopompus first notes it, and that Timaeus first dates its foundation, very little in their fragments is about Rome. – Polybius writes one and a half centuries before Livy, at the time of the great rise of Rome and about the great rise of Rome, and Polybius is a most important historian and it is most important that he writes about Rome, but, with the single exception of recording the earlier treaties between Carthage and Rome, he does not concern himself with events before 264, the

beginning of the first Punic war. – Varro writes two generations before Livy, when Rome has already risen very greatly, and Varro's *Antiquities* are the most important source on things divine, but that they are not a source on things human at all, the fact that Livy never quotes Varro suffices to show. – Siculus, Dionysius of Halicarnassus, and Trogus write in the generation before Livy, when Rome has risen yet more, and much in the histories of Siculus and Trogus is about early Rome, and the entire history of Dionysius is about early Rome, but none of the three adds anything substantial or essential to Livy. Siculus and Trogus, because they are both general histories and neither is concerned with early Rome in either detail or scope comparable to Livy. Dionysius for a different reason. He has left behind the first 11 of the 20 books of his *Roman antiquities*. And in his book XI Dionysius has reached the year 441. Livy has reached the year 441 early in his book IV. The difference is not detail or scope. The difference is speeches. Livy has supplied those early events, if they are events, with speeches. And Dionysius has supplied those early events, if they are events, and either way much the same as in Livy, with more and longer speeches. – Plutarch, finally, writes one century after Livy, when Rome continues to flourish very greatly, and Plutarch as well wrote much about early Rome. But Plutarch as well adds nothing substantial or essential to Livy, and for much the same reason as Dionysius. Plutarch writes lives. In particular, where early Rome is concerned, Plutarch wrote *Romulus*, *Numa*, *Poplicola*, *Coriolanus*, and *Camillus*. And there is in these five lives much detail and scope that there is not in Livy. Alas, the source of Plutarch's detail and scope, across eight and a half centuries in the case of Romulus, had Romulus been real, across five centuries in the case of Camillus, even if Camillus is, the only one of the five unquestionably so, real, the source of Plutarch's detail and scope cannot be different from the source of Dionysius's speeches.

The history of early Rome is Livy. To try and resolve the difficulty, true deeds? or poetic lore? the particulars in Livy have to be sorted out. And Livy himself provides the ground on which to resolve the difficulty.

From the foundation of the city begins at Troy, with the Trojan war. It continues with the foundation of Rome in 753, then in more detail with the seven kings of Rome. In 509 the seventh king is brought down, Rome becomes a republic, and beginning in 509, *From the foundation of the city* is annalistic, Livy records events year by year.

And beginning his account of the events of the year 389, he writes:

so far I have dealt with matters which are obscure not only because of their antiquity, like things far away which can hardly be described, but because in those days there was but scanty use of writing, the only true guardian of the memory of past events, and such records as there were nearly all perished in the great fire in the city;

from this point on, however, a clearer and more accurate account can be given of both the civil and the military deeds of the city (VI, 1).

And it can be concluded immediately. Barring powerful evidence to the contrary, the civil and the military deeds of the city before 389 are poetic lore. Barring powerful evidence to the contrary, the civil and the military deeds of the city after 389 are true deeds.

The conclusion rests on the facts as well, that Herodotus, Thucydides, and Ephorus show that until at least one generation-odd after 389 Rome remains very small, that Theopompus, Timaeus, and Polybius show that independent evidence for events in Rome does not begin until at least one century after 389, and that Fabius Pictor shows that the Romans themselves do not begin researching their past until close to two centuries after 389.

Before 389, then, poetic lore. Even if it is superb poetic lore.

Thus, in 753 Rome was founded. In particular, Livy reports:

begotten by Mars, suckled by a she-wolf, Romulus and Remus built a new city, and when Remus leapt over its wall, Romulus killed his brother to become the eponymous founder of the city, its first king, and upon his death, murdered and dismembered in one account, taken to heaven on a cloud in another, the god Quirinus (I, 4-16).

Romulus was the first of seven kings. The last

was Tarquinius Superbus. In 509 Rome became a republic. In particular, Livy reports:

raped by the son of Tarquinius, Lucretia killed herself rather than bear the dishonor, incensed, the people expelled the Tarquinius, elected Brutus and Collatinus consuls, replaced Collatinus with Poplicola, and when two of Brutus's sons plotted the restoration of the Tarquinius, Brutus executed his sons (57-II, 5).

The republic, unlike the kingdom, is attested independently. Two consuls were the highest magistrates of the republic, the names of the two consuls were the name of the year, and lists of consuls, or years, reach back to the time to which Livy dates the beginning of the republic.

Nevertheless, the civil and the military deeds of the republic as well are, barring powerful evidence to the contrary, before 389 poetic lore, true deeds after 389.

To take the military deeds first.

Livy reports, before 389 as well as after, with barely an exception, annual campaigns of the Romans against their neighbors, north, south, and east of the city. West was the sea.

North of the city their neighbors were the Etruscans.

South of the city their neighbors were the Latini, the Hernici, and the Volsci, east of the city the Aequi, further east and south the Samnites.

West was the sea, and on the sea were the Carthaginians and the Greeks.

In the north, the Etruscans emerge from obscurity before the Romans. At about the time of Mago, prince *c.* 520, the Carthaginians, allied with the Etruscans, fought Greek colonists on Corsica. In 474 Hiero defeated the Etruscans at sea. In 415 the Etruscans supported the Sicilian expedition of the Athenians with 3 ships. The Etruscans have also left behind their written language, an alphabet borrowed from the Greek, some 9 000 inscriptions, the large majority brief, fragmentary, and late, after the time of the Sicilian expedition of the Athenians. They have not left behind evidence for an Etruscan state. Nor do the historians attest an Etruscan state, including, in particular, Herodotus, or Thucydides, or Siculus, who attest the facts above. On the minimal standard of being attested by just one other state, say, an Etruscan prince attested by another state,

or even the still more minimal standard of itself attesting just one other state, say, an Etruscan prince attesting another state, there is no evidence for an Etruscan state. Other than the poetic lore of the Romans.

And the military deeds of the Romans against the Etruscans are at first poetic lore. In 508, for instance, Livy reports:

the Etruscan king Porsenna besieged Rome, Mucius stole in the Etruscan camp to kill the king, but mistakenly killed his scribe instead, was caught, a fire was lighted to torture him, Mucius thrust his hand in the fire and told the king, this is what those who seek glory think of their bodies, Porsenna freed the prisoner, abandoned the siege, and made peace (II, 9-13).

At length, however, the military deeds of the Romans against the Etruscans become true deeds. In 396, Livy reports:

after a ten-year siege, Camillus conquered the Etruscan city of Veii, the city was razed, its citizens enslaved, its gods removed to Rome (V, 21-3).

Rome to Veii, the distance is 15 km.

And that Camillus's conquest of Veii is a true deed has to be concluded on these grounds. 396 is close to 389. Veii is close to Rome. And there is the fact of the expansion of Rome, from the city of Rome to the Atlantic and the Euphrates, the expansion can be traced back war by war, the expansion has to have a beginning, and the beginning of the expansion has to be the conquest of Veii, 15 km north of Rome.

There is also, although appropriately adorned, another deed of Camillus. In 390, Livy reports:

a Gaul horde descended from the north and sacked Rome, *vae victis* and the Gauls were collecting the ransom of the Romans when Camillus, recalled from exile and appointed dictator, gathered his troops, vanquished the Gauls, and the people hailed him as a second founder of the city (41-9).

390 is very close to 389. There is in this case no distance at all, the Gauls sacked Rome. And Rome will not be sacked again for eight centuries, until 410^{AD}. This deed of Camillus's has to be a true deed, too.

Theopompus, moreover, first mentions the

Romans, and all he says is that the Gauls took Rome.

There is even the analogy with Sparta. Sparta emerges from the poetic lore when, under Theopompus, for nineteen years the Spartans incessantly fight for Messenia. Rome emerges from the poetic lore when, under Camillus, for ten years the Romans incessantly fight for Veii.

Camillus, in fact, can be hailed as the first, not a second, founder of the city.

In the south, the neighbors of the Romans were the Latini, the Hernici, and the Volsci, in the east, the Aequi, further east and south, the Samnites.

These peoples all emerge from obscurity with the Romans, and accordingly, with nothing very auspicious.

There is again at first the lore. In 458, for instance, Livy reports:

the Aequi trapped the Roman army on mt Algidus, Cincinnatus was called from the plough and appointed dictator, assembled a new army, defeated the Aequi, celebrated a triumph, and resigned the dictatorship in sixteen days, to return to his field and continue ploughing (III, 25-9).

Rome to mt Algidus, the distance is 20 km.

The annual campaigns of the Romans against the Latini, Hernici, Volsci, and Aequi continue, year after year after year. Livy reaches the campaign of 385, and writes:

I do not doubt that those who are weary of reading about these endless wars will ask, as I ask on examining the older historians who record these wars, where did the Aequi and the Volsci find so many men for so many defeats (VI, 12)?

Yet the Latini, Hernici, Volsci, and Aequi continue to find men for defeats, the annual campaigns continue, year after year after year, until, at great length, Livy reaches the year 343, and writes:

from this point on wars of greater importance begin, for in that year the first war with the Samnites begins (VII, 29).

And so they do, wars of greater importance begin. From this point on the Romans fought, and won

the first Samnite war in 343-1,

the Latin war in 340-38,
the second Samnite war in 326-04,
the third Samnite war in 298-0,
the war with Pyrrhus in 282-72,
the first Punic war in 264-41,
the first Illyrian war in 229-8,
the second Punic war in 220-02,
at which point the enumeration can, here, stop.
And those were only the major wars.

Those were the wars, traced forward, of the expansion of Rome from, to begin with, the city of Rome, to, eventually, the Atlantic and the Euphrates.

The wars beginning with the second Samnite war, in 326-04, belong to the following centuries, after Alexander.

In the centuries through Alexander, the first Samnite war, in 343-1, and the Latin war, in 340-38, belong.

In the first Samnite war the Romans fought the Samnites over the country north of the city of Capua (VII, 29-VIII, 1). The Romans won the war. In the Latin war the Romans fought the Volsci and the Latini over the same country, south of Rome, north of Capua (VIII, 6-15). They won this war, too. And at the beginning of this war:

when the Latini surrendered, Latium and Capua were deprived of their land, their land was divided among the Roman people (11).

At its conclusion:

the Latini were granted citizenship (15).

Capua is 170 km southeast of Rome.

The two consuls were elected annually, and the two consuls fought the wars, also annually.

Valerius Corvus was consul in 348, in 346, in 343, and in 335. Victory in the first Samnite war begins with him (VII, 32-3).

Publilius Philo was consul in 339, in 327, in 320, and in 315. Victory in the Latin war begins with him (VIII, 12).

The military deeds of other consuls in the two generations after Camillus, and after 389, are true. The military deeds of Valerius Corvus are first both true and important. Next the military deeds of Pubilius Philo are.

So, by 338 Rome had expanded north to Veii and south to Capua. On land.

And by 338 Rome had not ventured on the sea.

The sea was west of the city, and on the sea were the Carthaginians and the Greeks.

By 340 the Greeks had not yet noticed Rome, on land or on the sea.

As to the Carthaginians, Polybius, discussing the causes of the second Punic war, writes: to help historians avoid partisanship and errors in debates about the war, I will record all treaties between Rome and Carthage (III, 21).

And he records three treaties. The first was concluded in 508 (22). He does not record the date of the second. The third was concluded in 279 (25). Siculus writes: the first treaty between Carthage and Rome was concluded in 344 (XVI, 69). Given the overwhelming authority of Polybius – he reports, too: I will now translate the treaties (III, 22) – 344 has to be date of the second treaty, the one Polybius does not date.

The provisions of the first treaty, in 508, Polybius sums up thus:

the treaty shows that the Carthaginians considered Africa and Sardinia to belong to them absolutely;

as to the Romans, they only claimed Latium, and said nothing about the rest of Italy, for it was not yet under their authority (23).

The Romans conquered Latium in the Latin war, in 340-38. One and a half-odd centuries earlier, in 508, their claim to Latium was optative.

As to the sea, the treaty stipulates that: the Romans shall not sail beyond cape Bon (*id.*). Cape Bon is in Africa, just east of Carthage. And never mind sailing to cape Bon, never mind sailing to Sicily, any Roman sailing at all was, in 508, optative.

The first Punic war began in 264. The Romans defeated the Carthaginians on land at Messina in 264, and at Acragas in 262. But this war was not going to be decided on land. And Polybius writes: this was when the Romans first built ships; they had to overcome enormous difficulties; their shipwrights had never built quinqueremes; and this shows better than anything else the determination and the audacity of the Romans; it was not a question of whether they had sufficient resources, they had none; they had never ventured on the sea before; yet, once they decided to do it, they did it so boldly that,

before gaining any experience at all, they engaged the Carthaginians who had been for many generations the undisputed masters of the sea (I, 20).

The Romans learned to build ships, from the Carthaginians, learned naval warfare, also from the Carthaginians, and vanquished the Carthaginians, in 241.

In 262 they first built ships. It was not a question of whether they had sufficient resources, they had none. They had never ventured on the sea before.

The provisions of the second treaty, in 344, confirm the provisions of the first. And by 344 the claim of the Romans to Latium was just about to stop being optative. Their sailing remained optative.

These are the military deeds of the Romans, then, in the three-odd centuries at issue.

Before 406 poetic lore.

In 396 after a ten-year siege the Romans conquered Veii, 15 km north of the city. In the next couple of generations they fought their neighbors in the south and east annually. And by 338 they had conquered the country down to Capua, 170 km southeast of the city.

Thus, the Roman conquest of the earth had begun. Just begun.

To take now the civil deeds of the city.

And as the military deeds so the civil. Before 389, barring powerful evidence to the contrary, poetic lore. After 389, barring powerful evidence to the contrary, true deeds.

The civil deeds of the city can be divided into three parts. The development of the magistracies of the republic. The development of the strife of patricians and plebeians. And the development of the law.

The development of the magistracies of the republic.

Under Augustus, at the time of Livy, the great rise of jurisprudence also begins. One and a half centuries later, Pomponius is one of the finest jurists. Pomponius wrote on the Roman constitution, the law, and jurisprudence. And this is how Pomponius describes the development of the magistracies of the republic. He writes:

we have to consider the origin of the magistracies; for what is the law worth in a state, if

there is no one to administer it?
 when the kings were expelled, the supreme authority was vested in two consuls;
 later, when the consuls were not enough to carry out the census, censors were created;
 then, as the population grew, and the wars became frequent and savage, it was decided to establish a magistrate with greater power, a dictator, serving in an emergency for not more than six months, with a master of horse under him;
 when the plebeians withdrew from the patricians to the Sacred mount, plebeian tribunes were created to be the magistrates of the people;
 two members of the people were also put in charge of the plebiscites, the aediles;
 later, when the public treasury grew richer, quaestors were appointed in charge of the money;
 later, because the consuls were often away waging war on the neighboring peoples, a praetor was created to administer the law in the city (*Digest*, I, 2.2).

And below are, on the left, the magistracies in the order in which Pomponius describes them. On the right, the years in Livy, respectively, those explicitly of their creation in the cases of the five higher magistracies, consuls, censors, dictator, plebeian tribunes, and praetor, those in which Livy first mentions them in the cases of the two lower magistracies, aediles and quaestors:

consuls	509	(I, 50),
censors	443	(IV, 8),
dictator	501	(II, 18)
plebeian tribunes	494	(II, 33),
aediles	463	(III, 6),
quaestors	485	(II, 41),
praetor	367	(VI, 42).

The years before 389, as well as the events with which the creation of the respective magistracies is adorned – that of the consuls, for instance, related above – are poetic lore. The year after 389, as well as the event of the creation of the respective magistracy – that of the praetor, in 367, described below – is true.

The entire order of development of the magistracies in Pomponius, on the other hand, has to be true as well. Writing one and a half centuries after Livy, Pomponius is analyzing the early history of

Rome recorded by Livy. The early history of Rome is Livy. And Pomponius, ignoring the sequence and years of Livy, has analyzed the development perfectly. We have to consider the origin of the magistracies. The supreme authority was vested in two consuls. When the consuls were not enough to carry out the census, censors were created. As the population grew, and the wars became frequent and savage, it was decided to establish a dictator, serving in an emergency. Plebeian tribunes were created to be the magistrates of the people. Aediles were put in charge of the plebiscites. When the public treasury grew richer, quaestors were appointed in charge of the money. And because the consuls were often away waging war on the neighboring peoples, a praetor was created to administer the law in the city.

The wisdom of Pomponius, to ignore the sequence and years of Livy, the following facts also attest. In Livy, the two consuls are the highest magistrates from 509 to 444 – from 444 (IV, 7) to 367 (VI, 42) the highest magistrates are three to six military tribunes – in 367 the highest magistrates again become the two consuls. In Livy, there are three censuses through 459 (III, 24) – the censors are created in 443 – there are no censuses at all from 459 to 319 (IX, 19) – and in 319 regular censuses begin.

So, by 367, and not long before that, the structure of the magistracies of the republic had developed. The supreme authority was vested in two consuls. Censors were created to carry out the census. A dictator served in an emergency for not more than six months. Plebeian tribunes were the magistrates of the people. Aediles were in charge of the plebiscites. Quaestors were in charge of the money. In 367, because the consuls were often away waging war on the neighboring peoples, a praetor was created to administer the law in the city.

Shortly after that, the consuls were away waging, and winning, the first Samnite war and the Latin war.

The development of the strife of patricians and plebeians.

The city was governed by the patricians. The plebeians were the people, demanding debt relief, land, and access to the government of the city.

Again, before 389 poetic lore.

Thus, in 494:
the plebeians withdrew from the city to the Sacred mount, and fortified themselves there (II, 32-3).

To mollify them:
the magistracy of the plebeian tribunes was created (*id.*).

The plebeians return to the city, but strife continues. In 451 the plebeians withdraw from the city again. To mollify them:

the laws of the city, until then the prerogative of the patricians, were written down and published;

the laws were approved by the popular assembly; and the plebiscites, the decisions of the popular assembly, were made binding on all, plebeians and patricians (III, 32-57).

The plebeians return to the city, and strife continues.

Eventually, after 389, true deeds. Shortly after 389:

in 376, the plebeians Licinius Stolo and Sextius Lateranus began agitating for laws for debt relief, the distribution of land among the people, and the opening of the highest magistracy of the consuls to the plebeians;

these were matters of the greatest importance and they could not be resolved without tremendous struggle;

the struggle continued for ten years;

Licinius Stolo and Sextius Lateranus were elected plebeian tribunes every year, and continued to introduce those laws in the popular assembly; the patricians resisted the laws;

holding sway in the popular assembly, Licinius Stolo and Sextius Lateranus prevented the election of magistrates for five years;

debt relief was adopted;

and in 367, Licinius Stolo and Sextius Lateranus introduced in the popular assembly laws, removing all legal disabilities on the plebeians, and creating the magistracy of a praetor of the city to supervise the implementation of the laws;

the popular assembly approved the Licinian-Sextian laws;

the patricians acquiesced in the laws (VI, 34-42).

And these are the consequences of the Licinian-Sextian laws.

In the next year, 366, Sextius Lateranus was elected the first plebeian consul (*id.*). In 364 Licinius Stolo was elected consul (VII, 2).

In 351 Marcius Rutilus was elected the first plebeian censor (VII, 22).

Publilius Philo was consul in 339, in 327, in 320, and in 315. Victory in the Latin war begins with him.

In the Latin war, in 340-38: when the Latini surrendered, Latium and Capua were deprived of their land, their land was divided among the Roman people. Among the plebeians.

In 339 Publilius Philo introduced in the popular assembly laws, making the plebiscites, the decisions of the popular assembly, binding on all, plebeians and patricians (VIII, 12). And this plebiscite, this decision of the popular assembly, became binding on all, plebeians and patricians. In 336 Publilius Philo was elected the first plebeian praetor (15).

Other civil deeds after 389 are true. The civil deeds of Licinius Stolo and Sextius Lateranus are the first both true and important. Of Publilius Philo the military and civil deeds both are the first both true and important.

So, by 367 civil strife was substantially over. By 336 it was entirely over. All magistracies were open to all citizens. The plebiscites were binding on all citizens. Conquest had begun distributing land among all citizens, too.

And armed with the perfect structure of magistracies, and with the unity of the citizens, the Romans had embarked on the conquest of the earth.

The development of the law.

Livy, as he records campaigns annually before 389 as after, so he records legislation more or less annually before 389 as after.

Before, for instance:

in 451 the first ten of the Twelve tables were promulgated;

in 449 the additional two of the Twelve tables were promulgated;

in 449 as well the Valerian laws made the plebiscites binding on all, plebeians and patricians (III, 32-57);

in 445 the Canuleian law removed the prohibition of intermarriage of patricians and plebeians (IV, 1-6).

These are, barring powerful evidence to the contrary, lore. Most of them, like the Valerian laws in 449, have to be presumed lore on grounds supplied by Livy. In particular, the plebiscites, having become binding on all, plebeians and patricians, with these laws in 449, had yet to become binding on all, plebeians and patricians, with the Publilian laws in 339. The rest, like the Canuleian law in 445, have to be presumed lore on general grounds. In particular, the plebeians cannot be likely to be admitted to intermarriage with the patricians two-odd generations before being admitted to debt relief, land, and the government of the city.

After 389, barring powerful evidence to the contrary, the laws are true deeds. As their consequences, beginning with the Licinian-Sextian laws in 367, always show.

After 389 true deeds, before 389 poetic lore. In one case before 389, however, there is very powerful evidence to the contrary.

The Twelve tables.

The Twelve tables were promulgated in 451-49.

Stripping the promulgation of all adornment – which includes even this: the patricians sent to Athens three of their number, Manlius Vulso, Postumius Albus, and Sulpicius Camerinus, to copy Solon's famous laws and study the institutions, customs, and laws of the other Greek cities (III, 31) – stripping the promulgation of all adornment, this is how Livy describes it:

to end the quarrels of patricians and plebeians decemviri were appointed to write down and publish the laws of the city, until then the prerogative of the patricians;

the decemviri wrote and published the laws on ten tables, and the laws were approved by the popular assembly;

the following year new decemviri were appointed, they wrote and published laws on two more tables, and these were approved by the popular assembly as well;

the following year the laws were engraved on bronze and displayed in the forum (32-57).

Two generations before Livy, Cicero writes: if anyone is looking for the origin and source of the law, the small booklet of the Twelve tables surpasses all by itself all the libraries of the

philosophers in both authority and utility (*On the orator*, I, 195-6).

Livy writes:

to this day, when so many laws have been passed one upon the other, the Twelve tables remain the source of all public and private law (III, 34).

The Twelve tables are the origin and source of the law. They are the source of all public and private law. And their promulgation in 451-49 is a true deed.

Rome conquered the earth, the conquest can be traced back war by war, it has to have a beginning, and its beginning is the conquest of Veii in 396. In the same way, Rome developed the law more than any other state before or after, in incessant legislation – one law upon the other, as Livy describes it – the legislation can be traced law by law back to the Licinian-Sextian laws in 367, as the consequences of the laws always show, the legislation has to have a beginning, and the Twelve tables, the origin and source of the law, the source of all public and private law, in 451-49, are this beginning.

Two-odd generations separate the promulgation of the Twelve tables and the Licinian-Sextian laws. In these two-odd generations the perfect structure of the magistracies of the republic developed. For, with Pomponius, what is the law worth in a state, if there is no one to administer it? In these two-odd generations the perfect unity of the citizens was substantially achieved, and shortly after that achieved entirely. In these two-odd generations the citizens conquered Veii and fought their neighbors in the south and east annually. And of all three, the development of the magistracies, the achievement of unity, and the beginning of conquest, in these two-odd generations, the promulgation of the law has to be the foundation.

As there is in the case of conquest the analogy with Sparta, too, so there is in the case of the law the analogy with Athens. Athens emerges from the poetic lore with the legislation of Draco, and immediately embarks on more legislation and expansion, and more. Rome emerges from the poetic lore first of all, before Veii, with the Twelve tables, and immediately embarks on more legislation and expansion, and more, and more.

Hence, also, presumably – because of the analogy – the poetic deed of Manlius Vulso, Postumius Albus, and Sulpicius Camerinus of copying Solon's famous laws.

And the laws of the Twelve tables are very well attested. The jurists kept writing on them, and some 110 of the laws of the Twelve tables are recorded.

These are some of the laws:

both parties shall plead before the judge; and after noon, and before the sun sets, the judge shall decide before them both (I, 9);

a child born ten months after the death of the father shall not be an heir (IV, 4);

the acquisition of movable goods by use shall be completed in one year, the acquisition of land or buildings by use shall be completed in two years (VI, 3);

if a robber is killed by night, the killing shall be lawful (VIII, 12);

killing a robber by day shall be prohibited; even if he is armed, unless he uses the weapon, you shall not kill him; and even if he resists, you shall shout first, so that others may come (13);

if someone is found to have given false witness, he shall be thrown from the Tarpeian rock (23);

penalty shall not be imposed on a citizen except by the assembly, and the assembly are those whom the censors have enrolled in the register of the citizens (IX, 2);

if a judge is found guilty of taking a bribe, he shall be killed (3);

a dead man shall not be buried or burned within the city (X, 1).

These are the source of all public and private law. There is this law also which can be taken on the authority of Cicero to be a source of international law:

a claim of ownership against a foreigner shall be good forever (IV, 7),

Cicero comments on it: can there be a greater courtesy than to call someone against whom you are waging war just a foreigner (*Duties*, I, 37)?

The relations which the laws of the Twelve tables regulate are much the same as earlier laws have regulated them, heirs, property, its acquisition, robbery, murder.

The advance is twofold.

First, procedure is substantially more clearly and distinctly the foundation of the law. Both parties shall plead before the judge. If someone is found to have given false witness. Penalty shall not be imposed on a citizen except by the assembly. The assembly are those whom the censors have enrolled in the register of the citizens. If a judge is found guilty of taking a bribe. The first law on the first table already is:

if you call him before the law, he shall go; if he does not go, you shall have someone witness it, and take him by force (I, 1).

Procedure is the foundation of the law. Hence the substantially greater likelihood of equality before the law. And hence the substantially greater likelihood of the incorporation of all citizens into a strong unity.

Second, and more important still, there is no authority on which the laws rest other than themselves. There is no prince, Ur-Nammu or Hammurabi. There is no god, not even god. There is no lawgiver, real or otherwise. Cicero writes: Cato used to say that the constitution of our state is better than any other, because in other states a single man usually set up the laws; our state, on the other hand, was shaped by the labors of many, and not in one lifetime but over many generations (*Republic*, II, 2-3).

Cato is the great Cato, qu. 204, aed. 199, pr. 198, cos. 195, cens. 184.

The law rests on authority no other than itself. Hence, if the law maintains its authority, its authority can be no other than the authority of the citizens. And hence the substantially greater likelihood of the incorporation of all citizens into an irresistible unity.

So that they conquer the earth.

So, by the end of the three-odd centuries at issue, through the time of Alexander, Rome is already a major advance in the development of the law.

And Rome is beginning to be a major advance in the development of custom, too. At the conclusion of the Latin war, in 338:

the Latini were granted citizenship.

And so Rome will continue to conquer peoples, one after the other, and will continue to grant them, more slowly, yet one after the other, too, citizenship.

The constitution of Rome was thus perfectly mixed.

Polybius, writing one and a half centuries after the three-odd at issue, describes it:

the three kinds of constitution are so fairly distributed and ordered in the Roman state that it is impossible even for the Romans themselves to say whether their state is an aristocracy, a democracy, or a monarchy (VI, 11);

the consuls, before they lead the legions out of the city, stay in Rome and have supreme authority over all public affairs; all other magistrates, except the tribunes of the people, are subordinate to them; they introduce measures in the senate and are entirely responsible for the implementation of its decrees; they supervise also the affairs of state conducted by the people, they summon the popular assembly, and introduce measures before it; as for the preparation for war and its conduct, their power is almost unlimited; they enroll the soldiers and appoint the military tribunes; they have the authority to punish anyone under their command and to spend any sums they think fit from the public funds; thus, if one considers only this element of the Roman constitution, he may reasonably conclude that Rome is a pure monarchy (12);

the senate controls the treasury and regulates all revenue and expenditure; it controls all public works; it has jurisdiction over all crimes committed in Italy; it is responsible for relations with the countries outside Italy, to impose demands, receive submissions, or declare war; thus, if one stays in Rome at a time when the consuls are away from the city, the constitution of Rome may appear to him entirely aristocratic (13);

but the people have a very important role in the state, too; the people alone have the right to award honors and inflict punishments, the only bonds which hold together kingdoms and states, and human society, in general; the people have the power to try cases, and they are the only court which may try a man on a capital charge; the people also elect the magistrates; they approve or reject laws; they deliberate on all questions of war or peace and decide them; they ratify all alliances and

treaties; thus, one may reasonably conclude as well that the constitution of Rome is democratic (14);

the result is a union so strong that it can withstand any emergency; so much so, it is impossible to find a better state (18).

And that one and a half centuries before Polybius, the result was already a union so strong that it could withstand any emergency, and so much so, it was impossible to find a better state, the events of these one and a half centuries show, the second Samnite war, in 326-04, the third Samnite war, in 298-0, the war with Pyrrhus, in 282-72, the first Punic war, in 264-41, the first Illyrian war, in 229-8, the second Punic war, in 220-02, the second Macedonian war, in 200-197, the war with Antiochus, in 192-88, the third Macedonian war, in 171-68. In the last Polybius was a cavalry commander, and when the vanquished had to surrender hostages, Polybius was one of the hostages.

So, in 451-49 the Twelve tables were promulgated.

In 396 after a ten-year siege Camillus conquered Veii, 15 km north of the city.

In 367 Licinius Stolo and Sextius Lateranus passed the Licinian-Sextian laws, removing all legal disabilities on any citizens, and creating the magistracy of a praetor to supervise the implementation of the law.

By this time the entire structure of the magistracies of the republic had developed.

In 343-1 the Romans fought, and won, the first Samnite war. Victory began with Valerius Corvus.

In 340-38 they fought, and won, the Latin war. Victory began with Publius Philo. The domain of Rome extended to Capua, 170 km southeast of Rome. The Latini were granted citizenship.

In 339 Publius Philo passed the Publilian laws, making the plebiscites binding on all citizens. In 336 he was elected the first plebeian praetor. All magistracies were open to all citizens.

Thus through the Latin war and its immediate consequences.

In the next centuries those other wars and their consequences followed.

Turning to the year 294, Livy writes:

46 years and four books of Samnite wars so far and there are more to come; but can one tire of writing and reading about them if the men who fought them did not tire of fighting them (X, 31)?

They did not tire of fighting them until Trajan, prince 98-117^{AD}. The state of Rome extended from the Firth of Forth in Britain in the north to the fifth cataract of the Nile in the south and from the Atlantic coast of Spain and Africa in the west to the Persian Gulf in the east, across 38° of latitude, 59° of longitude, 4 200 km along the meridian, 5 600 km along the parallel.

Nor did they tire of the law. They continued to pass one law upon the other, jurisprudence rose very greatly, and through the finest jurists, Mucius, Servius, Alfenus, Labeo, Julian, Pomponius, Gaius, Ulpian, Paul.

Nor did they tire of granting citizenship. In 212^{AD} Caracalla completed the process of extension of citizenship. As Ulpian describes the fact: everyone in the Roman domain has been made Roman citizen by a rescript of Caracalla (*Digest*, I, 5.17).

Nor did Livy tire of writing about them. He completed the 142 books of *From the foundation of the city*, ending with the year 9^{BC}.

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These are the states in the three-odd centuries from Ashurbanipal to Alexander.

And the following conclusions can be drawn from the development of the state in these three-odd centuries.

These three-odd centuries are part of the seven and a half centuries from Tiglath-pileser III to Augustus.

And the seven and a half centuries from Tiglath-pileser III to Augustus are the decisive in the development of the state.

These are the centuries of the greatest continuous advance in the development of warfare, before or after. Of the greatest expansion of the domain under the state, before or after. Of the greatest growth of the power which the state is, before or after. All forms of government that have ever been tried, before or after, are tried for the first time in these centuries. These centuries are decisive in the development of the law. Decisive

in the transformation of custom. Decisive in the development of religion. In these centuries philosophy also begins. The state begins being built in speech, then the investigation of the state begins. The description of the surface of the earth becomes systematic, becomes geography. History advances very greatly.

Many of those developments begin in the previous one century-odd, the one century-odd from Tiglath-pileser III to Ashurbanipal. In these centuries, the three-odd centuries at issue, the three-odd centuries from Ashurbanipal to Alexander, all those developments – those that have begun in the previous one century-odd, and those that begin in these centuries, the three-odd at issue – accelerate very greatly.

The greatest advance in the development of warfare begins in the previous one century-odd. In these centuries, the three-odd at issue, the greatest advance in the development of warfare continues and accelerates very greatly.

The greatest expansion of the domain under the state begins in the previous one century-odd. In these centuries, the three-odd at issue, the greatest expansion of the domain under the state continues and accelerates very greatly.

The greatest growth of the power which the state is begins in the previous one century-odd. In these centuries, the three-odd at issue, the greatest growth of the power which the state is continues and accelerates very greatly.

All forms of government that have ever been tried are tried for the first time in these centuries, the three-odd at issue.

The decisive advance in the law begins in these centuries, the three-odd at issue.

The decisive transformation of custom begins in the previous one century-odd. In these centuries, the three-odd at issue, the decisive transformation of custom continues and accelerates.

The decisive development of religion begins in the previous one century-odd. In these centuries, the three-odd at issue, the decisive development of religion continues and culminates in the building of the first church.

Philosophy begins in these centuries, the three-odd at issue.

So, some time into the development of philosophy, the philosophers begin concerning them-

selves with the state, and at length, two and a half centuries into the development of philosophy, at the very end of the three-odd centuries at issue, the investigation of the state begins.

Great advance in the description of the surface of the earth begins in the previous one century-odd. In the three-odd centuries at issue the advance accelerates, and early into the development of philosophy, early in the three-odd centuries at issue, geography begins, and its advance accelerates very greatly.

And great advance in history begins in the previous one century-odd. In the three-odd centuries at issue, with the development of philosophy, history advances more than ever, before or after, and the advance continues and accelerates very greatly.

Those are the decisive centuries in the development of the state.

Thus generally.

Now more particularly.

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The previous one century-odd is the time of the 6 Assyrian princes, Tiglath-pileser III, Shalmaneser V, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal, who reign from 745 to 627.

These princes develop an army of not less than 100 000. Counting their recorded campaigns, from the first of Tiglath-pileser III in 745 to the last of Ashurbanipal in 645, they deploy their army in each of not less than 70 of these 101 years. They deploy their army from central Asia Minor in the northwest to Susa in the southeast across 1 700 km and from lake Urmia in the northeast to Thebes in the southwest across 1 700 km as well.

On the three counts jointly – size of the army, capability of deploying it continuously, and capability of deploying it far afield – the advance over earlier forces is by at least an order of magnitude. All three – the size of the army, its continuous deployment, and its deployment far afield – indicate major development of logistics. And in this way, the development of logistics, the advance over earlier forces is yet greater.

Warfare does not begin with Assyria, with these princes, at this time. Great warfare does.

And the greatest continuous advance in the

development of warfare does.

Thus, after Ashurbanipal Assyria declines catastrophically, and is destroyed. It is destroyed by Babylon and Media. In the southwest Egypt rises, in the northwest Lydia rises. The four kingdoms fight one another over an area well beyond the reach of the campaigns of the Assyrian princes.

And in 559 Cyrus ascends, and the greatest continuous advance in the development of warfare accelerates.

The next three generations are the time of the 4 great kings, Cyrus, Cambyses, Darius, and Xerxes, who reign from 559 to 465.

In 559 Cyrus becomes the ruler of Anshan. By 550 he has conquered Media. By 546 he has conquered Lydia. It is 2 600 km from Anshan to the Aegean. South and west of his domain now, surrounded by his domain, is Babylon, and in 539 he conquers Babylon. In 530 he falls fighting the Massagetae beyond the Amu Darya. It is 3 100 km from the Aegean to the middle course of the Amu Darya.

Cambyses succeeds. In 526 he conquers Egypt. He sends an expedition in the desert, further southwest than any of his predecessors. He leads an expedition beyond the fifth cataract, further south than any of his predecessors.

In 522 Darius succeeds. In the northwest, he conquers the Balkan peninsula from the Bosphorus to the Danube, and campaigns beyond the Danube, north of the Black Sea. In the east, he sends ships to explore the Indus, then conquers India, and sails the ocean. It is 4 400 km from the lower course of the Danube to the mouth of the Indus.

In 486 Xerxes succeeds. In 480 he invades Europe with 1 700 000 men and 1 207 ships.

The advance in logistics has accelerated very greatly.

Counting from Ashurbanipal back to the beginning of the state, in two-odd millennia the princes have developed the capability of deploying armies across 1 700 km. Counting from Cyrus to Darius, in three generations these princes develop the capability of deploying armies across 4 400 km. More than twice further in three generations than in the previous two-odd millennia.

These princes deploy armies further afield than any of their predecessors in all directions, south,

west, north, and east. They also indicate the steadily more studious preparation of the deployment of armies further afield than any of their predecessors in all directions, south, west, north, and east.

Xerxes leads an expedition which has been in preparation for ten years. He gathers his force from all countries from the Danube to the Nile to the Indus to the Amu Darya. He counts his force.

1 700 000 men and 1 207 ships.

It is not just the largest force ever gathered by more than an order of magnitude. It is the most powerful force ever gathered, by far.

And it is defeated. It has met a yet more powerful force.

It has met Sparta and Athens, and with Sparta and Athens the greatest continuous advance in the development of warfare accelerates yet more.

The three generations from Marathon, in 490, to the end of the greatest war, in 404, are the time of Miltiades, Themistocles, Pausanias, Brasidas, Gylippus, and Lysander.

The state has begun in the west, among the Greek cities, at the time of the Assyrian princes, two-odd centuries before the Persian war.

The country is small.

So here as everywhere, the state begins with smiting. Sparta conquers Messenia. Argos defeats Sparta. Corinth captures Epidaurus. Megara captures Salamis. Sicyon makes war on Argos. Athens wins back Salamis. Sparta captures Arcadia. It defeats Argos.

By the time of the Persian war one state is the mistress of the land. Sparta.

The country is also maritime.

The cities send out colonies, and more colonies. And as on land, so on the sea, smiting begins. Corinth builds a fleet and controls the sea routes. Athens captures Sigeum. Mytilene wins Sigeum. Athens wins back Sigeum. It captures Naxos.

Then there is a major advance on the sea. Polycrates, tyrant of Samos *c.* 538-22, is the first mortal to try to master the sea. He builds a fleet of 100 fifty-oared ships.

By the time of the Persian war, as on land, so on the sea, one state is the mistress of the sea. Athens.

In 490 Athens defeats a Persian force at Mara-

thon.

It is the first victory unambiguously anticipating tactics.

In 480 Athens and Sparta defeat the Persians on the sea at Salamis. In 479 Sparta and Athens defeat the Persians on land at Plataea.

These are battles greater than any earlier battle by not less than an order of magnitude. At Salamis 380 ships against 1 207. At Plataea 110 000 men against 300 000.

Salamis is also the second victory unambiguously anticipating tactics.

In 431-04 Sparta and Athens fight the greatest war.

It is the first war of many dozens of battles, many dozens of campaigns, fought on land and on sea, across 1 000 km, over 27 years. The war is also won with the first unambiguous anticipation of strategy.

Sparta and Athens are an advance in the development of warfare more radical than any earlier.

Sparta discovers that determination will vanquish numbers. Of 300 who stand, 298 fall. Of the city of 8 000 men, 5 000 march out. The city of 8 000 men dominates an alliance of not less than 500 000. The city of 8 000 men fights a war across 1 000 km over 27 years, and wins it.

Sparta greatly advances the heavy infantry. The hoplites, arranged in lines, the best men in the front line, shield in the left hand, sword in the right, fight in a body, pressing forward, the men behind stepping in for the fallen men in front, pressing steadily harder to the right, wheeling the left flank of the foe, and until the foe turns to flight. It is with the Spartan heavy infantry that the army begins fighting in a body, the army itself becoming one single massive weapon.

Athens discovers the trireme. The one-hundred-and-seventy-oared weapon, armed with a bronze ram, of mass 40 tons and speed 9 knots.

Athens greatly advances the navy. The trireme requires a crew of 200. In 480 at Salamis Athens leads 180 triremes. Athens, a radical democracy already, is the state of some 30 000 men. 180 triremes require crews of 36 000. The radical democracy, manning the ships, dominates an alliance of not less than 1 000 000. In 431 Athens enters the greatest war with 300 triremes in active

service. The state of the radical democracy has grown to some 100 000 men. 300 triremes in active service require crews of 60 000. Next to the 300 triremes, Athens maintains 16 000 infantrymen in garrisons abroad and 13 000 infantrymen guarding the city.

Thus, of all the great advances, the greatest is the discovery of the citizen-soldier. In Sparta and in Athens the soldier becomes a citizen, and the soldier become citizen becomes the most powerful weapon.

In Sparta, free of the contention for wealth and civil strife, in constant quarters, in constant training, in constant readiness, excelling in unity, disciplined, campaigning as often as necessary against their producers, who are also their auxiliaries, campaigning with their allies, who are also their auxiliaries, as well as against their allies as often as necessary, and always campaigning against their foes, the citizen-soldiers are a breed of noble and courageous men.

How many are men like that? They are all men like that.

The state of Sparta is an army.

In Athens, manning the ships, gaining allies, collecting the tribute of their allies and distributing it among themselves, suppressing all attempts of their allies to secede, planting armed colonies among them, and always leading their allies further afield – lovers of poetry, too, and very well versed in philosophy – these citizen-soldiers are a breed of courageous men, too, if not, perhaps, quite so noble.

How many are men like that? They are all men like that.

The state of Athens is a navy.

Athens and Sparta greatly advance also generalship. Miltiades wins at Marathon, the first anticipation of tactics. Themistocles builds deliberately the greatest navy. Themistocles also wins at Salamis, the second anticipation of tactics. Pausanias wins at Plataea, the battle greater than any earlier by not less than an order of magnitude. Brasidas, Gylippus, and Lysander win a major campaign single-handedly each, Brasidas on the north Aegean coast, Gylippus in Sicily, Lysander in Asia Minor and on the islands, each levying troops in persistently hostile territory, organizing them, leading them to victory. Archi-

damus, Brasidas, Agis, Gylippus, and Lysander win the greatest war, the first unambiguous anticipation of strategy.

Then Thebes vanquishes Sparta and Athens. Then Macedon conquers Greece, then Persia.

The greatest continuous advance in the development of warfare accelerates yet more.

The not quite two generations from Leuctra, in 371, to the death of Alexander, in 323, are the time of Epaminondas, Philip, and Alexander.

Sparta has been invincible in the field for two centuries.

In 371, at Leuctra, Epaminondas defeats Sparta. In 362, at Mantinea, he defeats Sparta and Athens.

These battles are the discovery of tactics, the beginning of the theory of the use of troops in battle. Leuctra and Mantinea are the first battles in which the systematically deliberate use of troops vanquishes both numbers and determination.

In 359 Philip ascends. Macedon is besieged on all sides, on the verge of destruction. By 336 Philip is the master of the Balkan peninsula, 700 km from the Balkan mountains to the Peloponnese, more than 700 km from the Adriatic to the Black Sea.

Philip is a very great advance in logistics, in the mustering, training, and maintenance of troops for battle. The heavy infantry is armed with 6-m pikes, and built into a tighter body, pressing evenly forward, difficult to wheel, quick to pin its foe. It is also readily deployed into smaller units. The cavalry is enlarged, and trained to fight in a body as well. The light infantry is also enlarged. And the three are integrated, heavy infantry, cavalry, and light infantry. The light infantry is trained to guard the flanks of the heavy infantry, and to support the charges of the cavalry. The cavalry is trained to penetrate the foe pinned by the heavy infantry.

With Philip troops become a systematically built weapon ready to be deployed with much greater flexibility and force than any earlier weapon, as a single unit on even ground, into smaller units in rugged terrain.

Philip is a further advance in tactics.

And he is a very great advance in generalship.

It is not an army of citizen-soldiers. But it is a

large army, mustered and trained for determination very much better than any earlier army, and armed also with tactics, and armed also with superb generalship.

In 336 Alexander ascends. By 326 he has reached the Ganges.

From the Adriatic to the Ganges, 4 900 km along the great circle. Alexander has campaigned further than any of his predecessors as well as any of his successors.

Alexander is a great further advance in logistics.

He leads an army of 35 000 from the Aegean to the Ganges, maintaining and recruiting it continuously from the Aegean to the Tigris in persistently hostile territory, from the Tigris to the Ganges at first in poorly explored territory, then in altogether unexplored territory.

He is the greatest advance in tactics.

All his battles are won tactically. Issus is the first battle of encirclement. Gaugamela is the paradigmatic battle of penetration.

He is a decisive step toward the discovery of strategy.

His conquest of Persia is the second and more unambiguous anticipation of strategy. It takes him 4 years to conquer the greatest empire that has ever been.

He is the greatest advance also in generalship.

Read and reread his campaigns, model yourself on him, this is the only way to become a great general and to discover the secrets of the art of war.

And the continuity in the greatest advance in the development of warfare is indicated clearly and distinctly.

From the Assyrian princes to the princes of the four kingdoms, Babylon, Media, Egypt, and Lydia, which destroy Assyria, then fight one another over an area well beyond the reach of the Assyrian princes. From the princes of the four kingdoms to the great kings, who conquer the four kingdoms, then campaign further than any of their predecessors in all directions. From the great kings to Sparta and Athens, whose initial development of warfare is to one degree or another independent, but whose great advance and acceleration of warfare is a consequence of the campaigns of the great kings, and achieved in the

course of more or less continuous wars with the great kings. – Cyrus conquers the Greek cities of Asia Minor. It is on the border of the domain of Cambyses that Polycrates rises, supports the great king's conquest of Egypt with 40 ships, is impaled by the satrap of the great king. Darius crushes the Ionian revolt. He sends the force defeated at Marathon. Xerxes leads the largest force ever gathered against Athens and Sparta. After the Persian war Sparta assaults the domain of the great king in Asia Minor. Athens builds its empire fighting the great king over the cities of Asia Minor. The great king joins the greatest war, too. – From Sparta and Athens to Thebes, and the advance becomes now, irrespective of any and all of its deliberately practical ends, deliberately theoretical. Epaminondas is a great philosopher and general. From the great philosopher and general Epaminondas to the great philosopher and general Philip. And from the great philosopher and general Philip to the greatest philosopher and general Alexander.

It is a natural process.

Hence, also, the greatest advance in the development of warfare is the main cause of the greatest expansion of the domain under the state.

Again, the previous one century-odd is the time of Tiglath-pileser III, Shalmaneser V, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal.

Again, expansion does not begin with these princes, at this time. Great expansion does.

And the greatest continuous expansion of the domain under the state does.

The domain brought under the state by these princes is the greatest ever. Tiglath-pileser III conquers the entire valley of the two rivers. The state has begun in this valley nineteen and a half centuries earlier. And the entire valley has been brought under one state several times, by the princes of Akkad, by the princes of Ur, by the princes of Babylon, three times by the earlier Assyrian princes. Now, Sargon II breaks out of the valley in the northeast, beyond the Zagros, and in the northwest, in Asia Minor. Esarhaddon breaks out of the valley in the southwest and conquers Egypt down to Memphis, Ashurbanipal conquers it down to Thebes. The state has begun in the valley of the Nile twenty-three-odd centu-

ries earlier. After twenty-three-odd centuries of independent development of the two valleys, these princes unify them.

And the expansion continues. East. And west.

With the destruction of Assyria, in the east, beyond the Zagros, Media rises. There has never been a state that far east.

In the west, in western Asia Minor, Lydia rises. There has never been a state that far west either.

The great kings rise. Not quite one and a half centuries after Ashurbanipal, by the end of the reign of Darius, in 486, the great kings have expanded their domain northeast to the Amu Darya, further east to the valley of the Indus.

In the west, mainland Greece is firmly under the state.

Further west, the rise of Carthage has begun.

Syracuse has risen in Sicily.

One and a half-odd centuries later, by the end of the reign of Alexander, in 323, the Balkan peninsula north to the Danube, first brought under the state by Darius, has been brought more firmly under the state by Macedon.

In the east, Alexander has reasserted the dominion of the state to the Indus.

In the west, Carthage has brought under the state Sardinia and the Mediterranean littoral out to Gades, beyond the strait of Gibraltar.

The rise of Rome has begun.

By 745, the beginning of the reign of Tiglath-pileser III, the state has developed for twenty-two and a half centuries. West to east, it has brought under itself the domain from the plain of the mouth of the Nile to the plain of the mouth of the two rivers, 20° of longitude, 1 900 km along the parallel.

By 323, the end of the reign of Alexander, the state had expanded the domain under itself, west to east, from the shore of the Atlantic to the valley of the Indus, 74° of longitude, 6 800 km along the parallel.

More than three times more in these four-odd centuries than in the previous twenty-two and a half.

And again, continuity is indicated clearly and distinctly.

The domain under the state is not expanded in the south, and it is expanded little in the north. It

is expanded greatly in the east and in the west. This is the belt of the densest human population.

In the east, the Zagros mountains have remained an impenetrable barrier for close to two millennia. Then Sargon II subdues the Medes beyond the mountains, then Media rises, then the great kings reach the Indus.

In the west, the barriers have been the Taurus mountains and the sea.

Beyond the mountains, in Asia Minor, the state has been trying, and failing, to establish itself for one millennium. Then Sargon II subdues eastern Asia Minor, then Lydia rises in western Asia Minor, and the state crosses the Aegean and begins in Greece. And next to the temporal and spatial contiguity, and the fact that Esarhaddon attests the Greeks – all princes from the middle of the sea prostrated themselves in my feet and brought me their tribute, from Yadnana, Javan, and as far as Nusisi – continuity from the valley of the two rivers to Greece directly is attested by the transmission of writing and the transmission of the colonization of the sea.

The sea has thus also quit being a barrier. Carthage is a colony of Tyre. Syracuse is a colony of Corinth. And by the time of the rise of Carthage and Syracuse, not only has the sea quit being a barrier, the sea has become that tightest of bonds, like the land, a battlefield.

And Rome is far from Sparta and Athens, far from Carthage, far from Syracuse. But not too far. Sardinia belongs to Carthage absolutely. Sardinia is 270 km from Rome. Syracuse captures Ischia and plants a colony on it. Ischia is 170 km from Rome. The Etruscans involve themselves in the war of the Athenians and the Spartans. And the Etruscans are the immediate neighbors of the Romans. Veii is 15 km from Rome.

It is a natural process.

Hence, also, the fundamental cause, the greatest advance in the development of warfare, and its effect, the greatest expansion of the domain under the state, are in turn, both jointly, the main cause of the greatest growth of the power which the state is.

The growth of the power is indicated by the advance in warfare.

From the capability of unifying the two valleys, of the two rivers and of the Nile – to the

capability of unifying all countries from the Danube to the Indus – to the capability of transforming the state into an army, or a navy – to the capability of vanquishing all from the Danube to the Ganges in ten years.

The growth of the power is indicated by the expansion of the domain under the state.

From 20° of longitude, 1 900 km along the parallel – to 74° of longitude, 6 800 km along the parallel.

By the time of Ashurbanipal, some 10 million have been brought under the state, not less than one tenth of humanity. By the time of Alexander, expansion has brought under the state some 40 million, not less than one quarter of humanity.

Better yet, the growth of the power which the state is indicated by the fact that the state becomes an empire.

And the state becomes an empire with Assyria, at the same time, with the 6 princes from Tiglath-pileser III to Ashurbanipal.

The state is power. Unitary power.

And with the 6 princes from Tiglath-pileser III to Ashurbanipal the state is for the first time a deliberately unifying power. It is the one state of all former states, it has brought under itself Babylon, Urartu, Tyre, Israel, Judah, Egypt. It has brought under itself also countries which have never been under a state before. And it is making them all live in peace. It is making them all speak the same tongue. It is establishing one tongue as the tongue of all lands.

With the great kings the state is a very much greater empire. It has unified all powerful former states, Media, Lydia, Babylon, and Egypt. It has unified also dozens of countries which have never been under a state before. It is more explicitly a deliberately unifying power. They no longer fight each other at all. All are at peace. And it is a very successful deliberately unifying power. As we now see the peoples ruled by the Persians all mixed together, Greek with Greek, Greek with barbarian, barbarian with Greek.

Sparta brings the cities it dominates into an alliance under itself. It is not an empire, not at first. Yet, after the Persian war, Pausanias becomes the first Greek to adopt Persian dress and Persian custom and to aspire to become the king of all Greeks. After the greatest war, Sparta

continued to wage war, on the far side of the Aegean, with the proclaimed end now of liberating the Greek cities of Asia Minor.

Athens becomes an empire *par excellence*. It brings 200 cities into its alliance. It has brought under itself, counting even the puniest, not less than one third of all Greek cities. The schoolmistress of all Greece has become the mistress of not less than one third of all Greece.

Carthage becomes an empire. What belongs to it belongs to it absolutely.

Rome, but two generations after the conquest of Veii, not yet an empire in any other way, is already an empire in this way, it grants citizenship to the conquered Latini.

And Alexander's is the greatest empire. Into the greatest empire built by his predecessors he unifies Athens and Sparta, too. He is himself more explicitly than any of his predecessors a deliberately unifying power. And he is himself, alas, briefly, the most successful deliberately unifying power.

And yet better, the growth of the power which the state is indicated by the successful implementation of the theory of the state, which the princes have been developing implicitly since the first prince, for twenty-two and a half centuries by the time of Tiglath-pileser III, and developing it steadily more explicitly for sixteen centuries by the time of Tiglath-pileser III.

The first prince's is a picture. The prince holds an upraised mace ready to smite his kneeling foe. He wears the crown of upper Egypt. And the crown of lower Egypt. The state begins with smiting, and unification.

Sargon is explicit: Sargon, lord of the earth, won 34 battles; to Sargon, lord of the earth, Enlil gave no rival from the upper sea to the lower sea.

The princes in both valleys develop the theory. The same theory.

Princship is one. The prince destroys all foes. He extends all borders. He subdues all lands.

The princes develop the theory steadily more explicitly.

And this is the formulation of the theory in the inscriptions of the 6 princes from Tiglath-pileser III to Ashurbanipal.

The prince is the lord of the earth. He destroys all foes. He brings under his sway the lands from

the sea of the rising sun to the sea of the setting sun. From the horizon to the zenith he establishes the princeship over them.

He brings all lands under the single rule of Assyria. He brings them within the borders of Assyria. He imposes the princeship on all lands. All lands submit to the princeship.

He makes all peoples live in peace. He counts them among the people of Assyria. He makes them all speak the same tongue. He establishes one tongue as the tongue of all lands.

He is entrusted with the princeship over the earth.

All foes are destroyed. All lands submit to the princeship. The state is one. All peoples are one people. All made to live in peace.

And the Assyrian princes have implemented the theory over not less than one tenth of humanity.

This is the formulation of the theory in the inscriptions of the great kings.

I am the great king, the king of all kinds of peoples of all kinds of origin. I am the lord of the earth. The peoples were in commotion, all peoples fighting each other. I brought an end to the fighting. They no longer fight each other at all. All are at peace.

And in the historian, the great king formulates the end of the state on this theory as explicitly as it can be formulated.

If we conquer the Greeks, we will make the limits of Persia the same as the limits of heaven are for Zeus. I will march to the end of Europe, and when the sun looks down, it will see no country bordering on ours, because I will make them all one country. There will be no city or people left among men to fight against us.

And it is irrelevant whether the historian renders the great king *verbatim*, or his is an inference from the deeds of the great kings.

The great kings have implemented the theory over not less than one fifth of humanity.

Alexander said, when we march to the ocean in the east, all Asia will be ours. When we next sail south from the Persian Gulf and come back through the strait of Gibraltar, all Africa will be ours. And the limits of our empire will then be the same as the limits Zeus set on the earth.

The inhabitants of this earth should not live

divided into different states and different peoples, each with its own rules of justice. All men should be one people and one state with a common life and common order, like a herd grazing together in a common field.

And it is again irrelevant whether the king is rendered *verbatim*, or those are inferences from his deeds.

Alexander has implemented the theory over not less than one quarter of humanity. If, alas, very briefly.

The princes have been developing the theory implicitly for twenty-two and a half centuries by the time of Tiglath-pileser III, and developing it steadily more explicitly for sixteen centuries.

In the four centuries from Tiglath-pileser III to Alexander the princes develop the theory at its most explicit.

And the growth of the power which the state is in these centuries is indicated spectacularly by the successful implementation of the theory, and most of all by the success in achieving the end of the state on this theory.

We march to the ocean. All Asia is ours. We sail the ocean. All Africa is ours. The limits of our empire are the same as the limits Zeus set on the earth. The state is one. All peoples are one people. Grazing together in a common field.

It is a natural process. Fundamentally, of learning.

War – expansion – empire – power.

The philosophers, for their part, once they began investigating the state, have found different ends of the state.

Aristotle: the state is for the sake of the good life. Hobbes: the final cause of the state is man's preservation and a more contented life. Locke: the chief end of the state is the preservation of property. Rousseau: the state tends toward equality and public utility. Hegel: the end of the state is the unity of the particular self-consciousness in the generality of the ethical spirit. Marx: the state serves the need to hold class conflicts in check.

We must not look at particular states, we must look at the idea of the state.

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All forms of government that have ever been tried are tried for the first time in the three-odd

centuries from Ashurbanipal to Alexander.

The form of government of the state is its constitution. And it is of three kinds.

Aristotle writes: constitution is the arrangement of magistracies and especially the highest (*Politics*, III, 6); constitution is the same as government, which is the supreme authority in the state, and as this must be in the hands of one, or of a few, or of the many, the forms of government are kingship, aristocracy, and democracy; their perversions are tyranny, oligarchy, and mob rule (7).

Hobbes writes: the difference of commonwealths consists in the difference of the sovereign, or the person representative of all and everyone of the multitude (*Leviathan*, 19); it is thus manifest that there can be but three kinds of commonwealth; when the representative is one man, the commonwealth is a monarchy, when it is an assembly of all that can come together, then it is a democracy, when it is an assembly of a part of them only, then it is an aristocracy; for either one, or more, or all must have the sovereign power entire; there are other names, but they are not names of other forms, they are names of the same forms disliked; they that are discontented with monarchy call it tyranny, they that are displeased with aristocracy call it oligarchy, they that find themselves grieved under a democracy call it anarchy (*id.*).

The kinds are monarchy, aristocracy, and democracy.

In the twenty-three and a half centuries from the beginning of the state through Ashurbanipal the state is of one kind, monarchy.

And in the three-odd centuries from Ashurbanipal to Alexander monarchy continues to flourish.

The four kingdoms, Babylon, Media, Egypt, and Lydia, are monarchies. Persia is a monarchy. Macedon is a monarchy.

But in Sparta, Athens, Carthage, Syracuse, Rome, the other kinds develop.

There is thus the problem of how and why.

And to begin with, this is how the state emerges from obscurity among the Greek cities. In chronological order, in the first one and a half-odd centuries of the development of the state among the Greek cities,

in Sparta with a king,
in Argos with a king,
in Locri, in the west, with a lawgiver,
in Corinth with a tyrant,
in Megara with a tyrant,
in Athens with a lawgiver,
in Miletus with a tyrant,
in Sicyon with a tyrant,
in Catana, in the west, with a lawgiver,
in Acragas, in the west, with a tyrant.

10 cities. 7 emerge from obscurity with monarchs – most, clearly, named by those that are discontented with them – 3 with lawgivers.

The state thus begins among the Greek cities much as it has begun, and developed, everywhere, as a monarchy, 7 out of the 10 cities are monarchies. The more so in that all 7 are, including Sparta at this time, petty monarchies. And wherever and whenever the state has not been great, there have been petty local chieftains.

Yet some of the monarchies are not pure monarchies. In Sparta the king establishes a council. In Corinth the tyrant is a leader of the people. And not only 3 of the 10 cities emerge from obscurity with lawgivers. In 1 of them, in Athens, the lawgiver frames the constitution of the state, and the constitution which he frames is not a monarchy, and within a generation this first lawgiver is followed by another, who reframes the constitution, and not into a monarchy either.

The country is different. Small, rugged, crowded. So the state begins here as everywhere with smiting.

The country is also maritime. Colonization spreads its population over the entire Mediterranean littoral, in several hundred small cities. And this will encourage the new cities, founded by older cities, to begin with lawgivers. 2 of the 3 cities which emerge from obscurity with lawgivers are colonies. And this in turn will encourage lawgiving in the older cities, and in all cities.

But the fundamental difference are Homer and Hesiod.

The state has developed for twenty-two and a half centuries by the time of Tiglath-pileser III.

There have been lawgivers among the princes, counting back to Urukagina, for sixteen and a half centuries. There have been lawgivers as great as Hammurabi, ten and a half centuries earlier.

And in the one century-odd from Tiglath-pileser III to Ashurbanipal the state is at its greatest, and enlightenment is at its brightest.

Writing is at its most massive. The inscriptions of these princes are more numerous than the inscriptions of any of their predecessors, by far. These princes are a great advance in the acquisition of knowledge. They are a decisive advance in the description of the surface of the earth. They are a decisive advance in history. They are a decisive advance in the observation of the heavenly bodies. They collect the first library, not less than 1 000 distinct compositions.

And in this century Greek writing begins, with Homer and Hesiod.

Greek writing does not begin gradually, it explodes.

Homer and Hesiod create for the Greeks their theogony. The gods are secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom.

Homer and Hesiod are a great advance in the acquisition of knowledge.

All learn from Homer from the first, the fifth philosopher reports. Homer is wiser than all Greeks, the eighth philosopher reports. Hesiod is the teacher of most men, he also reports.

Homer and Hesiod precede the development of the state among the Greek cities.

Homer and Hesiod will have encouraged very powerfully lawgiving among the Greek cities.

And lawgiving begins among the Greek cities from the first, and begins in Athens with the framing of the constitution of the state.

So, here as everywhere, the state begins with smiting. Here, it begins also with lawgiving. The smiting intensifies. The lawgiving intensifies.

And in Sparta and in Athens the soldier becomes a citizen.

The soldier becomes a citizen, not the citizen a soldier. In Sparta, nineteen years incessantly fight the fathers of our fathers, then Theopompus establishes the ephorate. In Athens, Draco does not arm all men who have the franchise. He gives the franchise to all men who arm themselves. Solon does not give ships, horses, and arms to all magistracies. He gives all magistracies to the men in charge of the ships, the cavalymen, and the infantrymen.

In both Sparta and Athens smiting is first, constitutional development follows. In both Sparta and Athens more smiting follows, testing the constitution. In both Sparta and Athens, the constitution passes the test. It proves victorious. On the battlefield.

The outcome of the constitutional development is thus, in Sparta, an army. In Athens, a navy. In Sparta, a breed of Homeric heroes like Achilles. In Athens, a breed of Homeric heroes like Odysseus.

That this will be the outcome of the constitutional development of Sparta and Athens is not only consistent with the theory of the state developed by the princes. It has to be a consequence of the theory.

So, the constitution of Sparta is mixed, of elements of all three, monarchy, aristocracy, and democracy.

The constitution of Athens is pure democracy, the purest that has ever been.

In the west, the constitution of Carthage is also mixed, like the Spartan, of elements of monarchy, aristocracy, and democracy.

The constitutional development of Carthage, in the west, is to some degree independent. But the degree cannot be large. It is a natural process, fundamentally of learning, the development of the state, including its constitutional development. And Carthage emerges from obscurity as a state of its own one and a half centuries after the beginning of the state among the Greek cities. It is also far, but not too far. And there is always that tightest of bonds, the battlefield.

Syracuse – a tyranny, a democracy, a tyranny, an aristocracy, a tyranny – is, constitutionally, a failure. Learning is hard.

The constitution of Rome is also mixed, like the Spartan, and the Carthaginian, of elements of monarchy, aristocracy, and democracy, all three. And while in both the Spartan and the Carthaginian constitutions the element of aristocracy predominates, in the Roman constitution the elements of all three are mixed perfectly, none predominates.

The degree to which the constitutional development of Rome is independent cannot be large either. Rome emerges from the poetic lore two and a half centuries after the beginning of the

state among Greek cities. And it is also far, but not too far.

It can be concluded, also, that, if the wars of these centuries – in the course of the greatest advance in the development of warfare – are wars of constitutions, monarchy has emerged victorious. Nevertheless, the mixed constitution has acquitted itself very well, with determination and dignity. Democracy also, even as it has lost the greatest war, has acquitted itself very well, with resolve, fighting to the end.

The decisive advance in the law in these centuries is thus, first and foremost, the development of all forms of constitutions. In Athens, it is also a most deliberate development. Draco frames the constitution, Solon reframes the constitution, Cleisthenes reframes the constitution, and the constitution is reframed in the following one century-odd, on Aristotle's count, six more times.

It is a decisive advance as well, however, that the law becomes a routine of the state.

Lawgivers appear in all cities.

More consequentially, in Athens, every leader of the people becomes a lawgiver.

Most consequentially, in Rome, the monarchical element, the consuls, proposes laws, the aristocratic element, the senate, deliberates on the laws, the democratic element, the popular assembly, approves or rejects the laws. The law has thus acquired the capability of change and of stability simultaneously. The state has developed a mechanism which is very likely, both, to produce laws continuously and to give the produced laws permanence.

Moreover, the Twelve tables are the source of all public and private law. And in the Twelve tables there is no authority on which the laws rest other than themselves. There is no prince. There is no god. There is no lawgiver.

In the monarchies, the source of the law has remained the monarch, and the authority of the law is in its foundation the authority of the monarch. In Athens, the leader of the people has become the source of the law, and the authority of the law – which never becomes very great in Athens either – is in its foundation the authority of the leader of the people. In Rome, the consuls, the senate, and the popular assembly, jointly, become the source of the law, and the authority of

the law is in its foundation the authority of the constitution of the state.

The authority of the law is the law itself.

In Rome also, toward the end of these centuries, in 367, a magistracy is created, the praetor, specifically to administer the law. For what is the law worth in a state, if there is no one to administer it?

In these centuries already Rome is becoming the greatest advance in the development of the law since Hammurabi.

Judaism also develops in these centuries, and in the law Judaism is a minor advance and a major development such as it is not an advance.

The advance is the code of *Deuteronomy*. It is more elaborate than the earlier codes, more comprehensive, more unitary. And it is a minor advance. This code is promulgated in 622. In 621, elsewhere, Draco frames the constitution of a state. Not into a theocracy either.

The major development is the assimilation of the law into religion. This begins with the Yahwistic document, continues with *Deuteronomy*, and is complete with the Priestly code. The law protects god. God is the lawgiver. God gives the law directly to you. The center of the law is his sanctuary. The law is administered by his priesthood. Procedure is integrated into his priesthood. The punishments are sterner than ever, there are rewards, and the rewards are great, if not as great as the punishments are stern. The law does not seek abidance by the law, the law most explicitly seeks obedience to the law. Exactly as I show you, so you shall do.

The sacred constitution of Judaism is thus not democracy. If the lawgiver is god, it is monarchy. If the lawgiver are the writings, it is aristocracy.

This major development remains marginal in these centuries. Judaism remains confined to but one, very small, of all the peoples under the great kings. Nor do any of the peoples elsewhere notice that people. This major development will become ecumenical several centuries later.

In the three-odd centuries from Ashurbanipal to Alexander the decisive transformation of custom, which has begun in the previous one century-odd, also continues and accelerates.

Pax Assyrica has mixed for one century one tenth of humanity.

Pax Persica mixes for two centuries one fifth of humanity. Mixes all the tribes in the empire, forcing them all to see, even as they would all much rather not see, that they must practice the virtues which must be practiced with respect to the great tribe of the empire, the one fifth of humanity that it is, even as they would each much rather continue practicing the virtues with respect to its own petty tribe only, the insignificant fraction of humanity that it is.

The great king Alexander enlarges the empire to one quarter of humanity, and undertakes the deliberate and systematic mixing of that one quarter of humanity.

More decisive still, the members of some of the tribes become citizens.

A citizen is who shares in the deliberative or judicial government of the state.

Becoming a citizen need not be a virtue that must be practiced. The extension of the franchise, however, cannot not be a very firm ground on which all members of any tribe admitted to the franchise will be forced to see that they must practice the virtues which must be practiced with respect to all other members of any tribe admitted to the franchise.

Sparta does not extend the franchise. Nevertheless, it does not just keep its producers producing. It makes them its auxiliaries. It makes them good men, too.

Athens extends the franchise. If the citizens are 30 000 at the time of the Persian war, and 100 000 at the time of the greatest war, after only two generations of empire building, the extension of the franchise is spectacular. A great pity, on this count, the radial democracy will not win the greatest war.

And Rome begins with victory, laws, and extension of the franchise.

Judaism, for its part, explicitly and unconditionally separates its congregation from the rest of humanity, and legislates the exclusion, both, of the practices of the rest of humanity from its own practices and of its own practices from the practices of the rest of humanity.

This development also remains marginal in these centuries. Judaism remains confined to one small tribe.

In these centuries the decisive development of

religion, which has begun in the previous one century-odd, also continues and culminates in the building of the first church.

The church is built by writing.

After two and a half millennia of building by smiting, building by writing.

All the writings collected in the Hebrew scriptures are 29. Ignoring the last 2, composed after the centuries at issue, 27 writings are composed through the centuries at issue. The total for the chapters of the 27 writings is 904.

It is massive writing. Writing of comparable or greater quantity has been produced but four times, under the great state of Ur, then under the great state of Babylon, then under the great state of the new kingdom, then under the great state of Assyria.

More important still, the Hebrew writing is the first – some two and a half millennia after the beginning of writing – which continues to accumulate steadily for nearly four and a half centuries. States come, and go, the Hebrew writing continues to accumulate. Nearly four and a half centuries is much longer than Ur, much longer than Babylon, longer than the new kingdom, much longer than any of the four times when Assyria rises.

More important still, in one and all of the 27 writings the end is most explicitly political, it is pursued with relentless unity of purpose, continuously honed, and to perfection.

And the writings become effectual.

Hezekiah is the prince of Judah 726-697.

The state of Judah has been ruined by the Assyrian princes.

But the first 5 writings have accumulated, the Yahwistic document, *Amos*, *Hosea*, *Isaiah*, and *Micah*.

Hezekiah abolishes the shrines, smashes the pillars, and cuts down the sacred posts. He clings to the lord. He keeps the commandments of the lord given by him to Moses.

The writings, culminating in *Isaiah*, have told Hezekiah what to do, and he has done it.

This first attempt to implement the writings is to implement them in the state. The state is ruined, but not yet destroyed. It is an attempt to restore the state. To establish it on the commandments of the lord, and thus, according to his

promise, reverse its fortunes.

And this first attempt is not successful. The prince keeps the commandments of the lord. But the people do not yet keep the commandments of the lord. The successors of Hezekiah also revert to doing what is displeasing to the lord.

Josiah is the prince of Judah 640-09.

The state of Judah has continued to be ruined, after the Assyrian princes by the Egyptian and the Babylonian princes.

But the writings have continued to accumulate and are now 10, now also *Psalms*, *Nahum*, *Jeremiah*, *Zephaniah*, and *Deuteronomy*.

Josiah defiles and demolishes the shrines, tears down the altars and scatters the rubble, slays the priests and burns human bones on them. So he fulfills the law recorded in the book of the law.

And he calls the men of Judah and of Jerusalem, all the priests and all the prophets, all the people, young and old, he reads the entire book to them, and he makes a covenant before the lord that they will obey the lord and will keep his law.

This second attempt to implement the writings is also to implement them in the state. The state is still not altogether destroyed. It is also an attempt to restore the state. To establish it on the commandments of the lord, and thus reverse its fortunes.

And this second attempt is successful. The political end of the writings is now achieved. Now not only the prince keeps the commandments of the lord. Now the people also keep the commandments of the lord. He reads the entire book to them, and he makes a covenant before the lord that they will obey the lord and will keep his law.

The writings, culminating now in *Deuteronomy*, have told them what to do, they have done it, and Judaism is now successfully established.

The great assembly under Ezra is in 445/33.

The state of Judah has been destroyed, Jerusalem and the temple razed, the people taken in exile, then the exile has ended, exiles have returned to Jerusalem, the second temple has been built.

And the writings have continued to accumulate and are now 23, now also *Habakkuk*, *Ezekiel*, *Ruth*, *Joshua*, *Judges*, *Samuel*, *Kings*, *Proverbs*, *Lamentations*, *Haggai*, *Zechariah*, the Priestly

code, *Job*, *Song of songs*, *Malachi*, and *Obadiah*.

Ezra is a priest expert in the commandments of the lord.

He is accompanied by not fewer than 1 754.

In Jerusalem he finds that the people of Israel and the priests and Levites have not separated themselves from the peoples of the land. They have taken their daughters in marriage. The holy seed is polluted. But he finds also that a large crowd gathers around him, men, women, and children. And the people are bitterly crying. Let us make a covenant with the lord to expel the foreign wives and the children born to them. Let us obey the law.

Not only Ezra has continued to keep the commandments of the lord. And not only also the 1 754 who accompany him have continued to keep the commandments of the lord. The people in Jerusalem also, at least in part, have continued to keep, at least in part, the commandments of the lord.

The state is destroyed in 587. The great assembly is in 445/33. The state is destroyed, but one and a half centuries after its destruction, the population of the state, which under Josiah has made a covenant before the lord to obey the lord and keep his law, has continued, without the state, to obey the lord and keep his law. The population of the state has become the congregation, without a state now, of a church.

Ezra brings out the book of the law before the congregation, men, women, and all. He reads to them from the law. All the people hear the book of the law. And they swear and pledge in writing to follow the law of god given by him to Moses and given by Moses to them, and to observe faithfully all the commandments of the lord, his rules and his laws.

The writings, culminating now in the Priestly code, have told them what to do, they have done it, and Judaism, the first church, is established unshakably.

It is very much like a state. It has its center, the temple. It has its administration, the priesthood. It even has its domain, Jerusalem and the surrounding country of Judah, tiny though this domain is and a part of the domain of another state. Most of all, it has its congregation. It is a power keeping men in awe, a power reducing the

wills of men unto one will.

And at length the second temple will also be razed, the administration will be dispersed, Jerusalem and Judah will be depopulated, the congregation itself dispersed. Undaunted, the congregation will continue to be a congregation. To follow the law of god given by him to Moses and given by Moses to the congregation.

In religion Judaism, the first church, is the most important development. So much so, Judaism shows paradigmatically what religion is, and hence, what is religion, what is not religion.

You shall have no other gods beside me. Destruction first, then salvation. It is his plan. The lord alone is god, and you keep the law, this is the law. And the cause of ruin is your wickedness. And if you obey the law, you are blessed, if you do not obey the law, you are cursed. And the list of blessings is long, and the list of curses is longer. And the past is steered by him. And first and foremost, exactly as I show you, so you shall do.

Before or after, if it is none of that, it is not religion. If it is some of that, it is religion. If it is all of that, it is Judaism, or Christianity, or Islam.

And after, some centuries after the centuries at issue, there will be very much of all of that. There will be next to Judaism Christianity, then also Islam.

Before, in all the centuries before the centuries at issue, there is little of that. Somewhat more of that in the valley of the Nile, barely any of that in the valley of the two rivers.

In the centuries at issue, Judaism remains marginal. In the great assembly, in 445/33, the congregation counts itself, with their slaves, singers, horses, mules, camels, and asses, 57 888. One four hundredth of the human population – never mind the horses, mules, camels, and asses – of the empire of the great kings.

There is also Zoroastrianism. And there is in Zoroastrianism nearly all of that. Zoroastrianism also remains marginal, more marginal even than Judaism.

Like Judaism, Zoroastrianism begins in the empire of the great kings. It begins also at much the same time. The *Gathas* are from the century before Artaxerxes, prince 465-24.

There is thus in the development of the two,

Judaism and Zoroastrianism, spatial contiguity and temporal contiguity. Which all by itself indicates a natural process. Not a supernatural process in this either.

Besides, some 40 million are under the state.

And none of that can be imputed to the Persians.

The Persians make no images of the gods and build no temples. They think that the people who do so are fools. They do not worship the gods in human shape. To sacrifice to Zeus they go up into the highest mountains, and they call the entire circuit of the heaven Zeus. They sacrifice to the sun, to the moon, to earth and fire, and to the winds.

None of that can be imputed to the Spartans and the Athenians.

You can have of the gods Homer and Hesiod have created for you as many as you please. The closest these gods come to having a plan is to plot, some of them, the victory of the Achaeans, and to fight for this victory, while the rest of them fight for the Trojans, doomed as they are, Trojans and gods, to defeat. It may be that the gods have made the law, but they are not the law, and you, you do not keep the law, you make the law for yourself. The cause of ruin is the fickleness of the gods, and if you offend one of them, you are cursed, it will take you twenty years to get home, at the same time, however, you are blessed by another of them, indeed by the wisest, for no apparent reason either, and she will bestow on you all kinds of treasures. The closest these gods come to steering the past is to have made you gold at first, then let you degenerate into iron. One way or another, as the fifth philosopher already complains, Homer and Hesiod ascribe to the gods everything shameful among men, stealing, cheating, lying to one another. So, lamentably, exactly as they show you, so you can do.

None of that can be imputed to the Carthaginians.

Dramatically, they make human sacrifices. But then Darius tells them to stop.

None of that can be imputed to the Romans.

The relevant poetic lore concerns Numa, the second king. Numa institutes the cults of the gods, their rites, and their priesthood. And, Livy writes: because in those days the people were

ignorant and savage, Numa pretended to meet at night with the goddess Egeria, and told the people that she taught him how to do everything so as to please the gods the best (I, 19). Nor is Numa taught only by Egeria. Livy reports: Numa is said to have been taught by Pythagoras (18), and objects: but Pythagoras was one century after Numa (*id.*). With all due respect to Livy, it cannot be more difficult for Numa to be taught by Pythagoras than by Egeria. Before becoming himself, Pythagoras is the Delian fisherman Pyrrhus, before that Hermodotus, before that Euphorbus and is wounded as such by Menelaus at Troy, before that Aethalides, a son of Hermes.

Very generally, there is very little religion in any of the states in these centuries.

The states, and the 40 million under them, are occupied otherwise.

They advance warfare, expand the domain under the state, build up the power which the state is, frame the constitution of the state, make laws, mix the peoples and extend the franchise.

They are, on balance, rather excellently occupied.

dxxxiv

The great advance in the development of the state in these centuries attests a proportionately great advance in the acquisition of knowledge.

Deploying armies across 4 400 km, campaigning further than ever, south, west, north, and east, mustering and leading 1 700 000 men and 1 207 ships, developing the heavy infantry invincible for two centuries, building the navy of 300 triremes in active service, the deliberate development of logistics, the anticipation of tactics, its discovery, its great further advance, the anticipation of strategy, the great development of generalship, all attest the solution of theoretical problems, irrespective of whether practical problems are thus solved as well. Propositions have been won, very many propositions.

Building the greatest empire, building the dominant power among the Greek states, building the first maritime empire, building a petty kingdom into the greatest and most glorious kingdom on earth, all attest the solution of theoretical problems. The building of the first church attests the solution of theoretical problems, too.

The more explicit formulation of the theory of the state, and the great success in the implementation of the theory, both attest the solution of theoretical problems.

Framing the constitution of the state, and reframing it, and again, and again, all attest the solution of theoretical problems.

The advance in the law attests the solution of theoretical problems.

dxxxv

In these centuries philosophy also begins. It begins early in these centuries, some two generations after Ashurbanipal, and by the end of these centuries, by the time of Alexander, it has developed for two and a half centuries.

The great advance in the development of the state is a principal cause of the development of philosophy.

In particular, geography begins early in the development of philosophy, then flourishes greatly. And of this the state is a principal as well as an immediate cause.

History flourishes greatly. And of this also the state is a principal as well as an immediate cause.

Conversely, the philosophers – other than the historians – are slow to begin investigating the state. They involve themselves with the state from the first. But it is nearly one and a half centuries into the development of philosophy before the state begins to pose problems the philosophers will try to formulate and solve. In particular, the first problem the state poses to the philosophers is to build the state better, in speech, than it has been built, in fact. So it is two and a half centuries into the development of philosophy, at the very end of the three-odd centuries from Ashurbanipal to Alexander, when, at length, the philosophers begin also investigating the state. And of this, that the philosophers – other than the historians – have rather neglected the investigation of the state, the state is neither a principal nor an immediate cause.

The task is to collect the development of the state, and of history, and in their dependence on one another, and in order to collect this development in its entirety, those have to be collected as well. First, the lesser success, what the philosophers – other than the historians – have said about

the state. Then the greater successes. Geography. And history.

And then the steps of advance in the acquisition of knowledge in these centuries can be tabulated explicitly, as they have been in the earlier.

dxxxvi

The philosophers involved themselves with the state from the first.

Philosophy begins with Thales. He solved the problem of the principles of all things, and the problem of the earth. And he also advised the Ionians to set up a joint council, and was said to have diverted a river for the army of Croesus.

In the next generation, Anaximander solved the problem of the earth better, and drew the map of the earth. And he also founded the colony of Apollonia on the western Black Sea coast (Aelian, *History*, III, 17).

In the next generation, Pythagoras discovered proof, the irrationality of $\sqrt{2}$, proved that the sum of the angles of the triangle is two right angles, solved the problem of the principles of all things better, number is the principle of all things. He taught the transmigration of the soul. And he also established a brotherhood of his followers at Croton, in the west, and the brotherhood became the aristocracy ruling the city (Laertius, VIII, 3).

Xenophanes discovered that knowledge is not belief, and criticized Homer and Hesiod for what they have said about the gods. And he also sang:

it is not just to put strength above good wisdom,
it does not bring good government to the city,
nor does it fill the storehouses with goods.

This is the first inkling that the philosophers will concern themselves with the government of the city.

Hecataeus drew the map of the earth, and wrote the first geographical treatise. And he also advised the Milesians not to revolt against the great king, and when the revolt was suppressed, advised them to sail away not to Sardinia or to Thrace, but to the island of Leros nearby, so that they may try to recapture their city.

In the next generation, Heraclitus solved the problem of the principles of all things better. He pointed out that asses prefer rubbish to gold. And he also advised his fellow Ephesians that they

should leave their city to the boys and all hang themselves. This is the first inkling that the philosophers will find the state, the real state, altogether unsatisfactory. Darius was also said to have admired Heraclitus, and in evidence the correspondence of the two, the great king and the philosopher, was produced (IX, 12-4).

In the next generation, Parmenides discovered the principle of contradiction, and that the earth is a sphere. He pointed out that

they wander about two-headed, deaf, blind,
befuddled, hordes with no judgment,
believing that what is and what is not are the
same and not the same
and everything turns back on itself.

And he also wrote the laws of his city, Elea, in the west (23).

Anaxagoras discovered the cause of eclipses, said that the sun is a piece of red-hot metal larger than the Peloponnese, discovered that wood does not make beds, that there is a reason for change, said that there is soul in all animals. And he also was an adviser to the leader of the people, Pericles (Plato, [*Alcibiades I*], 118c). Not incidentally, the people indicted him for impiety and jailed him. Incidentally, in jail he worked on the problem of squaring the circle (Plutarch, *Pericles*, 32).

Empedocles formulated the theory of the elements of all things, earth, water, air, and fire, solved the now distinct problem of the causes of all things, said that the soul is the ratio of the elements of the parts of the body. And he also was a democrat, and brought down the aristocracy in his city, in Acragas.

Four-odd generations into its development, philosophy had advanced very greatly. Philosophy is theoretical and practical. Theoretical philosophy is physics and mathematics, practical philosophy is politics. And four-odd generations into the development of philosophy, theoretical philosophy had advanced very greatly. Practical philosophy was yet to begin. Physics and mathematics had advanced very greatly. Politics was yet to begin. The philosophers, all still physicists and mathematicians, had involved themselves with the state, but the state had not yet begun to pose problems the philosophers would try to formulate and solve. This began in the next

generation.

In the next generation, the great advance of physics and mathematics continued. Oenopides discovered the obliquity of the ecliptic. Meton discovered the cycle synchronizing the periods of the moon and the sun. Leucippus discovered atoms. Democritus formulated the atomic theory. Hippocrates of Chios wrote the first *Elements*. Herodotus wrote the *Histories*. Thucydides wrote the *History*.

And in this generation politics began. Protagoras first wrote on the state. Hippodamus first built the state in speech.

In this generation ethics also began with Socrates.

In this generation politics – the master art, as Aristotle describes it – began. And in this generation the explicit collection of the particulars should begin. Of the philosophers who have concerned themselves with the state, and what they have said about it.

dxxxvii

The philosophers who have concerned themselves with the state in these centuries, through the time of Alexander, are,

490 - 420 **Protagoras**,

484 - 403 Hippodamus,

475 - 411 **Antiphon**,

473 *Athenian constitution*,

467 Thrasymachus,

455 Alcidas,

455 Lycophron,

455 Phaleas,

453 - 403 Critias,

430 - 350 **Xenophon**,

427 - 347 **Plato**,

407 Aeneas Tacticus,

384 - 322 **Aristotle**.

Philosophy, then, had developed for four-odd generations.

The state had developed substantially longer.

In particular, the time was one generation-odd after the Persian war. Sparta and Athens had defeated Xerxes. The citizen-soldiers had vanquished the greatest empire. The greatest empire had stopped expanding, but its consolidation continued, peace and prosperity prevailed. Sparta was the dominant power among the Greek states.

Athens was building the first maritime empire. It had become a radical democracy. It had also become the schoolmistress of all Greece.

So the philosophers came to Athens, the empire, the democracy, the schoolmistress, to teach the prospective leaders of the people. The prospective leaders of the empire, democracy, schoolmistress.

Protagoras, Gorgias, Hippias, Prodicus all came to Athens to teach.

Protagoras told the young man: young man, if you come to study with me, from the day you come, you will go home every day a better man than the day before (Plato, *Protagoras*, 318a-b). He was followed by students from every city through which he passed (315a-b). He was the first to charge a fee for teaching (349a). He let the student assess the value of being taught and accepted what the student decided (Aristotle, *Nic. ethics*, IX, 1).

Rhetoric begins with Protagoras and Gorgias.

More important, Protagoras wrote *On the gods*. It began: of the gods I cannot know either that they are or that they are not, for many are the barriers hindering knowledge, including the obscurity of the matter and the brevity of man's life (Laertius, IX, 51-2). Protagoras was thus the second philosopher honored with a condemnation for impiety, and the first honored with the burning of his books (Cicero, *Gods*, I, 63).

Protagoras wrote also the *Truth*. It began: man is the measure of all things, of those that are that they are, of those that are not that they are not (Plato, *Theaetetus*, 152a-d).

And Protagoras first wrote on the state.

Plato, a great teacher himself, a great writer on the state himself, belabors Protagoras relentlessly, and in much detail in the *Protagoras* and *Theaetetus*.

Laertius reports: Aristoxenus said that nearly all of Plato's *Republic* could be read in Protagoras's *Antiarguments* (III, 37). Aristoxenus was a student of Aristotle, himself a student of Plato.

Laertius also lists the treatises of Protagoras, and one of the treatises in the list is *On the first order of things* (IX, 55). And what Plato has Protagoras say in the *Protagoras* about the first order of things has to be from *On the first order of things*.

Protagoras says:
 once there were only gods;
 then, when the appointed time came, the gods made mortal beings out of earth and fire; they then appointed Prometheus and Epimetheus to give them powers and abilities; so Epimetheus gave to some swiftness, to some strength, to some wings, to some claws, to some hides, to some hooves, to some the ability to procreate fast;
 but Epimetheus was not very wise, and he forgot to give anything to the human race; so Prometheus, desperate to find something for men, stole arts and fire from Athena and Hephaestus, and gave them to men; sharing thus in some way in the divine, men set up shrines, discovered speech, began building houses and nourishing themselves from the fruits of the earth;
 but they were scattered, there were no cities; and they were destroyed by the beasts because they were weaker in every way; they tried to band together, but they kept doing wrong to one another, because they did not have the art of government; and because the art of war is a part of the art of government, they could not fight the beasts;
 so, afraid that they will all die out, Zeus ordered Hermes to give them shame and justice, and to distribute these not like the arts, where one doctor, for instance, suffices for many, but to have them all have a share; for a city can never come to be if only a few have shame and justice (320d-2d).

Politics – the master art – thus begins with Protagoras, on the one hand, very felicitously.

Protagoras has discovered that the state poses the fundamental problem of its beginning. How and why the state comes to be out of the not state.

The distinction between the not state and the state is also very sharp. Protagoras begins with the beasts. And as far as men are concerned, art and fire, setting up shrines, discovering speech, nourishing themselves from the fruits of the earth, all belong on the side of the not state, before the state, with the beasts. For there were no cities, men did not have the art of government.

The state begins with cities and the art of government.

It is an important result as well that the art of war is a part of the art of government.

The solution of the problem, on the other hand, if it is a solution of the problem, is not very felicitous. The state comes to be with shame and justice. And distributed not like the arts, where one doctor, for instance, suffices for many, but so that all have a share. For a city can never come to be if only a few have shame and justice.

The difficulty is not that shame and justice are not so distributed that all have share. Even as the evidence that they are not so distributed will seem lamentably overwhelming. The difficulty is not that shame and justice should be so distributed that all have a share either. Shame and justice should be so distributed, even as there can be no evidence where what should, or should not, is concerned. The difficulty is not even that the state, the real state, supplies no evidence whatever that it has begun with shame and justice, never mind so distributed that all have a share.

The difficulty is that the state, the real state, including most particularly the beginning of the state, of the real state, is well within the purview of the philosopher. The beginning of the empire of the great kings, but one century before the philosopher, is well within his purview. The beginning of Sparta, even if it is traced back to the poetic lore of the beginning of the Spartan kingship with Heracles, is well within his purview. The beginning of Athens, even if it is traced back to the poetic lore of the beginning of the Athenian constitution with Homeric heroes, is well within his purview. The beginning of the hundreds of new cities along the littoral, continuing to be founded in the lifetime of the philosopher, is well within his purview. Indeed, of one of these new cities along the littoral – Thurii, in the west, the colonists sent out by Pericles in 444 (Plutarch, *Pericles*, 11) – Protagoras himself wrote the laws (Laertius, IX, 50).

The philosopher has ignored all that.

The difficulty is that the master art begins not with the state that there is. The master art begins, quite deliberately, too, with the state that there should be.

With lore of its own.

And so the master art continues.

Hippodamus, Aristotle reports, discovered the

art of planning cities; he laid out Piraeus (*Politics*, II, 8). Piraeus was the harbor of Athens.

Aristotle reports also: Hippodamus first among those who were not leaders of a state spoke about the best state (*id.*).

In particular:
his city would have 10 000 citizens;
the citizens would be divided into 3 classes,
artisans, farmers, and soldiers;
the land would also be divided into 3 parts,
sacred, public, and private;
the law would also have 3 parts, dealing with
insult, injury, and murder;
there would be a single court of appeal;
and all magistrates would be elected by the people,
by all the 3 classes (*id.*).

The city of Hippodamus would be in size somewhat like Sparta, even if in Sparta all 8 000 citizens are soldiers. In that all classes would elect all magistrates it would be like Athens. This is not important, however. Important is that the city of Hippodamus is neither Sparta nor Athens. It is the best state.

Hippodamus as well was involved in the foundation of Thurii. He laid out the city (Hesychius, s. v.).

Then it was the time of the greatest war.

The next 7 philosophers in the enumeration, 4 important, 3 not important, are from this time.

In 411, when Athens was already beginning to lose the war, the oligarchy of the 400 overthrew the democracy and took over the government of the state. Antiphon was one of the 400. Thucydides reports: the most powerful mind, Antiphon planned the takeover; he gave the best advice on legal matters (VIII, 68). In 410, the oligarchy was overthrown, democracy restored. Antiphon was executed. Thucydides reports: on trial for his life, Antiphon gave the best speech ever made (*id.*).

Antiphon is one of the 10 in the canon of the Attic orators, the earliest.

He anticipated the method of exhaustion. To square the circle, he inscribed in it a square, then a regular octagon, then a regular sixteen-sided polygon, and so on.

Antiphon also said:

by nature there is no difference between Greek and barbarian (fr. 44b),
and:

the law is by convention, not by nature (fr. 44a).

Ignoring the law such as it would have 3 parts in the city of Hippodamus, this is the beginning of the philosophers' concern with the law. The law is by convention, not by nature.

Plato's *Republic* opens with the quarrel of Socrates with Thrasymachus.

Thrasymachus says:
justice is what is useful to the stronger;
for, whether in a tyranny, or in a democracy, or in an aristocracy, the rulers make the laws, they make them useful to themselves, and proclaim what they have made just;
so justice is the same in all cities, it is what is useful to the established rule; and since the established rule is the stronger, justice is the same everywhere, it is what is useful to the stronger (I, 338c-9a).

Herodotus, an older contemporary of Thrasymachus, writing some two generations before Plato, first attests the three forms of government. He reports: after the death of Cambyses, seven Persians gathered to discuss what form of government to establish; Otanes proposed democracy, Megabyzus proposed aristocracy, Darius proposed monarchy; one man gave us freedom, Darius said, one man will preserve our freedom. This was in 522, one generation-odd before the Persian war.

The three forms of government – and it is manifest that there can be but three – have been discovered. On the authority of Herodotus, the Persians have discovered them. Among the philosophers, Thrasymachus first speaks of them.

Thrasymachus also first among the philosophers said what, and why, the source of the law is. The rulers make the laws, make them useful to themselves, and proclaim what they have made just.

What justice is follows. Justice is the same in all cities, it is what is useful to the established rule, and since the established rule is the stronger, justice is what is useful to the stronger.

The master art has begun with shame and justice, distributed so that all have a share. Thrasymachus is not only more explicit. He has supplied some evidence, the first to do so, and one of a very few to do so, of all the philosophers who have said what justice is. First, the rulers make

the laws, and whether in a tyranny, or in a democracy, or in an aristocracy. Second, when Socrates objects: no one who rules, to the degree to which he is a ruler, seeks his own advantage, he seeks the advantage of those he rules, Thrasymachus wonders: Socrates, do you still have your wet nurse? and when Socrates asks: why? Thrasymachus replies: to have her wipe your nose, you seem to think that shepherds and cowherds seek the advantage of the sheep and the cattle (342e-3b). Even as, in the rest of the *Republic*, 9 books of it, Plato argues that, indeed, shepherds and cowherds seek the advantage of the sheep and the cattle.

Lycophron said:

highborn is an empty word, in truth there is no difference between lowborn and highborn (fr. 91).

Also:

the law is only a convention, it is men's promise to one another to be just, and it has no power to make the citizens good or just (Aristotle, *Politics*, III, 9).

The law and justice, or justice and the law, are becoming the main concerns of the master art.

The law is by convention, not by nature. And the rulers make the laws, and make them useful to themselves. Or the law is men's promise to one another to be just.

Justice is, or should be, distributed so that all have a share. Or, rather, justice is what is useful to the stronger. Or, more with Protagoras than with Thrasymachus, justice is the law, men's promise to one another.

Lycophron also, with men's promise to one another to be just, anticipates the covenant, or compact, or contract, of which the master art will be fond after Hobbes.

Athens lost the greatest war. In 404, when it capitulated, Lysander set up an oligarchy, the tyranny of the 30. Critias was one of the 30. In 403, the oligarchy was overthrown, democracy restored. Critias fell in the battle which overthrew the oligarchy, leading the cavalry.

Critias said that the soul is blood.

He said also:

at first men lived like beasts;

next laws were established so that justice may rule mankind, and the laws held men back

from doing evil in the open, but not from doing it in secret;

so a wise man discovered the fear of gods, to frighten evildoers even in their thoughts (fr. 25).

At first men lived like beasts. Next laws were established. Next a wise man discovered the fear of gods.

Critias is the second philosopher to concern himself with the problem of the beginning of the state, how and why the state – the law, justice, the fear of gods – comes out of the not state – out of beasts.

The relation of the law and justice Critias also has described differently. Laws were established so that justice may rule mankind. And there is no evidence in this case either, yet what Critias has said about the relation of the law and justice has to be more plausible than what any of his predecessors has said.

And Critias's is the first attempt to explain religion – or in any case the fear of gods. The laws held men back from doing evil in the open, but not from doing it in secret, so a wise man discovered the fear of gods, to frighten evildoers even in their thoughts.

Homer and Hesiod created for the Greeks their theogony. In particular, as Xenophanes already complains, Homer and Hesiod ascribed to the gods everything shameful among men, stealing, cheating, lying to one another.

Protagoras, with whom the master art begins, said: of the gods I cannot know either that they are or that they are not.

In the generation between him and Critias, Prodicus said that the gods are personifications of things beneficial to men (Cicero, *Gods*, I, 118).

In the same generation, Hippo is the first philosopher said to be not just impious, but an atheist (Plutarch, *Notions*, 31).

So, next: a wise men discovered the fear of gods, to frighten evildoers even in their thoughts.

Nor can this explanation of religion – or in any case of the fear of gods – be less plausible than others, say, that it descended from heaven.

There is very generally very little religion in the Greek states in these centuries. And there is very generally very little fear of gods in the philosophers earlier in these centuries, through

about this time, the time of Critias.

There are from this time also the *Athenian constitution*, Alcidas, and Phaleas. In all three cases the evidence is meager quantitatively as well as qualitatively. – The *Athenian constitution* has been preserved in the corpus of Xenophon. Brief, lacking the literary virtues of either Xenophon or any others, it was composed after 443 (3) and before 424 (2), when Xenophon was being born, and Athens was embarking on the greatest war. The scholarship, which has established that the treatise is spurious, has also endowed its author with the name the Old oligarch. The name can be deduced from the opening lines: as to the Athenian constitution, I do not like it (1). The reasons are weighty: the rabble have been given all magistracies, the slaves and the foreigners are uncontrolled, religion is debased (1); they do not rely on hoplites, they rely on a navy and wealth (2); they always side with the rabble in the other cities (3). – Of Alcidas, Aristotle reports: Empedocles bids us kill no living creature, for this cannot be just for some men, and not for others, there is an all-embracing law; and Alcidas says the same (*Rhetoric*, I, 13). And an anonymous scholiast glosses: Alcidas said that god set all men free, nature made no man a slave (*id.*). – Phaleas is the second of the 3 philosophers, after Hippodamus and before Plato, whom Aristotle has collected in his review of: the states conceived in speech and held in high esteem (*Politics*, II, 1-8). In particular: Phaleas first said that the citizens of a state should have equal property; he said that in a new city this can easily be achieved from the beginning; in an already established city the easiest way to achieve it is for the rich to give dowries and not receive them, for the poor to receive dowries and not give them (7). – Admirable sentiments both. Nature made no man a slave. The citizens of a state should have equal property. And no doubt not just the latter, both can easily be achieved.

Then it was the time after the greatest war. Sparta had won the war with the great king as an ally. After the war it began operations against the great king. Athens, Thebes, and Corinth joined the great king. Sparta defeated them. The king's peace left the great king in control of Asia Minor. Sparta remained the hegemon of the Greek states.

Athens began an attempt to rebuild its empire. Then Epaminondas discovered tactics, and Thebes destroyed the dominion of Sparta and arrested the attempt of Athens to rebuild its empire. Then Epaminondas fell.

And this was the time when the master art came into its own, with Plato.

Ethics had begun in the previous generation with Socrates. As Plato has Socrates report: I read the books of Anaxagoras, found that they were all about causes like air, aether, water, and other such things, and realized that he had nothing to teach me; I began to study the causes of things by myself; and I discovered that earth and air and other such things are not the true causes of things; the true cause of things is what is for the best (*Phaedo*, 97b-9b). As Aristotle describes it: Socrates abandoned physics altogether, and devoted himself to ethics (*Metaphysics*, I, 6).

Socrates was a great teacher. He had many students. Many of them, like himself, devoted themselves to ethics, many of them also, also like himself, and like Protagoras earlier, became teachers. And 2 more of them – Critias was also a student of Socrates – belong in the enumeration of the philosophers who concerned themselves with the state, Xenophon as well as Plato.

Both were students of Socrates. Both devoted themselves to ethics, Xenophon not entirely and not too intensely, Plato entirely and most intensely. Xenophon did not become a teacher, Plato became the greatest teacher. Xenophon nevertheless wrote on education not less than Plato. All in all, most of Xenophon's treatises are ethical, but not all, and those that are are not too intensely ethical. All of Plato's treatises are ethical, and all most intensely ethical, including the political.

The master art came into its own as ethics.

Xenophon was a soldier. In 401 he was a commander in the army with which a pretender tried to seize the Persian throne. The attempt failed, and in the decade after 399 Xenophon fought in the Spartan campaigns against the great king and then against Athens, Thebes, and Corinth. He served under Agesilaus. He fought at Coronea.

And on the one hand, Xenophon wrote the *Cavalry commander*. This is the first treatise

concerned with the art of war.

Xenophon deals with: the recruitment of men and horses, their training, armament, and discipline (1); the general formation of the cavalry (2); the duties of the commander (3); the formations of the cavalry in marches and battle (4-5); how the commander should induce the respect of his soldiers (6); how the size of the Athenian cavalry can be increased, and what role it can play in the defense of the city (7-8).

He concludes: the art of war should be practiced more than any other art (*id.*).

The art of war is a part of the art of government, and with the *Cavalry commander* the art of war has become a theoretical concern.

On the same hand, Xenophon is a very important historian. He wrote the *Greek history*, in 7 books, continuing Thucydides, recording events from 411 to 362. He wrote also *The march of Cyrus*, the record of the failed attempt to seize the Persian throne. The Cyrus of the title is the pretender to the throne.

On the other hand, Xenophon wrote on Agesilaus, on Cyrus, and on Hiero. On Agesilaus, who led Sparta for four decades and under whom Xenophon himself served, on Cyrus, who built the greatest empire, and on Hiero, who built Syracuse into the most powerful city in the west.

In the *Agesilaus* Xenophon begins with: the deeds of Agesilaus (1-2). These are borrowed from the *Greek history*, and are not the main concern of the treatise. The main concern of the treatise are: the virtues of the king (3). More particularly: his piety, his justice, his temperance, his courage, his wisdom, his love for his country, his dignity, his austerity (3-11).

In *The education of Cyrus* Xenophon begins: we considered how cattle obey the cowherd and never conspire against him, while men always conspire against those who try to rule them; we concluded that it is easier for a man to rule other creatures than to rule men; but then we considered Cyrus and we changed our mind; because a vast number of men, cities, and peoples obeyed him willingly, even if some of them lived many months away from him and knew that they will never see him (I, 1). What follows, however, 8 books of it, is not history, and not concerned with the art of government, including the art of war.

What follows is virtues and education. And in the *Agesilaus* the true deeds serve the ethical lore, but have not become, in the service of the lore, false deeds. In *The education of Cyrus* they have. The true deeds have become, in the service of the ethical lore, false deeds. Cyrus conquered Media. In *The education of Cyrus* Cyrus receives Media as the dowry of his wife (VIII, 5). Cyrus died fighting the Massagetae. In *The education of Cyrus* Cyrus dies peacefully in his bed (7). Cambyses conquered Egypt. In *The education of Cyrus* Cyrus conquers Egypt (6).

And in the *Hiero* there are no deeds at all, just lore. Xenophon has the tyrant himself, Hiero, in a dialogue with the poet, Simonides, lament how unhappy the tyrant is compared with the ordinary citizen (1-8), then the poet tell the tyrant that, if he wins the affections of the ordinary citizens, he will be happy (9-11).

Xenophon wrote also the *Spartan constitution*. He begins: I wondered why Sparta, although the least populous, is the most powerful of all Greek states; then I considered its constitution, and I wondered no longer; for Lycurgus gave the Spartans their laws, and he was the wisest (1). What follows is virtues and education.

Xenophon wrote also 4 Socratic disquisitions, the *Apology* and the 3 dialogues, *Memorabilia*, *Home management*, and *Symposium*.

Once there was ethics, ethics was bound, apparently, to try and subjugate everything to itself. Earth and air and other such things are not the true causes of things, the true cause of things is what is for the best.

In Xenophon the attempt to make history the means of ethics is indicated clearly and distinctly. Whether the attempt is presumed deliberate or not. The attempt to make politics the means of ethics is also indicated, if not quite so clearly and distinctly. Again, whether the attempt is presumed deliberate or not.

And the former, the attempt to make history the means of ethics, was not successful, not with the labors of Xenophon, and not for a long time after. History, the search for truth, as distinct from all lore, including ethical, had advanced very greatly. And history continued to advance greatly for a long time after, even as it became prone to be confounded with ethics. The fathers

of the church made history the means of ethics.

But the latter, the attempt to make politics the means of ethics, was successful. Not with the labors of Xenophon. Xenophon is not a very powerful philosopher. And politics, the master art, had remained small. But a half dozen philosophers had concerned themselves with the state, and rather with but one part of the state or another.

Yet politics had begun with lore. With the building of a fictional state, too. Justice had begun dominating the concerns of the philosophers.

And in the same generation, there is Plato. Plato is a very powerful philosopher. In Plato the deliberate attempt to subjugate everything to ethics is most explicit. In Plato the state becomes a central concern.

And so politics came into its own. As ethics.

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The years of Plato are 427-347. He is very well attested, his students already began writing on him. And there is no report that in those turbulent years, very turbulent for Athens, his city, he involved himself with real politics, in Athens or anywhere else.

He taught, and very consequentially. He founded the Academy c. 385, and ever since philosophy has been the product of schools.

Most consequentially, he wrote. Ignoring the spurious, there are 27 treatises in his corpus.

Plato is one of the most important philosophers, and all his treatises have been presented in some detail above, in the course of the collection of the development of one problem or another.

He obtained very important theoretical results. The investigation of knowledge begins with him. He formulated the theory of the forms, a decisive step toward the development of logic. He first attests the order of the outer planets, Mars, Jupiter, and Saturn.

But it is in practical philosophy that Plato is all-important.

He writes:

the most important thing to learn is the form of the good and that it is by their relation to the form of the good that things are beneficial; if we do not know this, even the most perfect

knowledge of anything else is of no use to us; and it is the form of the good that gives, both, truth to what one knows and one's power to know it; although an object of knowledge, the form of the good is also the cause of knowledge and truth; it is thus right to say that knowledge and truth are good, but wrong to say that either of them is the good; the good is higher.

He writes this in the *Republic*.

Knowledge and truth are good. But the good is higher. And if we do not know this, even the most perfect knowledge of anything else is of no use to us.

And Plato subjugates everything to the good. To use to us.

The theoretical results, for instance. He argues relentlessly the immortality of the soul. And it is in the course of arguments for the immortality of the soul that he develops the theory of the forms. In the course of an argument for the immortality of the soul, too, he attests the order of the planets. The soul is immortal, there is nothing it has not seen in this world or the netherworld, there is nothing it does not know. And it is on this ground – those who associate with me I help discover many beautiful things within themselves – that he investigates knowledge.

The deliberate attempt to subjugate everything – and it is everything, including all knowledge and truth – to ethics is most explicit.

And politics came into its own with the *Republic*.

The *Republic* is, like most of Plato's treatises, a dialogue, of Socrates with a series of young men, in 10 books.

Book I begins with the question: what is justice (331b-c)?

The young men hastily answer the question wrongly, and are just as hastily directed to the right answer, which is right so conclusively, it is a call to arms:

are we, then, to join ranks with the wise and blessedly happy Simonides, Pittacus, and Bias, who said that justice is to give everyone his due, and fight against Periander, Perdiccas, Xerxes, and Ismenias, who said that justice is to do good to your friends and harm to your foes?

yes, the young man replies, we are (335e-6a).
Justice is not to do good to your friends and harm to your foes. Justice is to give everyone his due. And to remove any lingering doubt, in the rest of book I Thrasymachus is annihilated. Justice is not what is useful to the stronger either:

no one who rules, to the degree to which he is a ruler, seeks his own advantage, he seeks the advantage of those he rules (342e).

Shepherds and cowherds do seek the advantage of the sheep and the cattle.

Justice is not to do good to your friends and harm to your foes. Justice is not what is useful to the stronger. Justice is to give everyone his due.

Doubt yet lingers in the young men. So in book II the question has to be asked again: what is justice (358d-e)?

And this time the question is answered more deliberately. This time the answer – the same answer – are all the remaining 9 books of the dialogue. In particular:

since we are not clever men, and lack keen sight, if we were told to read small letters from a distance, and noticed that the same letters are written larger nearby, should we not read the larger letters first before trying to read the smaller?

yes, the young man replies;

so, as there is justice of a single man so there is justice of a whole city?

yes;

is a city larger than a man?

yes;

let us, then, find out what is justice in the city first;

let us (368d-9a).

The attempt to find out what is justice in the city begins with the problem of the beginning of the city. Plato is the third philosopher, after Protagoras and Critias, to address this problem. Very briefly. He writes:

I think a city comes to be because none of us is self-sufficient, but we all need many things; men thus gather in one place to help each other (369b-c).

That is that.

And, the problem of the beginning of the city solved:

come now, let us build our city in speech;

yes, let us, the young man replies (*id.*).

And so they do.

To answer the question, what is justice? let us find out what is justice in the city. To find out what is justice in the city, let us build our city in speech.

And so they do. In books II-X Plato builds the best state.

It is the third best state, after that of Hippodamus, and that of Phaleas.

In the best state of Hippodamus the citizens are divided into 3 classes, artisans, farmers, and soldiers. In the best state of Plato the citizens are also divided into 3 classes. The classes are different, however. One is the same, soldiers, even if Plato prefers to call them guardians. One is not altogether different, producers, the artisans and the farmers of Hippodamus gathered into one class. One is altogether new, philosophers. Philosophers, guardians, and producers.

Hippodamus does not address the problem of why the citizens are divided into those 3 classes, or the problem of how they are going to be divided into those 3 classes. Plato addresses both problems, why, and how.

The problem of why they are divided into these 3 classes, he addresses in concluding book III. It is because:

god made men of three kinds, gold, silver, and iron or bronze (415a-b).

Or in any case, the citizens of the best state will be told that, that god made men of three kinds, gold, silver, and iron or bronze (*id.*). Either way, gold is philosopher, silver is guardian, iron or bronze is producer.

The problem of how they are going to be divided into these 3 classes, Plato addresses in all of books II through X. Education is how.

The gold, the philosopher, finds out who is gold, who is silver, who is iron or bronze, and purifies the gold and the silver by educating them into, respectively, gold and silver, and lets the iron or bronze remain iron or bronze by neglecting its education (II, 374e-III, 412a).

The *Republic* is a treatise on justice. More than it is a treatise on justice, however, it is a treatise on the best state. And more than it is a treatise on either justice or the best state, it is a treatise on education. More, in each case, both

quantitatively and qualitatively. Education is a central concern of seven of the ten books of the treatise, II-VII and X. And a most intensely central concern. Children demand education, men and women demand education, the guardians of the state demand education, the philosophers demand education, the rulers of the state demand education, that it is just to give everyone his due demands education, that it is everyone's due to give the philosophers their due demands education, and as it is the philosophers' due to rule the state and the state's due to be ruled by the philosophers this most of all demands education. Education is the essence of justice, the essence of the state, the essence of the philosopher, the essence of the state that should be just, the essence of the state that should be just under the philosophers. Not to mention the young men. Clearly, with Protagoras: young man, if you come to study with me, from the day you come, you will go home every day a better man than the day before.

This is, more particularly, how the gold is purified into gold, or what is the same, how the philosophers are educated into philosophers, or what is yet the same, how the rulers of the best state are educated into rulers of the best state: they are selected in childhood (II, 374e-6c); they are watched at all ages to ensure that neither duress nor magic spells make them forget that they must always do what is best for the city (III, 412e); they study through their 30th year arithmetic, geometry, astronomy, and harmony (VII, 521c-31d); these prepare them for the truths of dialectic, which are not suitable for immature minds of under 30 (537d-9a); and they then study these truths for 5 years (531e-7c); they are then sent out of the best state to acquire experience in the arts of war and peace for 15 years (539b-40a); and these who have excelled throughout, at 50, full-fledged philosophers now, join their betters in the task of ruling the best state (540a-c).

It is a part of this purification, it is its unconditional foundation, introducing the higher stages of the purification, that: the most important thing to learn is the form of

the good and that it is by their relation to the form of the good that things are beneficial; if we do not know this, even the most perfect knowledge of anything else is of no use to us (VI, 505a);

and it is the form of the good that gives, both, truth to what one knows and one's power to know it; although an object of knowledge, the form of the good is also the cause of knowledge and truth; it is thus right to say that knowledge and truth are good, but wrong to say that either of them is the good; the good is higher (VII, 508e-9a).

It is a part of this purification also, to provide the gold, including the young men, with their motivation, that:

men are fettered in a cave (514a);

and they do not want to be dragged out of the cave (515c-e);

but it is our task to compel the best among them to make the ascent out of the cave to the good (519c).

Education is all-important in the best state.

Because just as important, namely, all-important, is who should rule. The philosophers should rule.

They should rule the best state.

Very much more generally, however, they should rule all states. Clearly, to make them all the best. For:

until the philosophers become kings or the kings become philosophers, the states will have no respite from evil (V, 473c-e).

The argument is straightforward, our state is good, all other states are bad.

And our state is not just good:

our state, having been built correctly, is completely good (IV, 427e).

It is so completely good:

you will not find a state as great as ours among the states of either the Greeks or the barbarians (423a).

In books VIII-X, having in the previous books read the larger letters, Plato returns to reading the smaller. Having found out what is justice of the whole city, he returns to justice of the single man. The single man is like the whole city. Plato has earlier already drawn the conclusion:

if our state is good and correct, then all other

states are bad and wrong;
and in how they are bad and wrong they are of
four kinds (V, 449a).

In books VIII he begins by making this more
explicit:

our state is like aristocracy, which is good and
just;

the bad ones are the other four kinds of constitu-
tion;

timocracy, or victory- and honor-loving constitu-
tion, like the Spartan,

oligarchy,

democracy,

and tyranny (VIII, 544e-5a).

The order is of increasing evil, timocracy is worse
than aristocracy, oligarchy is worse than timocr-
acy, democracy is worse than oligarchy, tyranny
is the worst. And in the rest of book VIII Plato
depicts graphically their degeneration from bad to
worse. That timocracy, or victory- and honor-
loving constitution, is like the Spartan is the one,
and only one, reference to a particular bad state.
In book IX he depicts more graphically the single
men who are like whole cities, and their degener-
ation. And never mind justice. Not only is the
philosopher the most just, the tyrant the most
unjust. There is also happiness. And not only is
the philosopher the most happy, the tyrant the
most unhappy. The philosopher is not 3 times
happier than the tyrant, not 9 times, not 27 times,
not 81 times, not 243 times:

the life of the philosopher is 729 times happier
than the life of the tyrant (587b-e).

Should the young men have yet remained
unpersuaded, in book X Plato yet returns to
education. Homer is annihilated. For:

love and respect for Homer are instilled in us
since childhood (595b);

and Homer has taught all Greece (606e);

but we cannot admit Homer in our city, because

he arouses and nourishes the irrational part of
the soul and destroys the rational, just like
someone who destroys the better citizens by
strengthening the vicious and surrendering the
city to them (605a-b).

And this is how the *Republic* ends:

have you realized that the soul is immortal?

the young man is transfixed, are you sure?

I would be wrong not to be, and so would you;

because virtue benefits the soul, vice corrupts it;
and virtue is rewarded, vice is punished (608c-
9d).

Plato then depicts briefly the rewards for virtue
and the punishments for vice which the gods
bestow here on earth, then depicts at some length
the punishments and the rewards awaiting the
virtuous and the vicious after death. The rewards
after death, the greatest awaiting the philosopher,
and the punishments after death, the greatest
awaiting the tyrant:

savage men grab the criminals, bound their feet
and arms, flay them, lacerate them on thorn
bushes (615e-6a).

Then he concludes the dialogue:

the soul is altered inevitably by the life it
chooses;

everyone therefore must consider the nature of
the soul, decide which life is good, which life
is bad, and choose accordingly (618b-c);

and if we are persuaded by what I say, we will
believe that the soul is immortal, that every
evil and every good can befall it, and we will
always hold to the right path, practicing justice
in every way; in this way we will be the
friends of ourselves and of the gods here on
earth and after death, and like the victors in the
games, will earn our rewards; here and in the
hereafter we will be happy (621c-d).

Plato's main concerns in the *Republic* are four.
One, education.

Two, who should rule.

Three, who should do what.

The philosophers should rule, the guardians
should guard, the producers should produce.

The division of the labors of guardians and
producers Plato has borrowed from the real state
of Sparta. In the real state of Sparta the citizens
are soldiers, the conquered peoples are their
producers. In the real state of Sparta, however,
the producers are also the auxiliaries of the
soldiers. The citizen-soldiers lead the helots in
battle, each citizen-soldier supported by 7 helots.
Good men, too. In the best state of Plato the
division is sharp. The producers do not guard, the
guardians do not produce.

Four, who should own what.

In books IV-V, before focusing on the higher
stages of the education of the philosophers,

completing the building of the best state, Plato completes it with the division of all land and all chattel, including husbands, wives, and children. In all other states:

there is no evil greater than the contention for things, calling everything mine and not mine (462a-c).

In our state:

our guardians will have everything in common; there will be community of husbands and wives; all children will be in common;

they will own no houses, no movable goods, nothing at all;

they will have nothing to call mine;

they will be maintained by the other citizens as wages for their guardianship (464a-c).

In the second best state, Phaleas's, the citizens should have equal property. Before that, again, in the real state of Sparta no citizen could own more land than any other, money was despised and the contention for wealth was more or less completely eliminated. And again, Plato has borrowed this from the real state of Sparta, and sharpened it. The 2 better of the 3 classes will have no property at all, not even land, not even children. They will be maintained by the producers.

Thus the *Republic*.

There is also the *Laws*.

It is Plato's last treatise, in 12 books, and in the *Laws* Plato undertakes to rebuild the best state.

The best state, however, being the best, cannot be easy to build better, or even just differently.

This is how Aristotle compares the best state of the *Laws* with that of the *Republic*: everything is the same, there is the same education in both, the citizens are free from work in both, they share their meals in both; the only difference is that in the *Laws* women are admitted to the common meals, and the soldiers are 5 000, while in the *Republic* they are only 1 000 (*Politics*, II, 6).

Nor are these substantial differences.

Where women are concerned, in the *Republic* already:

the guardians are men and women indiscriminately;

and the philosophers and rulers of the state are men and women indiscriminately (V, 449a-56c).

Women are citizens *par excellence*. They have their own common meals, too. And it will not seem that the best state will become better because women will be admitted to the meals of men, or men will be admitted to the meals of women.

Where size is concerned, indeed, in the *Republic*:

our state will have 1 000 men to fight for it (IV, 423a),

in the *Laws*:

our state will have 5 040 guardians (V, 737e-40d), and: the number 5 040 should not be increased even by 1 (XI, 929a).

And a real state that has become 5 times larger will have thus become substantially different. It will not seem, however, that this can make a difference to the best state. As it can be of any size it pleases, so it can grow to any size it pleases.

It will seem a more substantial difference that in the *Laws* Plato argues explicitly:

men are puppets of the gods (I, 644d),

and:

god is the measure of all things (IV, 716c).

Thus, then, politics came into its own. With ethical lore.

With the state built in speech. The best state. The state that there should be.

There are a couple of bits, here and there, that are in relation to the real state, the state that there is.

Most of all, the beginning of the state. A city comes to be because none of us is self-sufficient, but we all need many things, men thus gather in one place to help each other. Brief as it is, this third attempt to address the problem of the beginning of the state is more explicit, and hence rather more plausible, than the earlier, those of Protagoras and Critias.

A little of what Plato says about the forms of government may be in relation to the real state. The forms are monarchy, aristocracy, and democracy. Plato has subdivided the aristocracy into aristocracy, timocracy, and oligarchy, and it may be that the subdivision describes real kinds of constitution. Even as the depiction of their degeneration, from rule of the best to rule of the victory- and honor-loving to rule of the few, may

not.

It may even be that all real states are bad, none good.

And nothing else in the state built in speech, the best state, the state that there should be, is in relation to the real state, the state that there is.

And very much more important, it has to be concluded also, even as it has very seldom been concluded, and it has to be concluded also, because it has very seldom been concluded, that the best state is itself not good at all. The best state is bad. The best state is worse than all real states.

Not on any standards supplied by the real state. The best state is bad on its own standards, those urged relentlessly by itself.

Justice is to give everyone his due.

Justice is not to do good to your friends and harm to your foes.

Yet: we must guard the city against its external foes and its internal friends, so that the former lack the power to harm the city, the latter lack the will (III, 414a-b). The best state does have its friends and does have its foes. And the best state proposes to do not just good to its friends, it proposes to do to its friends the best, and forever, here and in the hereafter. To its foes it proposes to do not just harm, it proposes to do to its foes the worst, also forever, also here and in the hereafter, here 729 times worse, in the hereafter to lacerate them on thorn bushes.

Justice is not what is useful to the stronger either.

The best state is yet very much more useful to the philosophers than to the producers.

Vagueness, and inconsistency, may well be the essence of all ethical lore. Yet, this ethical lore is most explicit: knowledge and truth are good. And it relentlessly proposes itself as knowledge and truth.

Thus, it has to be asked, and for the sake of justice not less than for the sake of knowledge and truth.

Education is just. But is it just in that, with the wise and blessedly happy Simonides, Pittacus, Bias, and Plato, justice is to give everyone his due? Or it is just in that, with the unwise and cursedly unhappy Periander, Perdiccas, Xerxes, and Ismenias, justice is to do good to your friends

and harm to your foes? And rather, with the most unwise and cursedly unhappy Thrasymachus, justice is what is useful to the stronger? And the philosophers do look in all too many ways like shepherds and cowherds.

The same with respect to who should rule.

The same with respect to who should do what.

And the same, most regrettably, with respect to who should own what, the single lofty argument of the *Republic*.

But the ultimate standard is whether it is beneficial. The most important thing to learn is whether things are beneficial. The ultimate standard is whether it is of use to us. The ultimate standard of everything, even the most perfect knowledge, is whether it is of use to us.

And it does not even have to be asked to whom among us it has been of use, it suffices to ask to whom among us it is proposed to be of use.

The reference of 'us' can be taken to be, as presumably it should be, all of us, humanity. And the best state is most explicitly not proposed to be of use to all of us. At its largest: our state will have 5 040 guardians, and this number should not be increased even by 1. 5 040 guardians, their children, the appropriate number of producers, their children, some philosophers to rule them, all in all, say, some 50 000 of us. At Plato's time there were some 120 000 000 of us. Subtracting, some 119 950 000 of us are excluded from the best state, very many of us abandoned to the real states, all bad, none good.

Restricting the reference of 'us', for the sake of the argument, to the population of one real state or another, the best state is not proposed to be of use to any barbarians among us. Plato has no use for barbarians: Greeks and barbarians are enemies by nature (V, 470c). The best state is a Greek state.

Restricting the reference, then, to the Athenians, the best state is not proposed to be of use to the Athenians either. It was a difficult time for the Athenians. – The other philosopher, Xenophon, concerned himself, in the *Cavalry commander*, to improve the Athenian cavalry. He even wrote the *Revenues*, to propose: a plan to relieve Athens of its poverty (1); rather than hire out the public silver mines, the city should buy 1 200 slaves to work the mines, and gradually

increase their number to 6 000, then 10 000, and so on, until there are three public slaves at work for every citizen (4). – This philosopher, building the best state, does not concern himself with Athens at all. In the 10 books of the *Republic* he notes Athens twice. Once, to set up the dialogue of Socrates and the young men in a house in Athens (I, 327a-8b). And once more, to have one of the young men report that he likes Attic pastry (III, 404d).

There are a couple of references to Sparta. And Plato does not say so explicitly, but, on the ground of all the borrowings from the constitution of Sparta, it can be presumed, cautiously, that the best state is proposed to be of use to the Spartans. Even as it is not proposed to be of any use to their helots. It was a difficult time for the Spartans as well. It was at this time that they lost their helots. The best state would have thus made them face a stark choice, to reduce some of themselves to being producers, or never mind the best state, try and reconquer their former producers.

There is one reference to Syracuse. The same young man, the one who likes Attic pastry, does not like Syracusan cooking (*id.*). May this be the reason the attempt to make a philosopher king out of the tyrant of Syracuse failed?

Incidentally, the young man does not like Corinthian girls either (*id.*).

The best state is positively proposed to be of use to new colonists. This can be inferred from the *Republic* on general grounds, and it is explicit in the *Laws*: our mandate is to frame the laws of a new colony (III, 702a-d). Alas, the colonization wave, which had continued for four and a half centuries, had by this time largely come to an end. The littoral was crowded, empires claimed the sea, and very few were still new colonists.

The best state is not proposed to be of use to many of us, not many at all. Not to all of us. Not to the barbarians among us. Not to the Athenians among us. Not to the Syracusans among us. Not to the Corinthian girls among us either. Perhaps it is proposed to be of use to the Spartans among us, if not to the helots among us. Positively it is proposed to be of use to the new colonists among us, yet such among us are, lamentably, crowded out by the old colonists and the empire builders

among us.

Nor has the best state been of use to more of us than it is proposed to be.

It has been of use to the political philosophers. As it came into its own, so the master art has continued. More or less exclusively, as ethical lore. With but a very few exceptions – and all of these are, with but 1 exception, partial exceptions – the political philosophers after Plato have done as Plato first did. They have ignored the real state, the state that there is, and have continued to build the state in speech, the state that there should be. As, twenty-three centuries after Plato, Hegel has it: we must not look at particular states, we must look at the idea of the state.

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Then it was the time of Philip and Alexander.
The time also of Aristotle.

From this time is the second treatise on the art of war. Aeneas Tacticus wrote *On the defense of fortified positions*.

Aeneas Tacticus deals with: the disposition of troops and the preparation of positions for defense (1-10), maintaining morale and avoiding betrayal (11-4), repelling the sudden forays of the besiegers (15-6), conducting activities outside the walls (17-20), guarding the walls at night (21-31), meeting assaults on the walls (32-40).

Aeneas Tacticus's are real guardians.

Aristotle's years are 384-22. From 367 to 347 he was a resident at the Academy. From 343 to 335 he was in Macedon, the tutor of Alexander. In 335, back in Athens, he founded the Lyceum. In 323, at the death of Alexander, he was indicted for impiety and left Athens.

Most consequentially, too, he wrote. Ignoring the spurious, 35 treatises can be counted in his corpus.

Aristotle is the most important philosopher, and all his treatises have been presented in some detail above, in the course of the collection of the development of all problems that have been collected.

It is one of Aristotle's most important results, too, that philosophy is theoretical and practical. Theoretical philosophy searches for truth. Practical philosophy searches for action. Theoretical philosophy is physics and mathematics. Practical

philosophy is politics.

And Aristotle concerned himself with theoretical philosophy very much more than he concerned himself with practical philosophy, counting the treatises, nearly 5 times more.

The physical treatises are 20. They treat of all parts of physics. The advance in the acquisition of knowledge which they are is attested by the fact that they remained the foundation of physics until Galileo. One fundamental reason is that theory is nowhere contaminated by practice, the search for truth is nowhere contaminated by the search for action. The outcome is knowledge. As Aristotle dramatically describes it: knowledge is neither useful nor pleasurable. And nothing in the physical treatises is either useful or pleasurable.

The mathematical treatises are 9. They treat of one part of mathematics only, logic. The advance in the acquisition of knowledge which these are is yet greater, they remained the foundation of logic until Frege. One fundamental reason is the same, theory is nowhere contaminated by practice. The outcome is again knowledge. Nothing in the logical treatises is either useful or pleasurable either.

The practical treatises are 6.

Aristotle writes:

every action aims at some good (*Nic. ethics*, I, 1); if there is a good which is desired for its own sake, it must be the chief good;

knowledge of this good has to be the master art; and politics appears to be this art;

politics encompasses even the most highly esteemed actions, warfare, economics, rhetoric; it legislates; and even when the end is the same for man and for the city, that of the city is greater and more complete (2).

Practical philosophy is thus of one kind, politics, the master art. It encompasses even the most highly esteemed actions.

The 6 practical treatises are thus all 6 political.

The *Rhetoric* treats of the highly esteemed action rhetoric.

The *Nicomachean ethics* and *Eudemian ethics* treat of the highly esteemed action – too highly by Plato – ethics. And ethics is a part of politics. Even when the end is the same for man and for the city, that of the city is greater and more complete.

The *Poetics* treats of another highly esteemed action, which Plato banished from the *Republic* precisely because it was highly esteemed.

Among the political treatises belongs also *The constitution of Athens*. It is a theoretical treatise *par excellence*, a historical treatise, in particular, contaminated nowhere by the search for action. Nevertheless, it treats of the constitution of the state, of one particular state.

Finally, and most important, there is the *Politics*, treating of the master art in its all-encompassing greatness and completeness.

And the *Politics* is very unusual among Aristotle's treatises. It is the one treatise of his contaminated by the search for action.

The search for action, being a search for action, can ignore knowledge and truth altogether. And it may well be that this kind of search for action is the best, but it may not be that this kind of search for action is philosophy. The search for action which will be philosophy – practical philosophy – has to involve itself with knowledge and truth. And the search for action can do that in one of two ways. The search for action can either, as Plato abundantly shows, subjugate knowledge and truth to itself. Or the search for action can subjugate itself to knowledge and truth. It can ground itself in the search for truth, and aim at being neither useful nor pleasurable. And, with the exception of the *Politics*, Aristotle's practical treatises are all of this kind. Even his ethics is of this kind. Suffice it to note that in the 10 books of the *Nicomachean ethics*, this twenty-year resident at the Academy notes the soul but twice, both times in passing. Never mind teaching the immortality of the soul to a series of young men.

The *Politics* is different. It is like so many other treatises of Aristotle very important, and like so many of his other treatises it advanced the acquisition of knowledge. It is with the *Politics* that the investigation of the state, at long last, begins. The advance in the acquisition of knowledge in politics, however, is not nearly as great, by far, very far, as in physics, or in logic. And it is a consequence of this fact as well, among others, the fact that the *Politics* is not nearly as great an advance in politics as Aristotle's physical and logical treatises are in physics and logic,

that politics has since not advanced nearly as much, by very very very far, as physics or logic.

The *Politics* is in 8 books. It divides sharply into two parts. Book I. And books II-VIII.

With book I the investigation of the state begins. Book I is, like Aristotle's physical and logical treatises, not Platonic in either its concerns or its results. In books II-VIII Aristotle does not investigate the state, he investigates the best state. Books II-VIII are Platonic in both their concerns and their results.

To begin with the second part, then, books II-VIII.

These books themselves divide into three parts. Book II. Books III-VI. And books VII-VIII.

Book II is a review of our predecessors. In books III-VI Aristotle deduces the state. And in books VII-VIII he builds explicitly the best state in speech.

The earlier two parts, the review and the deduction, are explicitly a preparation for the third, the building of the best state in speech.

In book II, the review, Aristotle begins: in order to consider which is the best state, we must examine constitutions, and not just those of well-governed states, but those also conceived in speech and held in high esteem (1).

In particular, he examines the constitutions of 3 well-governed states: the Spartan (9), the Cretan (10), and the Carthaginian (11). None of the 3 well-governed states is very well-governed, however. Aristotle finds all 3 constitutions deficient: so much for the Spartan constitution and its principal defects (9); the same criticisms that have been made about the Spartan constitution can be made about the Cretan (10); and most deviations from the best state are quite apparent in the Carthaginian constitution (11). More important, he examines 3 constitutions conceived in speech and held in high esteem, those of Hippodamus (8), Phaleas (7), and Plato (2-6). As many fictional as real. More important still, reassuring as it is that he finds all these deficient as well, to establish the deficiency of Plato's constitution alone demands more attention, quantitatively and qualitatively, both, than to establish the deficiency of the 3 real constitutions combined.

Aristotle collected the constitutions of 158 real

states. There are fragments from 67 of these constitutions of real states. *The constitution of Athens* attests historical research at its best. All of this is later labors apparently. These labors are not in evidence in book II of the *Politics*.

These labors are not in evidence in the later books of the *Politics* either.

In books VII-VIII Aristotle builds explicitly the best state in speech. He begins:

to decide which is the best state we must decide which is the best life; for what is the best for a man and what is the best for the state is the life of virtue (VII, 1).

Elsewhere: even when the end is the same for man and for the state, that of the state is greater and more complete. Not when building the best state, however. When building the best state the end of the state is neither greater nor more complete, it is exactly the same, the life of virtue.

Aristotle then elaborates on the life of virtue (2-3). He then assigns size and site to the best state (4-6). Assigns character to its citizens: they should be both intelligent and courageous (7). And he then turns to:

who should do what (8-9),
who should own what (10-2),
who should rule (13),
and education (14-VIII, 8).

Well over one half of the best state is education.

In books III-VI Aristotle deduces the state.

In these four books, unlike the others, there are many references to real states. These references do not indicate systematic research of real states, however. They are not the ground of the deduction of the state. They are one and all *ad hoc* illustrations of the results which Aristotle obtains in the course of the deduction. The following are, for instance, all references to Athens in these four books:

Cleisthenes enrolled in the tribes many foreigners, and both free and slaves (III, 2);
Solon gave to the many the power of electing the magistrates and holding them to account (11);
ostracism is a great power, and the Athenians used it against the Samians, Chians, and Lesbians (13);

in many states one class of the common people is a large part of the population, as the crews of the triremes are in Athens (IV, 4);

to the superiority of the middle class Solon testifies in his own verses (11);
 sometimes murderers who flee, and then return, are tried in special courts, as in Athens (16);
 in Athens those who live by the harbor are more democratic than those in the city (V, 3);
 in Mytilene a quarrel over a marriage led to war with Athens (*id.*);
 in Athens the reputation of the Areopagus strengthened the government (*id.*);
 in Athens the common people, serving in the navy, won an empire, and this strengthened the democracy (*id.*);
 in Syracuse, when the people vanquished the Athenians, they set up a democracy (*id.*);
 the 400 deceived the people by telling them that the great king will give them money for the war against Sparta (*id.*);
 Pisistratus was the leader of a faction (5);
 in Athens one oligarchic leader won power courting the 30, another courting the 400 (6);
 in the great war, everywhere the Athenians brought down the oligarchies, the Spartans the democracies (7);
 Pisistratus was a leader of the people before becoming a tyrant (10);
 men are apt to give way to their passions, and to this the overthrow of the Pisistratidae is attributed (*id.*);
 the tyranny of the Pisistratidae was third in duration (12);
 Cleisthenes strengthened the democracy in Athens (VI, 4);
 in many states one magistrate executes the sentences, another has custody of the prisoners, as in Athens (8).

The constitution of Athens is a later work.

These four books as well are a preparation for the building of the best state. The deduction of the state in these books, like the review in the earlier book, serves the completion of that task in the following books. Nevertheless, in these books Aristotle proposes to deduce the state, the real state, to that end. And he obtains results concerning the real state. Even as he obtains more results concerning the best state. The tension between the two, the real and the best, is present throughout. And the best, being the best, always gets the better of the real.

The deduction begins:

in order to inquire into the essence and properties of the different kinds of government, we must first of all determine what the state is;
 the legislator or politician is concerned entirely with the state, because government is the arrangement of the inhabitants of the state;
 the state is composite, like any other whole it has parts, and its parts are the citizens, who compose it (III, 1).

On the one hand, government is the arrangement of the inhabitants of the state. On the other hand, from one proposition to the next, the inhabitants have become citizens.

The deduction continues:

a citizen is who shares in the deliberative or judicial government of the state;
 and the state is a collection of such a number of citizens as is self-sufficient for life (*id.*).
 On the one hand, a citizen is who shares in the deliberative or judicial government of the state. On the other hand, the state is a collection of citizens. And this definition of the state has precluded more or less all real states from being states. It has precluded from being states all monarchies, including their perversions the tyrannies. It has precluded from being states all aristocracies, including their perversions the oligarchies. The perversion of democracy is mob rule, and all mob rules are precluded from being states as well. Democracies alone are states.

The deduction continues. On the one hand: what makes a state one and the same is the same constitution, whether the name stays the same or not, and whether the people remain the same or change entirely (3),
 and:

constitution is the arrangement of magistracies and especially the highest (6).

On the other hand:

one citizen differs from another, yet the wellbeing of the community is the concern of all;
 this community of all is the constitution; the virtues of the citizens must therefore be relative to the constitution;
 but there are many forms of government; it is thus evident that there is not one single virtue of the good citizen, the perfect virtue;
 hence it is evident also that the good citizen need

not possess the virtue that makes a man good; so is there no case in which the virtue of the good citizen and the virtue of the good man come together?

we answer, the good ruler should be both good and wise, but the citizen need not be wise (4). The good shepherd or cowherd should be both good and wise, but the sheep and the cattle need not be wise.

The deduction continues:
next we have to consider how many forms of government there are, and what they are;
constitution and government is the same; and government must be in the hands of one, or of a few, or of the many;
true government is for the common good, government for its own good is a perversion of government, and whether it is of one, or of a few, or of the many;
accordingly, the forms of government are kingship, aristocracy, and democracy;
their perversions are tyranny, oligarchy, and mob rule (*id.*).

True government is for the common good. The good of the sheep and the cattle. And next Aristotle makes this rather explicit:

how many rule, one, or a few, or the many, is an accident (8);

the true end of the state is virtue (9).

So Aristotle next considers at some length the various accidents of how many rule (10-8) in their relation to various virtues:

wealth and freedom are necessary, and justice and courage equally so (12);

but education has a superior claim (13),

in order to conclude:

the best state is the state governed by the best;

for, clearly, in the same way in which a man becomes good he will make the state good, whether the state is an aristocracy or a monarchy (19).

Clearly as well, the best state cannot be a democracy. If the sheep and the cattle all became wise, government would be superfluous, and *ipso facto* the state, the best or otherwise, would be superfluous.

This concludes book III. In book IV Aristotle begins:

but the best is often not attainable;

we should thus consider not only what form of government is the best, but also what is attainable, and what is easily attainable (1).

And this is what he considers in books IV-VI. More particularly, he considers what has been attained, the accidents of kingship, aristocracy, democracy, tyranny, oligarchy, and mob rule, in relation to the various virtues and vices. In book IV the central concern are the classes in the accidents, the rich, the poor, and the middle class, in their relation to virtues and vices (*id.*). In book V the central concern are the causes for the degeneration of each accident in relation to virtues and vices (*id.*). In book VI the central concern is how two of the accidents, democracy (1-5) and oligarchy (6-8), should be set up.

There is in these three books, IV-VI, but one important result concerning the real state:

all constitutions are composed of 3 elements, deliberative, executive, and judicial (IV, 14-6).

Books II-VIII of the *Politics* are, presumably, from Aristotle's early years at the Academy.

The true way begins with the collection of the particulars, duly and orderly verses itself in the particulars, and by continuous and gradual ascent only ultimately ends with the most general principles. The false way flies to most general principles and, taking them to be settled, proceeds to judgment. In books II-VIII of the *Politics* Aristotle follows the false way, not indeed as uncompromisingly as Plato, yet with great determination.

Nor are the particulars just disdained. They are condemned. Plato writes: until the philosophers become kings, the states will have no respite from evil. Aristotle writes early in book II: none of the constitutions of existing states is good (1). All evil, none good.

Aristotle's concerns in these books are, like Plato's everywhere, ethical through and through.

To build the best state, Plato's main concerns are who should rule, who should do what, who should own what, and education.

It is difficult to avoid the conclusion that Plato is not concerned with the state. Plato is concerned with the household, and he is concerned with the state to the degree, and only to the degree, to which it is like the household.

To build the best state, in books II-VIII of the

Politics Aristotle's main concerns are the same, who should rule, who should do what, who should own what, and education.

In both Plato and these books of the *Politics* the concerns are everywhere, implicitly and more often than not explicitly, the management of the relations of master and slave, husband and wife, and father and children.

The appeal of the household can be explained. And it is only secondarily in that the household is more readily managed than the state. It is first and foremost in that you set up your own household and then manage it, or delude yourself you manage it, as you should.

Neither Plato nor Aristotle ever distinguishes city and state. This would be encouraged greatly by the fact of colonization, whose outcome were several hundred small and smaller cities along the littoral, which would be its own state each. Even if by the time of Plato and Aristotle the colonization wave of the earlier centuries had come to an end, and empires claimed the small and smaller cities.

Hippodamus discovered the art of planning cities. Phaleas's best state can easily be achieved in a new city. Plato writes: our mandate is to frame the laws of a new colony. And Aristotle's mandate in books II-VIII of the *Politics* is to choose a site for the best state, choose a population for it, and build its houses, too, and adorn the houses, too (VII, 11). Also: it is best to lay out the streets in the manner of Hippodamus (*id.*).

Book I is different.

It is not burdened with the particulars any more than the other books of the *Politics*. But it is not burdened with the best state either. It is burdened substantially less with virtues and vices. And it is not burdened at all with education.

So with book I of the *Politics*, two and a half centuries into the development of philosophy, at long last, the investigation of the state begins.

Aristotle writes:

as in all other investigations so in politics the whole has to be analyzed into its parts; we must therefore look for the elements of which the state is composed (1);

also, whether it is the state or anything else, things are considered with the greatest clarity when they are considered from their origin and

first growth;

and first there has to be a union of those that cannot exist without one another, male and female, for in common with animals and plants men by nature strive to leave behind their progeny, and master and slave, for that which foresees by reason is master by nature and that which acts on the foresight by the body is slave by nature;

from these two relations the family arises by nature to supply man's daily needs;

when several families unite, and the union aims at more than the supply of daily needs, the first community is formed in the village;

and when several villages unite in a single community large enough to be more or less self-sufficient, the state has come into being, originating in the bare needs of life, and continuing for the sake of the good life;

it is thus evident that the state is by nature, and man is a political animal by nature;

it is evident also that man is a political animal more than bees and other gregarious animals; for he is the only animal that has speech; speech is for the sake of establishing what is useful and what is useless, and hence also what is just and what is unjust; man alone has a sense of good and bad, just and unjust, and the like, and it is the association of animals with this sense that makes a family and a state; moreover, the state is by nature prior to the family and the single man; the whole is prior to its parts;

and that the state is by nature, and that it is prior to the single man, the fact shows that the single man is not self-sufficient, he is necessarily a part of the whole; a man who is self-sufficient must be either a beast or a god, he is no part of a state;

a political instinct therefore is implanted in all men by nature (2).

Next:

seeing that the state is composed of households, we have to examine first of all the household; and the first and smallest number of possible elements of the household are master and slave, husband and wife, and father and children (3).

And Aristotle turns to the examination of the

elements master and slave, and in order to examine these elements, turns to the examination of property. To the question, in particular: is property a part of the household (4)?

He concludes:

property is of two kinds, one is a part of the household, and thus natural and honorable, the other is not a part of the household, and thus not natural and not honorable (10).

The first kind:

is gained by husbandry, farming, piracy, fishing, or hunting, and is natural because it is gained by men through their own industry (8).

The second kind:

is gained by trade, and is not natural because it is gained by men from one another (10).

Aristotle then writes:

this is enough about the theory of property; we now proceed to the practice (11).

Advice on how to gain property follows. And Aristotle concludes the book by assigning the appropriate virtues to master and slave, husband and wife, and father and children (12-3).

Book I itself thus divides into two parts.

With the second part, the investigation of the household begins, and more important, the investigation of property begins.

It is an important result. Property gained by husbandry, farming, piracy, fishing, or hunting is natural because it is gained by men through their own industry. Property gained by trade is not natural because it is gained by men from one another. Even as, lamentably, it cannot be true. Two millennia later, Adam Smith will build economics on the premise: there is a certain propensity in human nature to truck, barter, and exchange (*Wealth*, I, 2). And this propensity, in Adam Smith, to truck, barter, and exchange, cannot not be the same as the propensity, in Aristotle, to gain from one another. To gain from one another is, pace Aristotle, all too natural. As piracy suffices to show. Even as Aristotle presumes, clearly, that the pirate will not trade what he gains.

With the first part, the investigation of the state begins.

Aristotle writes elsewhere: the beginning is the most difficult (*Refutations*, 34).

And the beginning of the investigation of the

state has indeed been especially difficult.

It is yet the beginning.

It is a search for truth, theoretical, in order to be a search for action, and be not just practical, be practical philosophy.

As in all other investigations so in politics, the whole has to be analyzed into its parts. Also, whether it is the state or anything else, things are considered with the greatest clarity when they are considered from their origin and first growth.

And searching for truth, Aristotle discovered the three fundamental problems which the state poses. One, to explain the state is to begin with the not state, or what is the same, to begin with what is first by nature. Two, it is to end with the state, and that is, the real state, not the best. Three, it is to show how and why the state comes out of the not state, it is to bridge the abyss between what is first by nature and the state.

He did not solve any of the three problems well.

One. First by nature is an animal. A political animal, however. An animal also more political than bees and other gregarious animals, the only animal with a sense of just and unjust. And such an animal, with a sense of just and unjust, cannot help being a *petitio principii*.

Two. Aristotle proposes to end with the state. He describes a development at the end of which: the state has come into being. The state which has come into being, however, is for the sake of the good life. And it may be that this is the state to wish for. But it may not be that this is the state. Not any more than the herd of the *Republic* may be the state. Not on the evidence of the particulars. Five millennia of them.

Three. The state comes out of the not state – the abyss from animal to the state is bridged – by the relations of master and slave, husband and wife, and father and children. And these relations cannot bridge the abyss from animal to the household. With these relations, all three of them, the animal has remained an animal. Never mind bridging the abyss from animal to the state.

Aristotle did not solve any of the three fundamental problems which the state poses well, but he discovered all the three fundamental problems which the state poses.

These are the fundamental problems which

both Hobbes and Rousseau address, the two philosophers who after Aristotle, long after Aristotle, have advanced the investigation of the state further. These are the fundamental problems both address, and both solve better. Hobbes solves better the first problem, and solves conclusively the second. Rousseau solves much better both the first and the third problems.

And the three cannot not be the fundamental problems which the state poses.

The first, because everything is by nature, including most particularly the state, against its continuing propensity, twenty-three and a half centuries now, to descend instead now from heaven now from the idea. The second, because, as the difficulty of the beginning of the investigation of the state shows, and the continuing difficulty of the investigation of the state continues to show, twenty-three and a half centuries now – three and a half centuries after the conclusive solution of this part of the problem by Hobbes, too – what the state is remains very difficult. And if the first and the second, the third.

Aristotle is clear also that these are problems of development. In book I of the *Politics*: first there has to be a union of those that cannot exist without one another, male and female, and master and slave; from these two relations the family arises to supply man’s daily needs; when several families unite, and the union aims at more than the supply of daily needs, the first community is formed in the village; and when several villages unite in a single community large enough to be more or less self-sufficient, the state has come into being.

It cannot be a good description of the development whose outcome the state is.

In the early *On philosophy* Aristotle describes also this development: first, men were forced by necessity to discover the useful arts, like sowing and the grinding of corn; next, they discovered the arts aiming not at necessity but at beauty; next, they turned to politics, and discovered laws and all the things that keep a city together (fr. 13). It is a better description. Of the discovery, forced

by necessity, of sowing and the grinding of corn, of the discovery of laws, and of the discovery of laws after the discovery, forced by necessity, of sowing and the grinding of corn. Even as it cannot be a very good description either.

Yet again, these cannot not be problems of development, and Aristotle discovered this, too.

Finally, there is that other result.

Politics is the master art. In particular, even when the end is the same for man and for the state, that of the state is greater and more complete. Politics encompasses even the most highly esteemed actions. In particular, it encompasses ethics.

Ethics is a part of politics. Not the other way around. Politics is not a part of ethics.

And given that the successors of Plato and Aristotle have tended to build very much more on Plato than on Aristotle, and when building on Aristotle very much more on the other books of the *Politics* than on book I, the importance of this result, as a practical matter, cannot be overstated.

The beginning is the most difficult. As Aristotle adds: the beginning is also the most important (*id.*).

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In these centuries, the three-odd from Ashurbanipal to Alexander, the description of the surface of the earth advanced greatly, it became systematic and deliberate, became geography, and geography advanced greatly. A principal as well as an immediate cause is the great advance in the development of the state.

The particulars are,

650	circumnavigation of Africa
	under Necho,
611 - 541	Anaximander,
584 - 530	Cyrus,
562	Hecataeus,
562	Scylax,
555 - 522	Cambyses,
550 - 486	Darius,
520 - 465	Xerxes,
520	Sataspes,
484 - 425	Herodotus,
408 - 356	Eudoxus,
405 - 335	Ephorus,
384 - 322	Aristotle,

371 **Dicaearchus,**
 371 **Pytheas,**
 360 - 307 Nearchus,
 359 Hanno,
 356 Megasthenes.

The foundation is the great advance in the description of the surface of the earth in the previous one century-odd, the one century-odd from Tiglath-pileser III to Ashurbanipal.

In one of his inscriptions Tiglath-pileser III records 149 localities, not counting the dozens lost in lacunae. In his other inscriptions he records more, Sargon II records more, Sennacherib more, Esarhaddon more, Ashurbanipal more.

The spatial relations of the localities are steadily more explicit.

And the princes are clear that they are pressing against the limits of the known earth. Sargon II: I brought under my feet lands that had never been conquered. I opened mountains that had never been traversed. Esarhaddon: I took the most distant paths, across impassable mountains, across endless sands. Ashurbanipal: a land beyond the sea, a distant land of which my fathers had never heard.

On all three counts, the number of the recorded localities, the determination of their spatial relations, and pressing explicitly against the limits of the known earth, with the Assyrian princes the description of the surface of the earth is on the verge of becoming systematic and deliberate.

That is the time also of Homer and Hesiod. And where the Assyrian princes leave off, Homer and Hesiod continue.

The description of the surface of the earth by the Assyrian princes reaches in the west Egypt, Phrygia, Lydia, and Ionia. The description of the surface of the earth by Homer and Hesiod reaches in the east Ionia, Lydia, Phrygia, and Egypt.

Spatial relations are not explicit in Homer and Hesiod. If the poets are pressing against the limits of the known earth, too, they are rather poetically. For instance: father Ocean and mother Tethys live at the end of the earth.

Homer and Hesiod are yet a great advance in the description of the surface of the earth. Not less than 200 of the localities in Homer's catalogue are real. Hesiod's is the first enumeration

of rivers, 23 of them real.

And in these centuries, the three-odd from Ashurbanipal to Alexander, the advance in the description of the surface of the earth by the princes continues. And with the first philosophers it becomes geography, and geography flourishes greatly.

In particular.

After the fall of Assyria, and before the rise of the great kings, under Necho, prince of Egypt 610-595, Africa was circumnavigated.

Herodotus reports:

Necho dispatched a fleet of Phoenicians to circumnavigate Africa (II, 42).

This is some three centuries after the beginning of the colonization of the Mediterranean by the Phoenician cities. It is two centuries after the foundation of Carthage. In the century after the foundation of Carthage Gades was founded beyond the strait of Gibraltar. At the time of Necho the Phoenician cities continued sending out colonies, the Greek cities had joined them and were sending out more colonies and more. The distance from the mouth of the Nile to Gades is 3 300 km along the parallel. The distance from the northern shores of the Red Sea to the cape of Good hope is 6 900 km along the meridian. The circumnavigation of Africa is a spectacular feat. Rather well prepared, however, waiting for a bold prince to attempt it. And Necho first did. Later on, Xerxes did. Later on still, much later, prince Henry did.

Herodotus continues:

they set out from the Red Sea sailing south; in the third year of the voyage they passed through the strait of Gibraltar, and came back to Egypt from the west; they said that as they rounded Africa the sun was on their right (*id.*).

The length of the voyage is also the first indication of the size of the continent.

The sighting of the sun on their right is also the first indication that the continent extends far to the south of the equator.

Then the great kings rose, and built the greatest empire. And the relation of the greatest empire and the beginning of geography is causal.

The great kings redefined radically the limits of knowledge of the surface of the earth.

Cyrus campaigned beyond the Amu Darya. It

is 1 500 km from Anshan to the Amu Darya.

Cambyses campaigned beyond the fifth cataract. It is 4 000 km from the Amu Darya to the fifth cataract.

Darius campaigned beyond the Black Sea, reached the Indus, sailed the Indian Ocean. It is 3 300 km from the fifth cataract to the northern shores of the Black Sea, and 4 000 km from the mouth of the Danube to the mouth of the Indus.

Xerxes dispatched an expedition to the Atlantic. It is 6 900 km from the mouth of the Indus to the strait of Gibraltar.

Herodotus is clear that the great kings are redefining the limits of knowledge of the earth. He writes on Cambyses:

the king led an expedition to the uttermost ends of the earth.

On Darius:

most of Asia was discovered by Darius;
the king wanted to know where the Indus issues into the sea; and thus it was discovered that, except to the east, Asia is bounded by the sea.

From the northern shores of the Black Sea to the southern shores of the Red Sea and from the mouth of the Indus to the strait of Gibraltar the great kings reached across 33° of latitude and 73° of longitude. They increased the portion of the earth brought under exploration by an order of magnitude, some 10 times.

More important still, they organized this portion of the earth into a unity, and analyzed it into its component parts.

Herodotus quotes a tax register of Darius. In the register 77 countries and peoples are arranged into 20 satrapies. The arrangement of the 20 satrapies and of the 77 countries and peoples into the 20 satrapies indicates orientation west to east, and by the numbering of the satrapies rather explicitly, from the Ionians in Asia Minor and the city of Barca in Libya, in the west, to the Indians, in the east, across 4 900 km. It indicates also the analysis of each satrapy into its component countries and peoples. By assessing their taxes, it indicates the analysis as well of all satrapies into their relative wealth.

Darius himself, in the Behistun inscription, reports:

these are the countries I rule;

Persia, Elam, Babylon, Assyria, Arabia, Egypt,

the country of the sea, Lydia, Ionia, Media, Armenia, Cappadocia, Parthia, Drangiana, Aria, Chorasmia, Bactria, Sogdiana, Gandara, Scythia, Sattagydia, Arachosia, and Maka;

23 countries in all.

First is Persia, in the center.

Next are 8 countries in the west. First 3 countries immediately west of Persia, in their order from southeast to northwest, Elam, Babylon, and Assyria. Next 2 countries in the far southwest, in their order east to west, Arabia and Egypt. Next, in the far west in the middle, the country of the sea. Next 2 countries in the far northwest, in their order east to west, Lydia and Ionia.

Next are 3 countries in the north. North of Persia, in their order from southeast to northwest, Media, Armenia, and Cappadocia.

And next are 11 countries in the east. First 3 countries immediately east of Persia, in their order from west to east, Parthia, Drangiana, and Aria. Next 3 countries in the far northeast, in their order from southwest to northeast, Chorasmia, Bactria, and Sogdiana. And finally 5 countries in the far east, in their order from north to south, Gandara, Scythia, Sattagydia, Arachosia, and Maka.

Darius has taken a decisive step toward the discovery of orientation – the orientation of very large features on the surface of the earth, across 4 900 km.

In the meantime philosophy has begun.

Thales said that the earth floats on water, like wood.

Anaximander said that it is at rest because of equilibrium, and shaped like a drum.

And Anaximander drew the first map of the earth.

Hecataeus, not quite two generations later, drew the second map of the earth. And with Hecataeus geography has begun, the systematic and deliberate investigation of the surface of the earth.

Strabo, in the *Geography*, reports on the authority of Eratosthenes: first Anaximander drew a map, and Hecataeus wrote a geographical treatise (I, 1.11).

From the first geographical treatise there are some 330-odd fragments.

These are representative:

Matyceti, a Scythian people, Hecataeus in *Europe* (fr. 189);

Miletus, a notable city of the Ionians in Caria, Hecataeus in *Asia* (fr. 240).

Europe and *Asia* were the two parts of Hecataeus's treatise.

All in all, the fragments attest some 300-odd localities. The localities cannot be counted more precisely. A large number is cities, some are islands and capes, and these can be counted precisely. But a large number as well is peoples, and these are more difficult to count. As in the entire earlier record so in Hecataeus countries are identified with the resident peoples, and resident peoples are not among the stable features on the surface of the earth. Thus, it is clear where exactly Miletus, the notable city of the Ionians in Caria, is, but it is not clear where exactly the Matyceti, a Scythian people, are. Among the peoples in the fragments are peoples also like: the Pelasgians (fr. 127, 133), and:

the Halizones (fr. 217),

who are both peoples in Homer's catalogue, marching with the Trojans against the Achaeans (II, 840-3, 856-7). And for all the labors of Herodotus to find out where the Pelasgians are (I, 57-8; VI, 137; VIII, 44), it remains unclear, should they be burdened with the presumption of reality, where they are. After the labors of Strabo still to find out where the Halizones are (XII, 3.20-3), it is clear that they need not be burdened with the presumption of reality.

Yet, that Hecataeus's is the first geographical treatise the following facts all show.

The number of the localities, 300-odd, more than in any earlier collection of localities, the large majority of them unquestionably real.

The division of the localities into the two parts of the earth, Europe and Asia.

Their distribution, from Scythia in the north (fr. 185-90) to Ethiopia in the south (fr. 325-7) and from the strait of Gibraltar in the west (fr. 39) to the Indus in the east (fr. 296), across 33° of latitude and 73° of longitude, coinciding precisely with the reach of the expeditions of the great kings.

Then there is the second map of the earth. And while about the first map of the earth there is no

more in the record than that, that it was the first map of the earth, about the second map of the earth there is substantially more.

It was the time of Darius. Miletus was a part of his domain. Hecataeus was from Miletus, a subject of the great king. Aristagoras, the leader of Miletus, urged the Ionians to revolt. Hecataeus urged them strongly not to revolt, and in order to persuade them:

he pointed to the power of the great king, and listed for them all the peoples ruled by the king (V, 36).

Hecataeus failed to persuade them. Aristagoras went to Sparta and Athens to solicit help for the revolt. He took with him:

a map of the entire earth, drawn on a bronze tablet, showing all the seas and all the rivers (49).

The map of the entire earth, drawn on a bronze tablet, showing all the seas and all the rivers, is the map Hecataeus drew. In Sparta, Aristagoras pointed to the map and said to the king:

Cleomenes, here, next to the Ionians are the Lydians, next to the Lydians are the Phrygians, next to the Phrygians are the Cappadocians, next to the Cappadocians are the Cilicians, next to the Cilicians are the Armenians, next to the Armenians are the Matieni, next to the Matieni is Cissia, and in Cissia is Susa where the great king has his palace; capture Susa and you will rival Zeus in wealth;

how far from the sea is Susa? Cleomenes asked; three months, Aristagoras replied (*id.*).

Ptolemy writes in the *Geography*: the description of the earth deals with quantities; mathematical method must everywhere lead the way (I, 1); and in order to draw the map of the earth necessary is systematic research, of which one part is survey, the other part is astronomical observation; and through both parts distance and orientation must be determined (2).

The first part of the systematic research, the survey, Hecataeus has discovered. The second part, the astronomical observation, will be discovered one and a half centuries later. That distance and orientation must be determined Hecataeus as well has discovered.

Next to the Ionians are the Lydians, next are the Phrygians, next the Cappadocians, next the

Cilicians, next the Armenians, next the Matieni, next is Cissia, and in Cissia is Susa.

Qualitatively, if not yet quantitatively, Hecataeus has solved the problem of orientation from the Ionians to Susa.

And how far from the sea is Susa? Three months.

Hecataeus has solved also the problem of distance from the Ionians to Susa, and in this case quantitatively, too.

In two of his fragments Hecataeus notes Scylax (fr. 295-6).

Scylax, in the same generation, opened the Indus and the Indian ocean for Darius. Herodotus reports:

Scylax set out from Caspatyrus, in the country of the Pactyes, sailed down the river toward the sea, then west through the ocean, and in the thirteenth month returned through the Red Sea (IV, 44).

The Pactyes: live north of the other Indians, next to the Bactrians (III, 102). Scylax thus sailed more than half the length of the Indus, before sailing west through the ocean, and circumnavigating the Arabian peninsula.

In the next generation, Sataspes led the expedition dispatched by Xerxes to circumnavigate Africa. Herodotus reports:

Sataspes sailed west, passed the strait of Gibraltar and then sailed south, but after many months there was always more sea to cross, and he turned back; to Xerxes he said that he had reached a land of dwarfs, and had turned back because his ship would not sail further (IV, 43).

If the land of dwarfs is the country around the mouth of the Congo, Sataspes crossed the equator before turning back.

And in the next generation Herodotus wrote the *Histories*. And the *Histories* is a very great advance in geography, as it is a very great advance in history, and the two are inseparable. The very great advance in history is the foundation of the very great advance in geography and the very great advance in geography is in turn the foundation of the very great advance in history.

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Here, then, is the geography of the *Histories*.

The history of the *Histories* is presented below.

Herodotus begins with the Lydian princes. And:

the boundary between the Lydian and the Mede kingdoms is the Kizilirmak;

it springs from the mountains of Armenia, and it flows through Cilicia, then between the Matieni on the right and the Phrygians on the left, and then between the Syrian Cappadocians on the right and the Paphlagonians on the left; so it cuts through almost all of Asia Minor, from the Mediterranean opposite Cyprus to the Black Sea; and it is in length a journey of 5 days for a hardy man (I, 72).

As he has begun researching the great and magnificent deeds of Greeks and barbarians, so Herodotus has begun also drawing the map of the earth.

He has determined orientation. The Kizilirmak springs from the mountains of Armenia, flows through Cilicia, then between the Matieni on the right and the Phrygians on the left, then between the Syrian Cappadocians on the right and the Paphlagonians on the left, cutting through almost all of Asia Minor, from the Mediterranean opposite Cyprus to the Black Sea. He has determined distance. The Kizilirmak is in length a journey of 5 days for a hardy man. He has introduced a unit of distance, too, 1 day for a hardy man.

He then turns to the Mede princes. And: the distance from the sea of Azov to the river Rioni, where the Colchians live, is a journey of 30 days, and from Colchis to Media is not far, there is only one people between them, the Saspires (104).

He has again determined orientation and distance. The unit is the same. The distance from the sea of Azov to the Rioni is 30 days.

And Herodotus has not made this explicit yet, but the two parts of the map, which are already drawn explicitly, are connected. The Kizilirmak issues into the Black Sea, from the south, and the Rioni also issues into the Black Sea, from the east. The rivers are the connection. The sea of Azov is also a part of the Black Sea. Herodotus will make all this explicit, and will make explicit also that the Black Sea is the standard reference point.

Then the great kings rise, and Herodotus turns

to their deeds, the greatest and most magnificent.

Cyrus conquers Media, then Lydia, including the Greek cities on the coast. And Herodotus enumerates the Greek cities:

the 12 Ionian cities are Miletus, to the north in Caria Myus and Priene, in Lydia Ephesus, Colophon, Lebedus, Teos, Clazomenae, and Phocaea, as well as Samos and Chios which are islands, and Erythrae on the mainland (142).

These are in Asia Minor. Next:

the 12 Achaean cities are Sicyon, then Pellene, Aegira, and Aegae where the river Crathis is, Bura, Helice, Aegium, Rhypes, Patrae, and Olenus where the river Pirus is, and Dyme, as well as Tritaea which alone is inland (145).

These are in the Peloponnese. Next:

the Aeolian cities are Cyme, Larissa, the New Fort, Temnus, Cilla, Notium, Aegiroessa, Pitane, Aegaeae, Myrina, and Grynea; Smyrna the Aeolians have lost to the Ionians (149); but they have cities also on the islands, on Lesbos, Tenedos, and the Hundred Isles (151).

These are also in Asia Minor.

There are again 2 rivers with respect to which the cities in the Peloponnese are described, the Crathis and the Pirus. Orientation and distance are not determined explicitly. The connection with the other parts of the map is also only implicit, through the deeds of the princes. Yet the enumeration of the Ionian and Aeolian cities is complete, and all of Asia Minor has now been described in some detail. The enumeration of the Achaean cities is also complete, and much of the Peloponnese has also been described in some detail.

Cyrus then conquers Babylon. And:

in Assyria there are many great cities but the greatest is Babylon; it lies in a great plain and it is a square, each side 120 stades long; so its circumference is 480 stades, and a moat and a wall run along its entire length (178).

More important, there are again the rivers:

Babylon is divided in two by the river Euphrates, which is great, deep, and swift; it flows from Armenia and issues into the Persian Gulf (180);

the Diyala flows from the mountains in the country of the Matieni and issues into another great

river, the Tigris, which in turn issues into the Persian Gulf (189).

And this part of the map is connected to those drawn earlier explicitly. The Kizilirmak springs from the mountains of Armenia and the Euphrates also flows from Armenia. The Kizilirmak also flows left of the country of the Matieni, and the Diyala also flows from the mountains in the country of the Matieni. The Euphrates and the Tigris, into which the Diyala issues, both issue into the Persian Gulf. The Euphrates is great, deep, and swift. The Tigris is also great.

Cyrus then undertakes a campaign in the east. This is the first of the expeditions of the great kings which extend vastly the limits of knowledge of the earth. And:

the Massagetae live in the east, toward the rising sun, beyond the river Araxes (201);

of the Araxes some say that it is greater than the Danube, some say that it is smaller; it flows from the country of the Matieni, from which the Diyala also flows, and issues into the Caspian Sea (202);

east of the Caspian is a plain stretching endlessly before the eye; and in this plain the Massagetae live (204).

There is an error here. The Araxes is a conflation of two rivers. Its source in the country of the Matieni and mouth in the Caspian Sea identify it as the Aras, which flows eastward and issues into the Kura shortly before the Kura issues into the Caspian. Its situation east of the Caspian, in the plain stretching endlessly before the eye, where the Massagetae live, identifies it as the Amu Darya, which flows westward and issues – or rather issued, when there was such a sea – into the Aral Sea.

There is an error, but the error can be corrected, and the error can be corrected, because there is no confusion, here or anywhere else in Herodotus, and here as anywhere else Herodotus's explicit description itself is the ground of the correction.

That the Danube issues into the standard reference point, the Black Sea, Herodotus has not yet made explicit. He will.

But he has also begun comparing the great rivers explicitly, thousands of kilometers apart, the Danube, in particular, with – ignoring the

Aras in favor of the Amu Darya, far the greater of the two – the Amu Darya.

And this part of the map is connected explicitly with those drawn earlier, through the country of the Matieni, from which the Diyala also flows.

Herodotus continues:

the Caspian is a sea of its own, not mingling with the other seas; the Mediterranean Sea, the sea beyond the strait of Gibraltar which is called the Atlantic Sea, and the Indian Sea are all one sea; but the Caspian is separate;

it is 15 days of rowing long and 8 days wide;

west of the Caspian are the Caucasus mountains with peaks higher than any other (203).

He has now introduced the unit of distance on the sea as well. On land, 1 day for a hardy man, on the sea, 1 day of rowing.

Later on, he calibrates the units, too. On the sea: 1 day of rowing is 700 stades (IV, 86). Hence, this is, more particularly, how spectacular the spectacular feat of measuring the Caspian is, length,

<i>Histories</i>	between 1 600 and 2 100 km,
correction	not quite 1 100 km,
width,	

<i>Histories</i>	between 800 and 1 100 km,
correction	not quite 500 km.

Moreover, Herodotus has established that the Caspian is a sea of its own. Which it is.

In order to do so, he has established that the Mediterranean, the Atlantic, and the Indian Ocean are one and the same sea. Which – as the circumnavigation of Africa under Necho has shown – they are.

West of the Caspian, also, are the Caucasus mountains with peaks higher than any other. Which, this side of the Tien Shan, they are.

In book I already, as the great and magnificent deeds of the princes through Cyrus have been researched, but the great and magnificent deeds of his successors are yet to be researched, the map of the earth, grounded in the seas and the rivers, is substantially drawn.

The Kizilirmak issues into the Black Sea from the south, the Rioni issues into it from the east. The Kizilirmak springs from the country from which the Euphrates also flows, and it flows left of the country from which the Diyala flows. The Diyala issues into the Tigris, and the Euphrates

and the Tigris both issue into the Persian Gulf. East of the country from which the Diyala flows is the Caspian Sea. It is a sea of its own. Further east is the Amu Darya. The Mediterranean, the Atlantic, and the Indian Ocean are one and the same sea.

The Euphrates, the Tigris, the Danube, and the Amu Darya are great.

The Kizilirmak is 5 days for a hardy man long. The distance from the sea of Azov to the Rioni is 30 days. The Caspian is 15 days of rowing long and 8 days wide.

And later Herodotus will make explicit that the Danube issues into the Black Sea from the west, that the sea of Azov is a part of the Black Sea, and that the Black Sea, through the Mediterranean, and the Persian Gulf, through the Indian Ocean, are also that one and the same sea.

Cambyses succeeds Cyrus, and conquers Egypt. And:

Egypt is 3 600 stades wide along the coast and 7 920 stades long along the Nile from the sea to Elephantine (II, 9);

the Red Sea is 40 days of rowing long and $\frac{1}{2}$ day

wide (11).

Another river has been measured, and another sea has been measured.

Herodotus continues:

and I think that, just as the Red Sea is a gulf of the Indian Sea now, so the valley of the Nile was once such a gulf running down from the Mediterranean toward Ethiopia;

for if the Nile is to turn now toward the Red Sea, what is to prevent that sea from being silted up in 20 000 years, and even in 10 000 years? indeed, why has the river, so vast and working so hard since long before I was born, not silted up more of the sea than it has (*id.*)?

Lyell, in the *Principles of geology*, in 1830, quotes Herodotus's question, and answers it: a powerful current sweeps from the strait of Gibraltar to the prominent convexity of Egypt, so that not only are fresh accessions of land checked, but ancient parts of the delta are carried away (I, 13).

Lyell's answer rests on observation and experiment, and so does, twenty-three centuries earlier, Herodotus's question. Herodotus writes:

for I have seen how the delta projects into the

sea, I have seen seashells on mountaintops, I have seen how brine springs from the earth, I have seen that the soil is swampland and silt from Ethiopia (II, 12);

and when approaching Egypt by boat, while you are still a journey of 1 day from the land, if you drop a cable, you will bring up mud even if you are at a depth of 11 fathoms; this shows that deposits from the land reach that far into the sea (5).

The numbers, for their part, 1 day from the land and 11 fathoms, show that the question rests, in fact, on observation and experiment.

This part of the map is also connected explicitly to those drawn earlier. The Nile runs down to the Mediterranean. And the Red Sea is a gulf of the Indian Sea.

The Nile is vast and has been working hard since long before Herodotus was born. Why has it not silted up more of the sea? is thus only one of the problems it poses. Next:

I was very eager to find out why the Nile floods in the summer, why does it do the opposite of what other rivers do (19).

Herodotus has formulated this theoretical problem paradigmatically. Why does this river do the opposite of what other rivers do? As, in general, why does a thing do what other things of its kind do not do? He continues:

none of the Egyptians could tell me anything about this; but Greeks eager to be known for wisdom have proposed three explanations (19-20).

He does not attribute the three explanations, but Siculus does: to Thales, Hecataeus, and Anaxagoras, respectively (I, 37-41). These are the Greeks eager to be known for wisdom. The explanation of Thales is:

the Nile floods when, blowing from the north, the Etesian winds obstruct the river's flow (II, 20).

Herodotus objects:

but often the Etesian winds do not blow at all, and the Nile still floods (*id.*).

The explanation of Hecataeus is:

the Nile floods because it flows out of the Ocean, the river surrounding the earth (21).

Herodotus objects:

this tale was taken far enough to vanish where it cannot be refuted; for I do not believe that

there is a river Ocean, surrounding the earth, but rather think that Homer or another of the old poets found this name somewhere and introduced it in his poems (23).

The explanation of Anaxagoras is:

the Nile floods when snow melts in the south (22).

Herodotus again objects:

this explanation is the best of the three, but it still makes no sense at all; for how can the river flow out of snow, if its course lies in the hottest parts of the earth (*id.*)?

And continues:

having found fault with those, I must give my own explanation of this obscure matter;

the cause is the sun, in the summer the sun is not above the Nile but further to the north and the Nile does what all others rivers do; but in the winter stormy winds blow the sun to the south and, over the Nile now, the sun draws much water from the river and it shrinks (24-6).

On these obscure matters Herodotus should have listened to his older contemporary Anaxagoras. Anaxagoras said that the sun is a piece of red-hot metal larger than the Peloponnese. Thus very difficult for the stormy winds to blow to the south. And Anaxagoras solved the problem of why the Nile floods in the summer. The Nile floods when snow melts in the south.

The Nile poses yet another problem:

where the source of the Nile is, none of the Egyptians, Libyans, or Greeks to whom I talked professed to know, except for one priest whose story seemed to be a joke;

the priest said that there are two mountains between Syene and Elephantine, there are unfathomable springs in them, and one half of their waters flows north toward Egypt, the other half south toward Ethiopia; and that the springs are unfathomable king Psamtik had shown when he dropped a cable thousands of fathoms long and found no bottom (28).

That was a joke. So Herodotus continued to work on the problem:

I sailed down to Elephantine and this is what I found out (29);

for 4 months by boat and on foot the country of the Nile is known, but beyond that no one knows anything, because, due to the heat, the

country is desert (31).

He has not solved the problem of where the source of the Nile is yet, but he has measured the known length of the river. The Nile is longer than 4 months by boat and on foot.

And having found no answer from any Egyptian, Libyan, or Greek, and not by sailing down to Elephantine either, Herodotus yet found an answer:

in Cyrene, I heard that some Nasamonians came once to Etearchus, the king of the Ammonians, he asked them about the desert, and they told him that some of them had crossed it and had seen on the other side men much smaller than other men and a great river flowing west to east; Etearchus thought that this river is the Nile, and reason is on his side (32-3);

the Nile flows out of Africa, cutting it in half; because, reasoning from what is seen to what is unknown, I think that the distance to the source of the Nile is the same as that to the source of the Danube;

the Danube begins in the country of the Celts who live across from the strait of Gibraltar and next to the Cynesii, who of all people in Europe live the furthest; it divides Europe in half and issues into the Black Sea (*id.*);

the Nile issues into the sea in Egypt, Egypt is across from Cilicia, from Cilicia it is a straight journey of 5 days to Sinope on the Black Sea, and Sinope is across from the Danube where it issues into the sea;

this is why I think that the Nile is equal in length to the Danube (34).

The Danube begins not exactly in the country of the Celts who live across from the strait of Gibraltar, but further northeast. It issues into the Black Sea not exactly north of Sinope, but northwest. Sinope is not exactly north of the Nile delta, but a couple of degrees northeast. The Nile is not equal in length to the Danube, but nearly $2\frac{1}{2}$ times longer. And the great river which the Nasamonians saw flowing west to east across the desert is the Niger, not the Nile.

Herodotus's is yet exemplary reasoning from what is seen to what is unknown. There are the errors. He has yet solved the problem of the source of the Danube, the first to do so, and not

altogether incorrectly. He has solved also the problem of the source of the Nile, also the first to do so, even if in this case quite incorrectly. And reasoning from what is seen to what is unknown, he has put on the map of the earth, connected explicitly with one another, the strait of Gibraltar, across from it the source of the Danube, its mouth in the Black Sea, across the sea Asia Minor, again, 5 days for a hardy man wide, across from it the mouth of the Nile, and has followed the Nile 4 months by boat and on foot into the desert.

The problem of the source of the Nile remained difficult. Five and a half centuries later, Ptolemy solved it – the source are two lakes – by assigning a latitude and longitude to it (*Geography*, IV, 8). Recalculating the longitude from the meridian through Alexandria, where Ptolemy did his observations, identifying the eastern lake with lake Victoria, and rounding to the nearest 30', the latitude and longitude of the source of the Nile is:

<i>Geography</i>	7° 00' S	4° 30' <i>EA</i> ,
correction	0° 30' S	3° 00' <i>EA</i> .

Ptolemy's is also exemplary reasoning from what is seen to what is unknown. So that, seventeen and a half centuries later still, reasoning from what is seen to what is unknown eventually led to seeing the unknown, when in 1858-64 Speke and Baker reached the source of the Nile, and in 1874-6 Gordon dispelled the lingering doubts by mapping it.

Cambyses undertakes also a campaign in the south. This is the second expedition of the great kings which extends the limits of knowledge of the earth, and Herodotus describes:

this campaign to the uttermost ends of the earth.

Darius succeeds.

Herodotus describes the 77 peoples large enough to owe more than 10 talents each, arranged by the great king in their series and order into 20 satrapies, and the 77 peoples from the Ionians to the Indians are thus explicitly put on the map of the earth as well.

The great kings, by building their empire, and the more so by their campaigns to the uttermost ends of the earth, have been posing steadily more urgently the problem of the limits of knowledge of the earth, and Herodotus now begins to formulate this problem steadily more explicitly, and to solve the formulated problem steadily more

explicitly. This problem, too, the limits of knowledge of the earth – an essential part of the problem of drawing the map of the earth – Herodotus also discovered. This problem, too, he first formulates explicitly and first solves explicitly.

He writes:

of all the peoples we know and of whom we can say anything with certainty the Indians live furthest to the east in Asia; further east the country is desert (98);

on the known earth furthest to the south is Arabia (107);

on the known earth furthest to the southwest is Ethiopia (114);

these are the countries at the uttermost ends of the known earth in Asia and in Africa (115);

but about the end in the west I cannot speak with certainty (*id.*);

I do not think that there is a river Eridanus which issues into a sea to the north and from which our amber comes; nor do I know that there are Tin Islands from which our tin comes; nor could I find anyone who has actually seen a sea beyond Europe (*id.*).

Herodotus has discovered that to solve the problem of the limits of knowledge of the earth demands reasoning from what is seen to what is unknown. He has discovered also that to solve the problem is difficult. And that no one professed to know where the source of the Nile was, or no one had actually seen a sea beyond Europe, was only a part of the difficulty, and much the smaller part. Much the greater part was what they professed to know, and what they said they had actually seen. So there was the river Ocean surrounding the earth. There were unfathomable lakes in the south. There were a river Eridanus and Tin Islands in the north. In the east there were: ants smaller than dogs but larger than foxes (102). And there was much else at the limits of knowledge.

Herodotus continues:

our amber and tin certainly come from the northern ends of the earth (115); the greatest supply of gold is also found there, but I do not think that, as they say, one-eyed men steal the gold from griffins; nor do I believe that there are men who are just like other men except that they are one-eyed (116).

Darius campaigns to the uttermost ends of the earth in the north, the third expedition of the great kings which extends vastly the limits of knowledge of the earth. Herodotus describes the expedition, and returns to the problem of the limits of knowledge:

the country north of the Scythians they say no one can see or penetrate, because the earth and the air are so full of feathers it is impossible to see anything (IV, 8).

Himself Herodotus did not see that country either, but penetrated it nevertheless:

north of Scythia no one knows what there is, for I found no one who claimed to have seen the country beyond; but I will tell everything that I heard as exactly as I can (16);

where the Dnieper is, further north the country is uninhabited, only cannibals live there, and beyond that no one at all lives as far as we know (18);

to the east, where the Don is, people wearing black cloaks live, and further north there is marshland which is also desolate of people as far as we know (20);

further east and north they say that there are mountains in which goat-footed men live, and beyond them men who sleep for six months every year; this I do not believe either (25); they have stories also about one-eyed men and griffins guarding gold (27);

as to the feathers of which they say the air is full in the country north of theirs, I think that the snow falls there throughout the year, even if it is probably lighter in the summer, and the snow is what I think their feathers are (31);

as to Hyperboreans, Hesiod talks about Hyperboreans and so does Homer, if indeed the *Epinomies* is by him, but neither the Scythians nor any other people living in these parts have anything to say about Hyperboreans (32); and if there are Hyperboreans, there should also be Hyperboreans (36).

Never mind the goat-footed men, the men who sleep for six months, the one-eyed men, the griffins, the feathers, and the Hyperboreans. Herodotus has put on the map the Dnieper and the Don. He continues:

indeed, many have drawn maps of the earth, but these are all ridiculous; they surround the earth

with a circular ocean as if drawn by a compass and make Asia of the same size as Europe (*id.*).

The many who have drawn the ridiculous maps are the two, Anaximander and Hecataeus. Herodotus continues:

so I will describe briefly what size and shape these should have on the map (*id.*).

And he draws explicitly the map of the earth: the Persians live on the southern sea, north of them are the Medes, above them the Saspies, and above them the Colchians who live on the northern sea (37).

The southern sea is the Persian Gulf, the northern sea is the Black Sea. And in beginning the drawing of the map with a south-north line of reference Herodotus anticipates Eratosthenes's discovery, two centuries later, of the fixed meridian as the indispensable presupposition of mapping. Even if the line from the westernmost point of the Persian Gulf to the easternmost point of the Black Sea is a half dozen degrees off the meridian line. Herodotus continues:

from this region between the two seas two peninsulas protrude toward the west, one stretching along the Black Sea as far as the Troad (38); the other stretching from the country of the Persians toward the Red Sea, and including Assyria and Arabia (39).

Asia Minor and the Arabian peninsula. He continues:

Asia beyond Persia, Media, the Saspies, and the Colchians is bounded toward the east by the Indian Sea, toward the north by the Caspian Sea and the river Araxes which flows eastward; Asia is inhabited as far as India; further east the country is desert and no one knows what there is (40).

The Amu Darya flows westward. He continues: Africa is in that second peninsula; where the peninsula joins Egypt it is narrow, for the distance from the Mediterranean to the Red Sea is 1 000 stades, but after that the peninsula is very broad (41);

Europe stretches parallel to both Africa and Asia (42);

Africa, except where it joins Asia, is surrounded by the sea (*id.*).

He supplies the evidence for this, the circumnavi-

gation of the continent under Necho. He reports: most of Asia was discovered by Darius, and describes the voyage of Scylax down the Indus and west on the Indian Ocean, the fourth expedition of the great kings which has vastly extended the limits of knowledge of the earth.

The Indus is now also on the map.

Herodotus continues:

thus it was discovered that, except to the east, Asia is also bounded by the sea (44);

but of Europe, whether it is bounded by the sea to the west or to the north, no one knows (45).

He discusses the names of the three continents, and concludes:

this should be enough about the map of the earth (*id.*).

He then continues the investigation of the north. The most important results are four.

One. He describes the rivers in the north.

Two. As he has determined the limit of knowledge in the south explicitly with the problem of the source of the Nile, so he determines the limit of knowledge in the north explicitly with the problem of the source of the Dnieper:

the Dnieper is the greatest river in Scythia after the Danube, and I think it is the most fertile not only of those in Scythia but of all rivers except the Nile; and only of this river and of the Nile I do not know the sources, and I think that no other Greek knows them either (53).

This problem as well remained difficult. Five and a half centuries later, Ptolemy assigns a latitude and longitude to the source of the Dnieper as well (*Geography*, III, 5):

<i>Geography</i>	53° 00' N	8° 30' W.A.,
correction	56° 00' N	3° 30' E.A.

Thirteen centuries later, on the map of Fra Mauro, in 1459, the solution of this problem is still Ptolemy's. It was in the following couple of centuries, as the resident states at long last began concerning themselves with the description of their domains, that this problem was solved better.

Three. Herodotus calibrates the standard point of reference:

the Black Sea is the most marvelous of all seas; it is 11 100 stades long and 3 300 stades wide; the channel at its entrance, the Bosphorus, is 120 stades long and 4 stades wide;

the Bosphorus issues into the sea of Marmara which is 1 400 stades long and 500 stades wide;

this sea issues into the Dardanelles which are nearly 400 stades long and not more than 7 stades wide;

the Dardanelles issue into the Aegean Sea;

in a long day's journey a ship covers about 700 stades and in one night about 600 stades; from the Bosphorus to the mouth of the Rioni, which is the greatest length of the Black Sea, the journey is 9 days and 8 nights, and that is, 11 100 stades, and from Sindice to Themiscyra, which is the greatest width of the Black Sea, the journey is 3 days and 2 nights, and that is, 3 300 stades;

this is how I made these measurements (85-6).

And these measurement of the most marvelous of all seas are themselves marvelous,

north to south,

Histories between 500 and 700 km,
correction about 600 km,

west to east,

Histories between 1 700 and 2 200 km,
correction about 1 200 km.

Herodotus anticipates the fact, too, that the determination of longitude is more difficult than the determination of latitude. This problem will not be solved conclusively until the voyages of Cook, in 1768-79.

Four. Herodotus calibrates the unit of distance on land:

I have established that 1 day of walking is 200 stades (101).

So.

A south-north line of reference runs from the Persian Gulf to the Black Sea.

To the west, the Black Sea is 11 100 stades.

The Bosphorus is 120 stades.

The sea of Marmara is 1 400 stades.

The Dardanelles are nearly 400 stades.

To the north, the Black Sea is 3 300 stades.

On its northern shore from the Danube to the sea of Azov is 20 days of walking (IV, 101).

From the sea of Azov to the river Rioni is 30 days of walking.

To the east, the Caspian is 15 days of rowing long and 8 days wide.

To the west again, and to the south, from the

Black Sea to the Mediterranean Asia Minor is 5 days of walking.

From Sardis in Asia Minor to Susa near the Persian Gulf the royal road is 90 days of walking (V, 53).

From the Mediterranean to the Red Sea is 1 000 stades.

The Red Sea is 40 days of rowing long and $\frac{1}{2}$ day wide.

Egypt is 3 600 stades along the coast and 7 920 stades along the Nile to Elephantine.

The Nile is longer than 4 months by boat and on foot.

1 day of walking is 200 stades.

1 day of rowing is about 700 stades, 1 night of rowing about 600 stades.

Maxwell writes, in *The mathematical classification of physical quantities*: all quantities may be defined by means of two factors, a numerical quantity, and a standard quantity of the same kind with that to be defined (*id.*).

And the foundation of Herodotus's very great advance in the mathematical classification of physical quantities is the discovery that the most important features on the surface of the earth are not the cities or the peoples, but the seas and the rivers.

He has put on the map the one and the same sea which the Mediterranean, the Atlantic, and the Indian Ocean are. The Persian Gulf which is a part of the Indian Ocean. The Red Sea which is also a part of the Indian Ocean, and has measured this sea. The Aegean Sea which is a part of the Mediterranean. The sea of Marmara which connects the Aegean and the Black Sea, and has measured this sea as well. The Black Sea, the most marvelous, and has measured this sea marvelously. The sea of Azov which is a part of the Black Sea. And the Caspian Sea which is a sea of its own, and has measured this sea as well.

He has put on the map the Nile, which is vast and has been working hard since long before Herodotus was born, and is the most fertile, and has measured it. The Kizilirmak, the greatest in Asia Minor, and has measured it. The Danube, which is the greatest in Scythia. The Dnieper, which is the second greatest in Scythia, and is the second most fertile after the Nile. Further east the

Don. Further southeast the Rioni. The Euphrates, which is great, deep, and swift, and the Tigris, which is also great, with its tributary the Diyala. The Amu Darya, which may be greater than the Danube. The Indus.

These are the greatest rivers. And only the greatest. Herodotus has put on the map very many more.

To show how many, exactly, two conundrums have to be cleared away first.

One. Is it a river?

Herodotus reports on springs, brooks, streams, and rivulets as well as rivers. And in this case, as in any, there is the sorites, when does a spring become a brook? a brook become a stream? or a stream a brook? or a rivulet? and any of these a river?

The resolution of this conundrum is straightforward. 2 000 km is a river, a great river. 200 km is still a river. But 20 km is not a river. Never mind 2 km. Thus, 2 000 km and more is a great river. Less than 2 000 but more than 200 km is a large river. Less than 200 km, but not too much less, is a small river. Too much less than 200 km is not a river.

Two. Which river is it?

The Danube Herodotus calls the Ister, the Dnieper he calls the Borysthenes, the Don he calls the Tanais, the Kizilirmak he calls the Halys, the Diyala he calls the Gyndes. He also calls the Indian Ocean the Red Sea, the Red Sea – the Arabian Gulf, the Mediterranean – the sea sailed by the Greeks, Africa – Libya. And on and on.

More generally, some of the rivers involve no difficulty of identification. Others involve some difficulty. Some difficulty involve the rivers at the limits of knowledge. Some difficulty involve also some of the smaller rivers within the limits of knowledge. The larger rivers involve no difficulty, these are, with the seas, the foundation of the map of the earth.

The resolution of this conundrum is thus threefold. Where identification involves no difficulty, the larger rivers are given the names by which they are most likely to go today, and that is, the names given them by the resident states, which would claim their importance. Where identification involves no difficulty, the smaller

rivers are given the names which they have in the historian, taking it for granted that these rivers can have no other importance than that the historian put them on the map of the earth. Where identification involves some difficulty, all rivers, large and small, are given the names which they have in the historian.

Ignoring all springs, brooks, streams, rivulets, and very small rivers, then, and giving them all the appropriate names, the following are all rivers in the *Histories*.

Beginning with the errors.

Herodotus writes:

the Corys in Arabia issues into the Persian Gulf (III, 9),

and:

the Triton west of the gulf of Sidra issues into the Tritonian Lake (IV, 178).

There are no such rivers, or such a lake. The rivers Corys and Triton are two more of the many objects which Herodotus encountered at the limits of knowledge, and which, unlike so many others, including the rivers Ocean and Eridanus, he failed to appreciate sufficiently as such.

Next the tentative discovery.

The Araxes is a conflation of the Aras and the Amu Darya. But Herodotus writes also:

in Asia there is a plain surrounded on all sides by mountains; and from the mountains a mighty river flows whose name is the Aces (III, 117). The mighty Aces, too, can only be the Amu Darya.

Herodotus has put the Amu Darya on the map of the earth.

The rest are all discoveries, clearly and distinctly.

He has put on the map 5 great rivers, west to east: the Danube, the Nile, the Dnieper, the Euphrates, and the Indus.

He has put on the map 53 other rivers, 17 large and 36 small, whose identification involves no difficulty. In each case the description situates the river unambiguously. As the pictures below illustrate.

West to east.

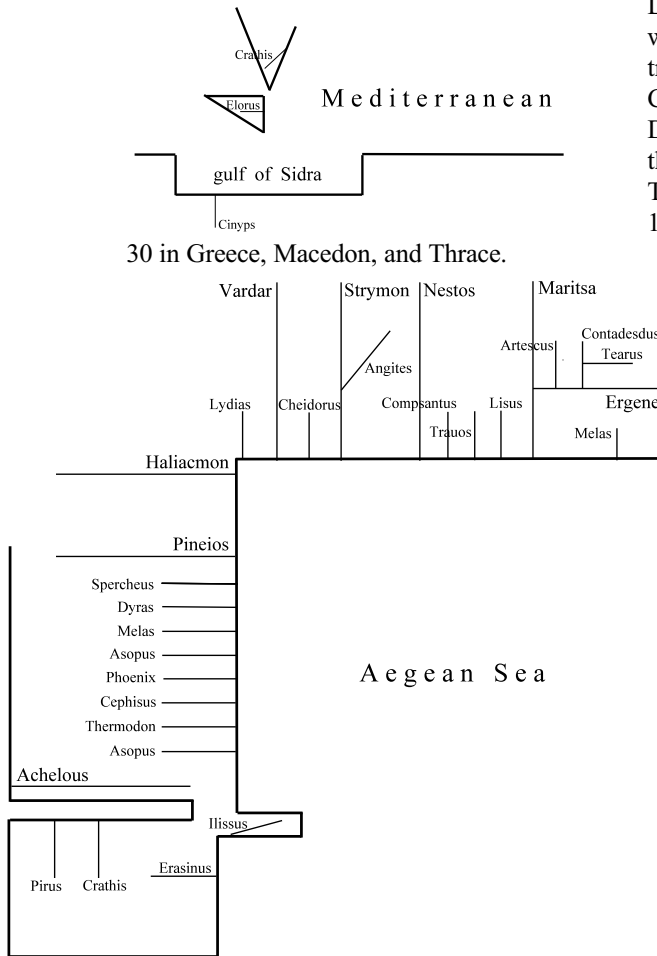
3 in the west.

In Libya, issuing into the gulf of Sidra, the Cinyps (IV, 175), small.

In Sicily, issuing into the sea to the east, the

Elorus (VII, 154), small.

In southern Italy, issuing into the sea to the east, the Crathis (V, 45), small.



Issuing into the sea to the west, the Achelous (VII, 126), large.

In the Peloponnese, issuing into the sea to the north the Pirus and another Crathis (I, 145), issuing into the Aegean, the Erasinus (VI, 76), all 3 small.

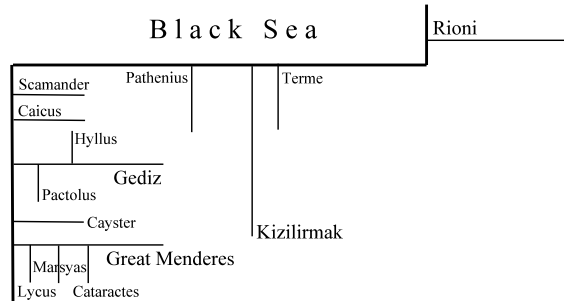
In Attica, issuing into the Aegean, the Ilissus (VII, 189), small.

North to south now, and east to west, all issuing into the Aegean, the 7 large, the Maritsa and its tributary the Ergene (IV, 90), the Nestos (VII, 109), the Strymon (113), the Vardar (123), the Haliacmon (127), and the Pineios (129), and the 18 small, the Melas (58), the Tearus and the

Contadesdus, of which the first issues into the second, the second into the Ergene (IV, 90), the Artescus, another tributary of the Ergene (92), the Lisus (VII, 108), the Trauos and the Compsantus, which issue into a lake near the coast (109), the tributary of the Strymon the Angites (113), the Cheidorus, the Lydias (127), the Spercheus, the Dyrras, another Melas (198), the Asopus (199), the Phoenix (200), the Cephissus (VIII, 33), the Thermodon (IX, 43), and another Asopus (VI, 108).

14 in Asia Minor and in the Caucasus.

In western Asia Minor, all issuing into the Aegean, north to south, the 2 large, the Gediz (I, 80) and the Great Menderes (V, 118), and the 8 small, the Scamander (VII, 43), the Caicus (42), the tributaries of the Gediz the Hyllus (I, 80) and the Pactolus (V, 101), the Cayster (100), and the tributaries of the Great Menderes the



Cataractes (VII, 26), the Marsyas (II, 104), and the Lycus (VII, 30).

In central Asia Minor, all issuing into the Black Sea, the Kizilirmak, large, and west of it the Parthenius (II, 104), east of it the Terme (IV, 86), both small.

Flowing from the Caucasus and issuing into the Black Sea, the Rioni (104), large.

Not entirely incidentally, in the *Iliad*, the Scamander is the river which rises from its bed to fight Achilles (XXI, 233-83). In the *Histories*, on its march through Asia and Europe Xerxes's army drinks several rivers dry, and it drinks dry first of all the Scamander (*id.*).

6 in Mesopotamia.

The Is, a tributary of the Euphrates (I, 179), small.

The Tigris and its tributaries the Upper Zab, the Lower Zab, the Diyala, and the Karkheh (V,

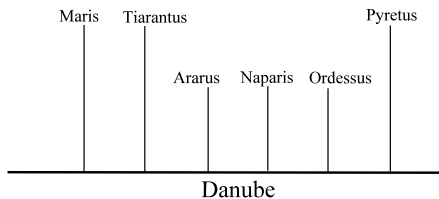
52), all 5 large.

And Herodotus has put on the map 26 other rivers, whose identification involves some difficulty. These are all in the far north, where on the authority of the Scythians: the earth and the air are so full of feathers it is impossible to see anything. On the authority of the Thracians: bees possess the country and no one can enter it because of the bees (V, 10).

Herodotus writes: the Danube is the greatest river that we know, and the reason for its greatness is that it has many tributaries (IV, 48).

And he describes the many tributaries.

The left tributaries thus (48-9):



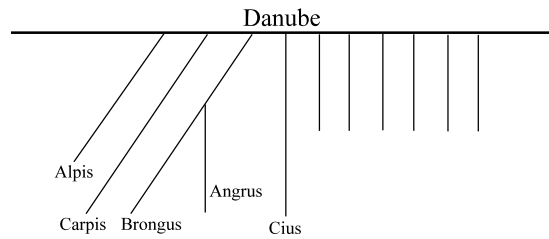
The Pyretus, in the east, is the Prut, more than 700 km long, and the largest tributary of the Danube close to its mouth. The Maris, in the west, has to be the Tisza with its tributary the Mureș. The Tisza is the largest left tributary of the Danube, close to 1 000 km long, and its largest tributary, a left tributary, the Mureș, is itself more than 700 km long. Hence the Tiarantus has to be the Olt, the largest tributary between the Tisza and the Prut, more than 600 km long. And hence the Ararus, the Naparis, and the Ordessus have to be the Argeș, the Ialomița, and the Siret, all 3 large, and the 3 largest tributaries between the Olt and the Prut.

Leibniz writes: the names of rivers usually come from the greatest antiquity and indicate the best the oldest language and the most ancient inhabitants of a country; for this reason they deserve special investigation (*New essays*, III, 2).

The Prut, the Mureș, and the Argeș illustrate. As several of the rivers below also do.

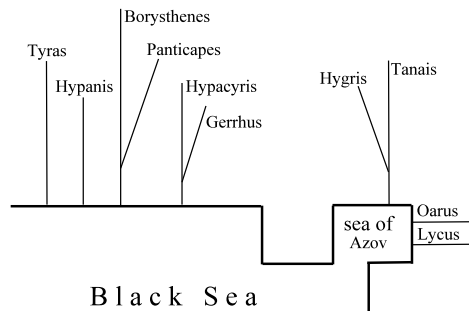
The right tributaries Herodotus describes thus

(49):



The Cius, in the middle, is the Iskar, large, and the only river which, as Herodotus describes it: cuts through the Balkan mountains (*id.*). The Brongus and the Angrus, to the west, are the Sava, nearly 1 000 km long, and its tributary the Drina, itself large, flowing, as Herodotus describes them: north from Illyria (*id.*). Hence, further west, the Carpis has to be the Drava, more than 700 km long. Hence, in the far west, the Alpis has to be the Inn, more than 500 km long. East of the Cius Herodotus has 6 tributaries: Atlas, Auras, Tibisis, Athrys, Noes, and Artanes. East of the Iskar the Danube has 2 large tributaries, the Osam and the Yantra, and 2 small but not too small, the Vit and the Rusenski Lom. These have to be 4 of Herodotus's 6. The other 2 were apparently possessed by the bees.

And north and east of the Black Sea Herodotus describes these rivers (51-7, 123):



The Borysthenes is the great Dnieper, more than 2 200 km long. To the west, the Tyras and the Hypanis are the Dniester, more than 1 300 km long, and the Southern Bug, more than 800 km long. The Panticapes has to be the Inhulets, the southernmost large tributary of the Dnieper, even if it is a right tributary rather than a left. In the east, the Tanais and the Hyrgis are the Don and its largest tributary the Donets, more than 1 800 km and 1 000 km long, respectively. In the far

east, the Oarus and the Lycus have to be the Yeya and the Kuban, both large and the two largest rivers south of the Don issuing into the sea of Azov. This leaves the Hypacyris and its tributary the Gerrhus, in the middle. The Hypacyris has to be the Mius which, though issuing further east in the sea of Azov and barely large, is the largest river between the Dnieper and the Don. It is, however, too small to have a tributary of any size. The Gerrhus was apparently also possessed by the bees.

Ignoring the errors, but counting all the tentative discoveries waiting for corroboration, Herodotus has put 83 rivers on the map of the earth.

All in all, there are 1 012 localities in the *Histories*. Herodotus has put 1 012 localities on the map of the earth.

The map reaches from the Atlantic in the west to the Indus in the east, its limits coinciding precisely with the reach of the expeditions of the great kings. In the north, where the goat-footed and the one-eyed men lived, the map reaches a little further than Darius, to the problem of the source of the Dnieper. In the south, where there was not even grass to eat, the map reaches a little further than Cambyses, to the problem of the source of the Nile.

The great kings are a principal as well as an immediate cause of the *Histories*.

All in all, there are 2 020 objects in the *Histories* identified by Herodotus with a proper name each.

1 012 are the localities. 804 of the remaining 1 008 are predecessors and contemporaries of his, among whom are the Greeks and barbarians whose great and magnificent deeds he researches. All these 804 objects Herodotus has ordered in their temporal as well as spatial series and order.

The father of history is also the father of geography. Hecataeus is its grandfather. And the two are inseparable. The father of history is the father of geography because he is the father of history and he is the father of geography because he is the father of history.

dxlii

The description of the earth deals with quantities. Mathematical method must everywhere lead the way. And in order to draw the map of the

earth necessary is systematic research, of which one part is survey, the other part is astronomical observation, and through both parts distance and orientation must be determined.

The part survey begins with Hecataeus, and has advanced very greatly with Herodotus.

And two-odd generations after Herodotus, the part astronomical observation begins with Eudoxus.

Mathematical method is clearly in evidence in Herodotus. With Eudoxus mathematical method begins leading the way.

Philosophy had developed for two-odd centuries now. Physics and mathematics had advanced very greatly.

Oenopides had measured the ecliptic. Meton had measured the summer solstice, the solar year, and the period synchronizing the motions of the moon and the sun.

Hippocrates of Chios had written the first *Elements*.

Eudoxus formulated the theory of proportion. He developed the method of exhaustion.

He formulated the theory of the motions of the heavenly bodies in concentric spheres. He determined the relative sizes of the sun and the moon. He wrote the first *Phenomena*, describing 32 northern and 15 southern constellations. He measured the periods of the planets, the synodic, the return of a planet to the same position with respect to the sun, and the sidereal, its return to the same position with respect to the fixed stars. Of Jupiter and Saturn, for instance,

	synodic	sidereal
Jupiter		
Eudoxus	13 months	12 years,
correction	13.1 months	11.9 years,
Saturn		

Eudoxus	13 months	30 years,
correction	12.4 months	29.4 years.

And he wrote a *Description of the earth*, of which there are substantial fragments in Strabo's *Geography*, three and a half centuries later.

And Eudoxus measured the earth.

He calculated its circumference at 400 000 stades.

Stades varied from about .2 km to about .15 km. Eudoxus thus calculated the radius of the earth in any case at not more than about 12 700

km and not less than about 9 500 km. Eudoxus thus not only first measured the earth, with its first measurement already he solved the problem of the order of magnitude of the size of the earth conclusively.

Stades varied, and earlier measurements in stades have to be converted into the standard units within the range of variation. As all measurements of Herodotus above are. Beginning with Eudoxus, however, the measurements of the mathematicians are steadily more, steadily better, improving explicitly on one another. Beginning with Eudoxus, uniformity of the measurements of the mathematicians – never mind the not mathematicians – can be presumed, at 1 stade $\approx$.16 km. The first calculation of the radius of the earth is thus,

Eudoxus	10 200 km,
correction	6 378 km.

The first calculation of the radius of the earth is one of the most consequential results ever obtained.

Eudoxus also first measured orientation.

Strabo reports:

to describe the promontory of Attica, Eudoxus said that, if a straight line is drawn easterly from the Ceraunian mountains to cape Sunium, all the Peloponnese will be on the right, to the south, and all the sea coast of Attica on the left, to the north (IX, 1.1).

The latitude of cape Sunium is $37^{\circ} 40' N$. The Ceraunian mountains abut on the Adriatic at cape Glossa, and the latitude of cape Glossa is $40^{\circ} 30' N$. The first measurement of the orientation of the promontory of Attica, or of any promontory, or of anything, is thus,

Eudoxus	easterly,
correction	$2^{\circ} 50'$ off of easterly.

The distance from cape Glossa to cape Sunium is 510 km, too. Eudoxus measured orientation across 3 200 stades.

In the same generation, Ephorus wrote the *Histories*, in 30 books.

It was a general history, like Herodotus's, on all Greeks and barbarians. And Ephorus is a major source of Strabo in the *Geography*, attesting that history and geography continued to develop jointly. Even if little in his fragments indicates advance over Herodotus.

Strabo reports:

Ephorus said that if we divide the earth into four parts, in the east will be the Indians, in the south the Ethiopians, in the west the Celts, in the north the Scythians; and Ethiopia and Scythia are larger than the other two parts; for the Ethiopians live from winter sunset to winter sunrise, and the Scythians live opposite to them in the north (I, 2.28).

It is the first attempt to assess the size of the known earth. Not yet very explicitly. Still, if Ethiopia and Scythia, along the length of the known earth, are larger than Celtica and India, along the breadth of the known earth, this can imply that the length of the known earth is greater than its breadth.

Also:

Ephorus said that the voyage around Sicily takes 5 days and nights (VI, 2.1).

It is the first measurement of Sicily.

The next is the generation of Aristotle.

And as he obtained important results in everything, so Aristotle obtained one also in geography. He first assessed the size of the known earth explicitly.

He writes in the *Meteorology*:

the way they draw the map of the earth is ridiculous; they draw it as circular, and both reason and observation show that this is impossible; reason shows that the known earth is smaller in breadth than in length; for climatic zones extend around the earth, and we meet with no excessive heat or cold along the length of the known earth, but we do along its breadth;

thus, unless a great sea presents an obstacle, there is nothing to prevent us from voyaging around the earth;

and observation corroborates this; for voyages on land and sea reach further along the length of the known earth than along its breadth;

and if we add up what we know of such voyages, from the strait of Gibraltar to India and from Ethiopia to the sea of Azov, the ratio of length to breadth is about 5 to 3 (II, 5).

There is in Aristotle's corpus also the spurious *On the world*, from the early Lyceum after Aristotle. It is still more explicit:

the length of the known earth at its greatest is about 70 000 stades, its breadth at its greatest

is somewhat less than 40 000 stades (3).

A little more than 5 to 3.

This is the size of the known earth. 70 000 stades by 40 000 stades.

As to the size of the unknown earth, it is implied by the size of the known.

Eudoxus calculated the circumference of the earth at 400 000 stades. This is the circumference of the equatorial circle. Hence, the circumference of the circle around the earth at latitude, say, $35^{\circ} N$, in the climatic zone where we meet with no excessive heat or cold, is 285 000 stades. Unless a great sea presents an obstacle, there is nothing to prevent us from voyaging around the earth. With or without a great sea to present an obstacle, in the climatic zone where we meet with no excessive heat or cold, we have 215 000 stades to go. Aristotle comments on Eudoxus's measurement: it shows that the earth is not a large sphere (*Heaven*, II, 14). Not large in comparison with the heavens. Quite large, if we are to voyage around the earth. Thus, of the 237 who will embark on the first voyage around the earth, eighteen and a half centuries later, 18 will complete the voyage. And if we are to voyage into the excessive heat and cold, meridian circles being all equal, we have 360 000 stades to go.

The unknown earth is much larger than the known. On the other hand, not too long before that, there is no known earth at all.

In the next generation one of the several students of Aristotle, who advanced the acquisition of knowledge substantially, is Dicaearchus.

In geography Dicaearchus obtained two important results.

He also wrote a *Description of the earth*, of which there are fragments in Strabo's *Geography*.

And Strabo reports:

Dicaearchus measured the distance from the strait of Gibraltar to the Peloponnese at 10 000 stades (II, 4.2).

It is a measurement of a sea substantially larger than the seas measured earlier, the first measurement of a substantial part of the Mediterranean, and an excellent measurement,

Dicaearchus	1 600 km,
correction	2 500.

Dicaearchus also improved greatly on the measurement of the earth. He calculated its

circumference at 300 000 stades. This is thus the advance in the solution of this problem in but one generation,

Eudoxus	10 200 km,
Dicaearchus	7 600,
correction	6 378.

It was a time also of voyages deep into the unknown earth.

Pytheas voyaged deep into the excessive cold.

Strabo – even as he calls Pytheas: a shameful liar (I, 4.3) – reports on the voyage:

Pytheas sailed the Atlantic north of the strait of Gibraltar,

described the coast of Celtica,

reached Britain,

established that it is an island,

determined the position of the island alongside

Celtica,

established that the island is triangular in shape,

and determined the dimensions of the triangle by sailing around it (I, 4.3-4; II, 4.1).

The perimeter of the triangle Pytheas measured at 40 000 stades, the side facing east at 20 000 stades, the side facing south at 5 000 stades (*id.*).

This yields for the sides of the triangle, in km,

Pytheas	800	2 400	3 200,
correction	520	860	970.

Excellent measurements, too. Not only did Pytheas put Britain on the map of the earth, and by measuring it. That was well beyond the countries of the goat-footed men, the men who sleep for six months, the one-eyed men, the griffins, the feathers, the bees, and the Hyperboreans.

Hanno voyaged deep into the excessive heat.

He sailed the Atlantic south of the strait of Gibraltar.

His *Description of the sea* recounts the voyage. As Hanno himself first – and for a long time last – named all the localities he reached:

we called it Caricus (*id.*),

we called it Gytta (*id.*),

we called it the Chariots of the gods (*id.*),

there is some difficulty in ascertaining how far down the coast Hanno reached. Yet, at length he reached:

a very great river, full of crocodiles and hippopotami (*id.*),

and beyond that river:

a great bay, the land next to which, the natives

told us, is called the Horn of the west (*id.*). The Senegal is the first river of any size down the coast, beyond it is cape Vert, and it can be concluded that Hanno reached cape Vert. More than 2 600 km down the Atlantic coast of Africa. More than 16 000 stades along the coast of the country where there was not even grass to eat.

Alexander conquered the empire of the great kings, and reached the Ganges.

Nearchus, the admiral of the fleet which Alexander dispatched to sail down the Indus, then west on the ocean – like Scylax earlier – was one of the many who wrote the history of Alexander. He is a source of Strabo on the east.

Megasthenes voyaged deep into the climatic zone where we meet with no excessive heat or cold.

Megasthenes served Alexander, and wrote an *Indian history*. It is the main source for India of Strabo in the *Geography*, three centuries later, and of Arrian in his *Indian history*, one and a half centuries later still. And thirteen centuries later still, in 1459, Fra Mauro writes about the different features on the map of the earth on the very features on the map, and on India he writes: those who want to know about the customs and practices of these people should read Arrian and Strabo who write copiously about India (*id.*). It was in the following couple of generations, eighteen centuries after his voyage, that Megasthenes's *Indian history* was superseded.

Strabo reports:

Megasthenes says that the entire length of India is 16 000 stades (XV, 1.11); and the Ganges, Megasthenes says, is 100 stades wide (1.35).

Excellent measurements, too. Corroborating one another, too. If Megasthenes measured the width of the Ganges at its delta, it can be concluded that he calculated the entire length of India from the mouth of the Indus to the mouth of the Ganges. And from the mouth of the Indus to the mouth of the Ganges it is,

Megasthenes	2 600 km,
correction	2 400.

One generation after Aristotle, then, the relation of the known earth and the unknown earth has changed dramatically.

The circumference of the earth is not 400 000

stades, it is 300 000 stades. The circumference of the circle around the earth at latitude $35^{\circ} N$ is thus 210 000 stades. Adding India to the Ganges, the length of the known earth is now 86 000 stades. And in the climatic zone where we meet with no excessive heat or cold we now have only 124 000 stades to go. In the excessive heat, cape Vert is not further south than Ethiopia, say, the southernmost shores of the Red Sea. Still, we have penetrated into the heat now from the west as well as from the east. And in the excessive cold, adding Britain with the number for its extension south to north at its face value – for on this first voyage in the north Pytheas first reports also on the island of Thule north of Britain (Strabo, I, 4.3), and the island of Thule can only be the Shetland Islands – the breadth of the known earth is now 60 000 stades. Along the meridian circle we now have only 240 000 stades to go.

The three-odd centuries from Ashurbanipal to Alexander were the best of times for geography.

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It remains to collect the historians.

And the collection of the historians is favored with a very singular and very important fact. The historians have been, in fact, collected. By Bodin, in 1566.

Everywhere, above and below, in all parts of this investigation, in order to collect the particulars – and in this part four of the investigation, in particular, in order to collect the states, to collect the law, to collect religion, to collect the political philosophers, to collect the geographers, to collect the historians – the entire record has to be examined.

In order to formulate the problems we are to solve we call the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous.

Sometimes, not too often, there are explicit earlier collections, and whenever there are such collections, the further collection should begin with these collections. With these more explicit sessions of the council.

Aristotle's reviews of our predecessors's formulations and solutions of physical problems – presented above, in the earlier parts of the

investigation – are such collections.

In particular, the collection of the states is not favored with such a collection.

The collection of the law – later on, if not early on – is favored greatly with the collection of jurisprudence in the *Digest*.

The collection of religion is not favored with such a collection. Many as the collections of bishops, saints, and miracles are.

The collection of the political philosophers is favored with such a collection. The further collection should begin with Aristotle's review of the states built in speech and held in high esteem. It is such an explicit collection, and the firmest ground on which to begin the collection of the political philosophers. It is yet a narrow ground. It is a review of but one political problem, if indeed it is a problem. To try and collect all political philosophers even only through Aristotle's time, Aristotle's review of the states built in speech is a small beginning. And there is not even such a collection after Aristotle. After Aristotle the collection of the political philosophers has to begin at the beginning. And Aristotle is twenty-three and a half centuries ago.

The collection of the geographers is favored better. There is Strabo's *Geography*, and the collection should begin with it. Strabo does not collect his predecessors explicitly. In the 17 books of the *Geography*, however, he describes the known earth not so much by researching it himself as by researching his predecessors' researches into it. Strabo is thus, implicitly if not explicitly, a substantially complete collection of the earlier geographers. To try and collect all geographers, Strabo is not a small beginning. But, again, there is no explicit collection after Strabo, and there is not even a compendium of earlier geography like Strabo's. After Strabo the collection of the geographers has to begin at the beginning. And Strabo is twenty and a half centuries ago.

Bodin is extraordinary. He has collected the historians explicitly. And he is but four and a half centuries ago.

His years are,
1530 - 1596 Bodin.

Bodin is thus, counting back only to the father of history, the successor of twenty centuries of

development of history.

In the first four-odd of these centuries, counting from Herodotus to Livy, as the acquisition of knowledge flourished greatly, so history also flourished greatly. In the following four centuries, counting from Livy to Augustine, as the acquisition of knowledge did not flourish, so history also did not flourish, and as the acquisition of knowledge was brought to a halt, so history also was assimilated into religion. In the following seven and a half centuries, counting from Augustine to Otto of Freising, as the darkest of dark ages continued on and on, so history also lingered on, writing down bishops, saints, and miracles. In the following four-odd centuries, counting from Otto of Freising to Bodin, as the acquisition of knowledge began gradually flourishing once again, so history also began gradually flourishing once again, and by the time of Bodin, as the acquisition of knowledge was flourishing greatly once again, so history also was flourishing greatly once again. Bodin is two generations after Copernicus, and an older contemporary of Viète, Gilbert, and Tycho. He is two-odd generations after Columbus, and one generation-odd after Magellan and El Cano. And he is three generations after Machiavelli, two generations after Guicciardini.

All of this – the great flourishing, the not flourishing, the assimilation into religion, the lingering on, the gradual flourishing again, the great flourishing again – twenty centuries of it – is reflected in Bodin's collection, all of it informs the collection.

The two and a half centuries after Bodin, as they were the brightest period in the acquisition of knowledge, so they were also the brightest period in the development of history. In history alone, this was the time of Bacon, Spinoza, Leibniz, Voltaire, Hume, Kant, Gibbon.

This is not reflected in Bodin's collection.

In the following two centuries, as spirit was restored to the substantiality and purity of its being, the acquisition of knowledge and history parted ways. As the acquisition of knowledge continued to flourish, history became a spiritual science. The younger sister, having been fettered to her older sister since the father of history, became unfettered.

This is not reflected in Bodin's collection

either.

The collection of the historians should begin with Bodin. His collection is the broadest ground, and the firmest ground. To try and collect all historians, his collection of the historians should be corrected, completed, and continued.

First, then, Bodin's collection is presented, and sorted out.

Then the historians in the three-odd centuries from Ashurbanipal to Alexander, in particular, are collected.

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Bodin wrote the *Method for the easy knowledge of history*, in 1566.

This is not quite two generations before the *New organon*, two-odd generations before the *Discourse on the method*. And not quite two generations before Bacon, Bodin is clear that the true way begins with the collection of the particulars, and marshaling them in their series and order. Two-odd generations before Descartes, he is clear that the fundamental rule of the method is always to make enumerations as complete and reviews as general as to omit nothing.

The *Method for the easy knowledge of history* is in ten chapters. Chapter 10 is *The order and collection of the historians*. And in *The order and collection of the historians* Bodin orders and collects the historians.

He orders and collects them under 18 heads. The 18 heads are:

writers of universal history;

universal geographical historians;

after the universal historians, it is not inappropriate to add the ecclesiastical writers and the writers of the sects which have established and retained their power, and first of all of the religion, antiquities, and deeds of the Jews;

historians of the pagan superstitions;

historians of the Christian religion;

historians of the Arab sect;

historians of the Chaldeans, Assyrians, Medes, Egyptians, Persians, Phoenicians, Hebrews, Parthians, whose deeds are described mostly by the writers above;

historians of the Greeks, under which name come the Ionians, Aeolians, and Dorians who settled Asia Minor as well as Europe from the Dan-

ube, the Acroceraunians, and mt Haemus to the Ionian Sea, the islands, and the continent; historians of the Romans and the Carthaginians, and of all things concerning Italy;

historians of the Celts, or Gauls, and of the Franks, under which name come all peoples between the Rhine, the Pyrenees, the Alps, and the sea;

historians of the Germans and of all peoples who live from the Alps to the Baltic Sea, and from the Rhine to the Vistula, to which is added the history of the Goths, Vandals, Huns, Heruli, Helvetians, Lombards, Poles, Muscovites, Danes, Swedes;

historians of the Britons, who were afterward called Anglo-Saxons and Scots;

historians of the Spaniards;

historians of the Arabs, who once ruled Africa, Syria, Persia, and Spain, known vulgarly as Saracens;

historians of the Turks;

historians of the Tartars and the Muscovites;

historians of the Ethiopians, Indians, Americans, and all peoples of Africa;

and after the histories common to all peoples and those peculiar to each state, the separate history of illustrious men follows (*id.*).

Temporally, Bodin reaches back to the antiquities of the Jews. It will be three centuries after him when the recovery of the antiquities of the Mesopotamians and the Egyptians begins.

Spatially, he reaches across nearly the entire surface of the earth, from the Americans in the west to the Tartars and the Indians in the east, and from the Swedes in the north to all peoples of Africa in the south. It will be one generation-odd after him when Ricci goes to China and begins filling the last gap, the Chinese.

The collection includes the writers of universal history, geographical historians, historians of religion, as well as of superstitions and sects, the histories common to all peoples, peculiar to each state, as well as of illustrious men.

Bodin's is a most successful attempt to collect all historians.

Under the 18 heads, the collection is ordered into entries. All entries are 286. The large majority of entries are of one historian each. Of each historian, with but a few exceptions, there is a

brief description and a date. The following 8 are representative of the entries:

Moses, the books of origins from creation to the migration of the Hebrews from Egypt to Palestine, a complete history of the world for 2450 years; fl. 1518^{BC};

Herodotus of Halicarnassus, on the deeds of the Greeks, Egyptians, Medes, Persians, Lydians from 3210^{AM} to 3500^{AM}, 9 books; fl. 425^{BC};

Caesar, on the Gallic war, 7 books, with the book of their continuation by Hirtius, fl. 43^{BC};

Eusebius, ecclesiastical histories, 10 books; fl. 312;

the koran, collected from all the korans in the name of Muhammad in the year of Muhammad 110; fl. 600^{AD};

Otto of Freising, on the deeds of Frederick Barbarossa;

Niccolò Machiavelli, history of the Florentines from 1215^{AD} to 1494^{AD}; fl. 1500;

Christopher Columbus the Genoese, voyage to islands until then unknown, fl. 1512 (*id.*).

These 8 are representative of the kind of the entries. They are not representative, however, in that these 8 historians are all very important. The majority of the historians in the collection are not important, many of them very very not important.

This also indicates that the collection is very comprehensive.

The collection is weighed heavily in favor of contemporary, at the time of writing, writers. And many of these writers have in the four and a half centuries since the time of writing receded very very far into obscurity.

There are thus some difficulties of identification. Much as there are with the rivers in Herodotus. Here, as there, the difficulties tend to involve the smaller objects rather than the larger.

The task is to reduce the collection entirely to particularity.

And here as everywhere the guide can only be importance. The historians have to be divided into important, including very important, and not important, and the very not important have to be discarded. And here as everywhere importance can be determined in one way only, by ascertaining the judgment of the council of our predecessors, and in particular, in the four and a half centuries since Bodin.

The great quantity of not important has this virtue, if no others, that it makes it possible to draw the line between important and not important very sharply.

Bodin's few errors also have to be corrected.

And more precise dates have to be assigned, to arrange the historians in their series and order more precisely.

There are, then, 286 entries in the collection, under 18 heads. And, proceeding head by head, these are the historians in the collection.

The first head is: writers of universal history. The entries under the head are 40.

The first entry is:

Moses, the books of origins from creation to the migration of the Hebrews from Egypt to Palestine, a complete history of the world for 2450 years; fl. 1518^{BC}.

Bodin is one century before Spinoza.

The books of origins from creation to the migration of the Hebrews from Egypt to Palestine are the Pentateuch. And the historian Moses has to be replaced with the 3 historians Yahwistic document, *Deuteronomy*, and Priestly code, all 3 important.

12 entries are one important historian each, in the order of the entries: Berossus, Herodotus, Polybius, Siculus, Philo Judaeus, Eusebius, Jerome, Africanus, Bede, Hermann the Lame, Vincent of Beauvais, Luther.

1 entry is:

Trogus, epitome by Justin, in 44 books covering briefly the deeds of almost all peoples from Ninus to Augustus; fl. 150^{AD}.

These are 2 historians, Trogus important, Justin not important.

10 entries are one not important, but not very not important, historian each: Prosper of Aquitaine, Freculph, Ado of Vienne, Marianus Scotus, Zonaras, Sigebert of Gembloux, Melanchthon, Giovio, Bullinger, Mercator.

14 are one very not important each: Matteo Palmieri, Mattia Palmieri, Hélinand of Froidmont, Honorius of Autun, Burchard of Ursperg, Antoninus of Florence, Donato Bosso, Johannes Nauclerus, Filippo Foresti, Achilles Gasser, Paul Phrygio, Johann Carion, Caspar Peucer, Johann Funck.

1 entry is:

Sabellicus, 11 enneads of history from the creation, and corresponding to them the epitome of Caspar Hedio.

Sabellicus is not important, but not very not important, Caspar Hedio is very not important.

And 1 entry:
fascicule of the times from creation to the year 1484, of uncertain authorship,
has defied the labors at identification.

This yields 28 important and not important, but not very not important, historians. In their series and order,

860 **Yahwistic document**,
662 **Deuteronomy**,
529 **Priestly code**,
484 - 425 **Herodotus**,
321 Berossus,
200 - 118 **Polybius**,
89 - 16 **Siculus**,
67 **Trogus**,
22^{BC} Philo Judaeus,
139^{AD} Justin,
181 Africanus,
265 - 339 **Eusebius**,
340 - 420 Jerome,
387 - 468 Prosper of Aquitaine,
673 - 735 **Bede**,
784 - 855 Freculph,
800 - 875 Ado of Vienne,
1013 - 1054 Hermann the Lame,
1028 - 1082 Marianus Scotus,
1030 - 1112 Sigebert of Gembloux,
1078 Zonaras,
1190 - 1264 Vincent of Beauvais,
1436 - 1506 Sabellicus,
1483 - 1546 **Luther**,
1483 - 1552 Giovio,
1497 - 1560 Melanchthon,
1504 - 1575 Bullinger,
1512 - 1594 Mercator.

Next: universal geographical historians. The entries are 6.

3 important: Strabo, Pomponius Mela, Pausanias of Magnesia.

1 not important, but not very not important: Münster.

1 very not important: Raphael Volaterranus.

And 1 entry is this:
to this can be added historians of various matters,

such as Athenaeus, Aelian, Tzetzes, Leonico, Solinus, Valerius Maximus, Pliny, *Suda*.

There are 8 historians in the entry. 3 of the 8 are important, Pliny, *Suda*, and Tzetzes. 4 of the remaining 5 are not important, but not very not important, Valerius Maximus, Athenaeus, Aelian, and Solinus. The remaining 1 is very not important, Niccolò Leonico.

This yields 11 more important and not important, but not very not important, historians,

65 - 29^{AD} **Strabo**,
27^{BC} Valerius Maximus,
1^{AD} Pomponius Mela,
24 - 79 **Pliny**,
133 Pausanias of Magnesia,
157 Athenaeus,
178 Aelian,
227 Solinus,
935 *Suda*,
1103 Tzetzes,
1488 - 1552 Münster.

Next: historians of the Jews. The entries are 5.

These are more difficult entries.

The first is:
the holy bible.

Below Bodin has also the entry: the new testament. Considering here, then, only the old testament, the old testament is twofold, the Hebrew scriptures which are part also of the old testament, and the writings which are not Hebrew scriptures but are part of the old testament. And as to the former, the Hebrew scriptures, 3 of these historians have been collected above from the entry: Moses, and from another of Bodin's entries below 2 more of these historians can be collected. As to the latter, the writings which are not Hebrew scriptures but are part of the old testament, the 2 historians *Second book of the Maccabees* and *First book of the Maccabees*, both important, can be collected here. One generation-odd before Bodin, Luther excluded these historians from the holy bible. Luther, however, was a heretic.

1 entry is a historian collected already from the earlier heads: Philo Judaeus, important.

The remaining 3 entries are:

Josephus the Jew, 20 books of Jewish antiquities and 7 books on the Jewish war, fl. 99^{AD};
Josephus, son of Gorion, history of the Jewish war written in Hebrew; fl. 99^{AD};

Hegesippus, history of the Jews from the Maccabees to 72^{AD}; fl. 130^{AD} (*id.*).

The first Josephus is the important historian Josephus.

The second Josephus pretends to copy the first Josephus in the tenth Christian century. And the Hegesippus of the third entry also pretends to be who he is not. His epitome of Josephus was compiled some two centuries after the father of the church Hegesippus. Both fabrications are very not important.

This yields 3 more important historians,
164 *Second book of the Maccabees*,
134^{BC} *First book of the Maccabees*,
37^{AD} - 98 Josephus.

Next: historians of the pagan superstitions. The entries are 7.

4 important: Irenaeus, Clement of Alexandria, Lactantius, Orosius.

1 not important, but not very not important: Arnobius.

1 very not important: Lilio Giraldi.

And 1 entry has defied the labors at identification:

Jo. Caules, a book about the religion of the ancients, in French and Italian.

This yields 5 more historians,
121 - 195 Irenaeus,
150 - 214 **Clement of Alexandria**,
220 Arnobius,
250 - 325 Lactantius,
384 Orosius.

Next: historians of the Christian religion. The entries are 17.

The first is:
the new testament.

This historian can be replaced with the 5 more particular historians st Paul, *Gospel of Mark*, *Gospel of Matthew*, *Gospel of Luke*, *Acts of the apostles*, and *Gospel of John*, *Apocalypse*, all 5 important. The historian catholic letters can be ignored.

2 entries are historians already collected from earlier heads: Irenaeus, Eusebius, both important.

5 others are also important: Justin Martyr, Tertullian, Origen, Ammianus, William of Tyre.

1 is not important, but not very not important: Evagrius.

5 are very not important: Gennadius of Mas-

salia, Nicephorus Callistus, John Foxe, Johannes Sleidan, the *Magdeburg centuries*.

1 entry is this:

Socrates, Sozomen, Theodoret, and Cassiodorus, ecclesiastical history from the birth of Christ to the year 454.

Cassiodorus is important, Socrates Scholasticus, Theodoret, and Sozomen are not important, but not very not important.

And 2 entries have defied the labors at identification:

on the state of the church, of uncertain authorship, from the birth of Christ to the year 1560, in French;

on religion and the church under the kings Henry II, Francis II, and Charles IX, of uncertain authorship, in French.

This yields 15 more historians,

6^{AD} - 62 **st Paul**,
25 *Gospel of Mark*,
43 *Gospel of Matthew*,
50 *Gospel of Luke*, *Acts of the*
apostles,
55 *Gospel of John*, *Apocalypse*,

98 - 166 Justin Martyr,

160 - 240 Tertullian,

185 - 254 **Origen**,

330 - 396 Ammianus,

384 Socrates Scholasticus,

393 - 466 Theodoret,

405 Sozomen,

488 - 585 Cassiodorus,

535 - 599 Evagrius,

1130 - 1185 William of Tyre.

Next: historians of the Arab sect. There is the single entry:

the koran, collected from all the korans in the name of Muhammad in the year of Muhammad 110; fl. 600^{AD}.

This yields 1 more important historian,

570 - 632 **Muhammad**.

Next: historians of the Chaldeans, Assyrians, Medes, Egyptians, Persians, Phoenicians, Hebrews, Parthians. The entries are 11.

The first is:

the books of *Kings*, of *Chronicles*, and of *Ezra*.

This can be replaced with the 2 historians *Joshua*, *Judges*, *Samuel*, *Kings* and *Chronicles*, *Ezra*, *Nehemiah*, both important. The several

apocryphal *Ezra's* can be ignored.

4 entries are historians already collected from earlier heads, 3 important: Herodotus, Berossus, and Josephus, and 1 very not important, the one pretending to be Hegesippus.

5 others are also important: Xenophon, Megasthenes, Manetho, Appian, Procopius.

And 1 entry is this:

Ctesias of Cnidus, Agatharchides, and Memnon, fragments about the kings of the Persians and the Assyrians, fl. 375^{BC}.

Ctesias is important, Agatharchides is not important, Memnon of Heraclea is very not important.

Thus, 9 more important historians,

- 597 **Joshua, Judges, Samuel, Kings,**
- 445 Ctesias,
- 430 - 350 **Xenophon,**
- 429 **Chronicles, Ezra, Nehemiah,**
- 356 Megasthenes,
- 346 **Manetho,**
- 215^{BC} Agatharchides,
- 93^{AD} - 166 Appian,
- 500 - 560 Procopius.

Next: historians of the Greeks. The entries are 15.

6 entries are historians already collected from earlier heads, 5 important: Herodotus, Xenophon, Polybius, Siculus, and Procopius, and 1 not important, but not very not important: Zonaras.

5 others are also important: Thucydides, Plutarch, Anna Comnena, Gregoras, Plethon.

1 is not important, but not very not important: Choniates.

The remaining 3 entries involve some difficulty.

1 is this:

Megasthenes, Theopompus, Philostratus, Hellanicus, Timaeus, Acusilaus, Ephorus, Mochus, Hestiaeus, Hieronymus, Isidore, and Nicolaus of Damascus have written histories continuing one another, as can be seen from Plutarch, but their writings have vanished completely.

Many and substantial fragments have since been recovered from several of these historians. But not from all. There are 12 historians in the entry. 1 of the 12 has been collected from the earlier heads, Megasthenes, important. 6 of the remaining 11 are also important, Hellanicus, Ephorus, Theopompus, Hieronymus of Cardia,

Timaeus, and Philostratus. 2 of the remaining 5 are not important, but not very not important, Acusilaus of Argos and Nicolaus of Damascus. The remaining 3, Mochus, Hestiaeus, and Isidore, are errors, apparently. Mochus is that joke of Posidonius's – Mochus was born before the Trojan war – that has failed to amuse his successors. Hestiaeus and Isidore – if neither of them is either a tyrant of Miletus or a bishop of Seville – are very difficult to find either in Plutarch or anywhere else.

The last 2 entries are these:

Dares of Phrygia, on the Trojan war, 6 books, translated from the Greek into Latin song by Cornelius Nepos; fl. 1129^{BC};

Dictys of Crete, on the Trojan war, 6 books, translated from the Carthaginian into Latin by Q. Septimius; fl. 1129^{BC}.

Dares is a Trojan priest in the *Iliad* already (V, 9). An eyewitness, no less. The composition *Dares of Phrygia, on the Trojan war*, announcing itself, in a prefatory letter from Sallust to Cornelius Nepos, a translation of Dares by Sallust, postdates Sallust by some six centuries, Dares himself, given Bodin's date, it postdates by some eighteen centuries. The historian *Dares of Phrygia, on the Trojan war*, is very not important. So is the historian *Dictys of Crete, on the Trojan war*. So is the historian, translator from the Carthaginian, Q. Septimius.

Thus, 14 more historians,

- 523 Acusilaus of Argos,
- 480 - 402 Hellanicus,
- 464 - 399 **Thucydides,**
- 405 - 335 **Ephorus,**
- 378 - 315 Theopompus,
- 359 - 267 Hieronymus of Cardia,
- 350 - 259 Timaeus,
- 64^{BC} - 1^{AD} Nicolaus of Damascus,
- 48^{AD} - 125 **Plutarch,**
- 178 Philostratus,
- 1083 - 1153 Anna Comnena,
- 1155 - 1217 Choniates,
- 1292 - 1360 Gregoras,
- 1355 - 1452 Plethon.

Next: historians of the Romans and the Carthaginians, and of all things concerning Italy. The entries are 30.

6 entries are historians already collected from

earlier heads, 3 important, Polybius with 2 entries under this head, Appian, and Procopius, and 2 not important, but not very not important, Prosper of Aquitaine and Sabellicus.

13 others are also important: Paterculus, Eutropius, Fabius Pictor, Cato, Dionysius of Halicarnassus, Sallust, Cassius Dio, Caesar, Livy, Tacitus, Pius II, Machiavelli, Guicciardini.

5 are not important, but not very not important: Festus, Florus, Xiphilinus, Biondo, Bembo.

4 are very not important: Giovanni Pontano, Pandolfo Collenuccio, Michael Coccinius, Galeazzo Capella.

1 entry is this:

Ammianus, knight, of Constantinople, 18 books which survive from 31; he begins with Nerva, where Tacitus ends, and ends with Valens; the rest Eutropius supplies; there are also the separate histories of the princes by Suetonius, Cassius, Spartianus, Capitolinus, Vopiscus, Herodian, Lampridius, and Egnatius.

11 historians in the entry. 4 of the 11 have already been collected from earlier heads, Tacitus, Cassius Dio, Eutropius, and Ammianus, all 4 important. 1 of the remaining 7 is also important, Suetonius. 2 of the remaining 6 are very not important, Herodian and Baptista Egnatius. The remaining 4, Spartianus, Capitolinus, Vopiscus, and Lampridius, are the 1 historian *Augustan history*. The *Augustan history* – so called by Casaubon in 1603 – is a collection of lives of the emperors from Hadrian to Carinus, by a single hand, the single hand pretending to be 6 different writers in the different lives. Spartianus, Capitolinus, Vopiscus, and Lampridius are 4 of those 6 different writers. The historian *Augustan history* is nevertheless important.

The final entry is this:

consular lists, restored by Sigonius and Panvinio; fl. 1560.

The restored consular lists replicate Livy. Carolus Sigonius and Onofrio Panvinio are very not important.

Thus, 20 more historians,

256 Fabius Pictor,
234 - 149 **Cato**,
100 - 44 **Caesar**,
86 - 35 Sallust,
67 Dionysius of Halicarnassus,

59^{BC} - 17^{AD} **Livy**,
19^{BC} - 35^{AD} Paterculus,
56 - 123 **Tacitus**,
70 - 127 Suetonius,
98 Florus,
164 - 234 Cassius Dio,
323 - 392 Eutropius,
331 Festus,
347 *Augustan history*,
1035 Xiphilinus,
1392 - 1463 Biondo,
1405 - 1464 Pius II,
1469 - 1527 **Machiavelli**,
1470 - 1547 Bembo,
1483 - 1540 **Guicciardini**.

Next: historians of the Celts and the Franks, under which name come all peoples between the Rhine, the Pyrenees, the Alps, and the sea. The entries are 26.

2 entries are historians already collected from earlier heads, 1 important, Appian, 1 very not important, Galeazzo Capella.

1 entry is:

Caesar, on the Gallic war, 7 books, with the book of their continuation by Hirtius, fl. 43^{BC};

Caesar has been collected already from earlier heads, but Hirtius is an important historian himself.

2 entries are other important historians: Gregory of Tours, Froissart.

4 are not important, but not very not important: Trithemius, Robert the Monk, Monstrelet, de Commynes.

8 are very not important: Hunibald, Jean du Tillet, Paulus Aemilius Veronensis, Jean Le Féron, Robert Gaguin, Jean Lemaire de Belge, and William Paradin with 2 entries.

9 entries have defied the labors at identification:

Hubert Leonard, on the origin of the Franks, 1 book, fl. 1490;
Nicolas Giles, annals of the Franks, fl. 1500;
Bochet, annals of Aquitaine;
count Herman, the deeds of the Franks to the year 1525, fl. 1530;
Aemund, on the dukes of Burgundy, Flanders, Brabant, and Holland, from the Trojan war to the emperor Charles V, fl. 1520;
Beissel, on the deeds of the Flemings;

annals of Burgundy of uncertain authorship;

Antony the Monk, 5 books on the kings of the Franks, from the year of Christ 420 to 826; fl. 830;

Rabutinus, on the expedition of Henry against Charles V in 1552 for the liberty of the German princes; fl. 1556.

Beginning with this head, the modern historians tend to predominate heavily, and the modern historians have tended to be more successful than the ancient at resisting identification. Bodin, clearly, read very far and wide.

Thus, 7 more historians,

83 - 43^{BC} Hirtius,

539 - 594 Gregory of Tours,

1074 Robert the Monk,

1335 - 1409 Froissart,

1400 - 1453 Monstrelet,

1447 - 1511 de Commynes,

1462 - 1516 Trithemius.

Next: historians of the Germans and of all peoples from the Alps to the Baltic Sea, and from the Rhine to the Vistula, and of the Goths, Vandals, Huns, Heruli, Helvetians, Lombards, Poles, Danes, Swedes. The entries are 42.

6 entries are historians already collected from earlier heads, 4 important, Tacitus, Procopius, Cassiodorus, Pius II, 1 not important but not very not important, Münster, 1 very not important, Burchard of Ursperg.

3 others are also important: Jordanes, Bruni, Paul the Deacon.

7 are not important but not very not important: Helmond of Bosau, Olaus Magnus, Saxo Grammaticus, Agathias, Hydatius, Sidonius, Widukind of Corvey.

19 are very not important: Beatus Rhenanus, Jakob Wimpfeling, Franciscus Irenicus, Ulrich Hugwald, Johannes Aventinus, Lupold of Bebenburg, Wolfgang Lazius, Ricardo Bartolini, Melchior Soiter, Antonio Bonfini, Martin Cromer, Philippus Callimachus, Albert Krantz with 2 entries, Erasmus Stella, Gerard Geldenhouwer, Jan Dubravius, Johann Stumpf with 2 entries.

7 entries have defied the labors at identification:

chronicle of the dukes of Bavaria and Swabia of uncertain authorship;

Jo. Turot the Hungarian, chronicle of Hungary, 3

books;

chronicle of the Poles;

chronicle of uncertain authorship on the origins of the Franks, Vandals, Goths, and Burgundians;

three books of uncertain authorship on the Saxon war;

Sebastian Boisseliner, on the siege of Magdeburg, fl. 1560;

five books of chronicles of Lübeck.

Thus, 10 more historians,

397 - 473 Hydatius,

430 - 486 Sidonius,

518 Jordanes,

531 - 582 Agathias,

725 - 792 Paul the Deacon,

930 Widukind of Corvey,

1120 - 1182 Helmond of Bosau,

1175 Saxo Grammaticus,

1370 - 1444 **Bruni**,

1490 - 1557 Olaus Magnus.

Next: historians of the Britons. The entries are 8.

1 entry is a historian already collected from earlier heads, Bede, important.

3 not important but not very not important: Gildas, Polydore Vergil, Geoffrey of Monmouth.

4 very not important: George Lily, Ponticus Vitruvius Tarvisinus, Hector Boece, Nicholas Trevet.

Thus, 3 more not important historians,

507 Gildas,

1095 - 1152 Geoffrey of Monmouth,

1470 - 1555 Polydore Vergil.

Next: historians of the Spaniards. The entries are 10.

1 entry is a historian already collected from earlier heads, Appian, important.

1 is not important but not very not important: de Nebrija.

6 are very not important: Francisco Tarafa, Sánchez de Arévalo, Pedro de Medina, Jacobus Bracellus, Carlos Verardi, Damião de Góis.

2 entries have defied identification:

Peter Antonio, chronicles of Spain, in Spanish and Italian;

Maria the Sicilian, Aragonese history.

Thus, 1 more not important historian,

1444 - 1522 de Nebrija.

Next: historians of the Arabs. The entries are 4.

2 entries are historians already collected from earlier heads, 1 important, William of Tyre, 1 not important but not very not important, Robert the Monk.

2 others are also not important but not very not important: Leo the African, Hermann of Carinthia.

Thus, 2 more not important historians,
1108 - 1159 Hermann of Carinthia,
1488 - 1559 Leo the African.

Next: historians of the Turks. The entries are 8.

1 entry is a historian already collected from earlier heads, Giovio, not important but not very not important.

2 others are also not important but not very not important: Postel, Chalcocondyles.

3 are very not important: Andrea Cambini, Christophe Richer, Martin Barleti.

2 entries have defied identification:
a description of the Turkish state of uncertain authorship;

Henrik of Penia on the war between Ismail and Selim.

Thus, 2 more not important historians,
1425 - 1490 Chalcocondyles,
1510 - 1581 Postel.

Next: historians of the Tartars and the Muscovites. The entries are 4.

1 entry is again a historian collected from earlier heads, Giovio, not important but not very not important.

1 other is important: Polo.

1 is not important but not very not important: Hayton of Corycus.

1 is very not important: Maciej Miechowita.

Thus, 2 more historians,
1240 - 1314 Hayton of Corycus,
1254 - 1324 **Polo**.

Next: historians of the Ethiopians, Indians, Americans, and all peoples of Africa. The entries are 10.

2 entries are historians collected from earlier heads, Leo the African and Giovio, both not important but not very not important.

3 others are important: Ca' da Mosto, Columbus, Vespucci.

1 is not important but not very not important: di Varthema.

1 is very not important: Francisco Álvares.

1 entry is:

Alberto Vespucci, epitome of voyages, fl. 1501.

Alberto is an error, apparently, a corruption of Amerigo, who has his own entry: Amerigo Vespucci, four voyages, fl. 1497.

2 entries have defied identification:

Peter Aloysius, voyages;

Joseph the Indian, voyages, fl. 1500.

Thus, 4 more historians,

1432 - 1488 Ca' da Mosto,

1451 - 1506 **Columbus**,

1454 - 1512 Vespucci,

1470 - 1517 di Varthema.

Finally: the separate history of illustrious men. The entries are 42.

22 entries are historians who have been collected from earlier heads. 9 important, Xenophon, Philo Judaeus, Plutarch with 2 entries, Suetonius, Cassius Dio with 2 entries, Philostratus, Eusebius, Eutropius, and Ammianus. 2 not important but not very not important, Polydore Vergil and Giovio. 5 very not important: Raphael Volateranus, Jean Le Féron, Baptista Egnatius, Herodian, Jacobus Bracellus, and Filippo Foresti, the last sharing an entry with Plutarch. And Spartianus, Capitolinus, Lampridius, and Vopiscus, the 4 of the 6 writers whom the *Augustan history* pretends to be.

4 others are important: Laertius, Marcus, Otto of Freising, Valla.

4 are not important but not very not important: Petrarch, Boccaccio, Aurelius Victor, Curtius Rufus.

1 entry is:

Pliny the younger, or as some think Cornelius Nepos, on 77 illustrious men.

Pliny the younger and Cornelius Nepos are both not important but not very not important.

7 are very not important: Caspar Ursinus, Johannes Cuspinian, Pomponius Laetus, Michele Riccio, Bartolomeo Platina, Paolo Vergerio, Charles Estienne.

1 is Trebellius, another of the 6 writers whom the *Augustan history* pretends to be.

1 entry is this:

Tilpin, Einhard, and Acciaiuoli, on Charlemagne,

the two former in his own time, the third in 1472.

Einhard is important, Tilpin is not important but not very not important, Donato Acciaiuoli is very not important.

And 2 entries have defied identification: the succession of the princes of Montferrat of uncertain authorship, fl. 1550; Staphylus, on the deeds of Charles V.

Thus, 12 more historians,
 95 - 22^{BC} Cornelius Nepos,
 3^{AD} Curtius Rufus,
 62 - 112 younger Pliny,
 121 - 180 **Marcus**,
 219 **Laertius**,
 349 Aurelius Victor,
 751 - 797 Tilpin,
 770 - 840 Einhard,
 1113 - 1158 **Otto of Freising**,
 1304 - 1374 Petrarch,
 1313 - 1375 Boccaccio,
 1407 - 1457 **Valla**.

And those are all the 286 entries in Bodin's collection.

28 entries have defied the labors at identification. Given the number of very not important objects in the collection, it can be concluded that the labors at identification have been quite out of proportion to the possible importance of the objects in these entries as well.

The very not important, including the fabrications and the errors, are 88.

The rest are the historians, 90 important, 59 not important, a total of 149.

This is their series and order,
 860 **Yahwistic document**,
 662 **Deuteronomy**,
 597 **Joshua, Judges, Samuel, Kings**,
 529 **Priestly code**,
 523 Acusilaus of Argos,
 484 - 425 **Herodotus**,
 480 - 402 Hellanicus,
 464 - 399 **Thucydides**,
 445 Ctesias,
 430 - 350 **Xenophon**,
 429 **Chronicles, Ezra, Nehemiah**,
 405 - 335 **Ephorus**,
 378 - 315 Theopompus,
 359 - 267 Hieronymus of Cardia,

356 Megasthenes,
 350 - 259 Timaeus,
 346 **Manetho**,
 321 Berossus,
 256 Fabius Pictor,
 234 - 149 **Cato**,
 215 Agatharchides,
 200 - 118 **Polybius**,
 164 *Second book of the Maccabees*,
 134 *First book of the Maccabees*,
 100 - 44 **Caesar**,
 95 - 22 Cornelius Nepos,
 89 - 16 **Siculus**,
 86 - 35 Sallust,
 83 - 43 Hirtius,
 67 Dionysius of Halicarnassus,
 67 **Trogus**,
 65 - 29^{AD} **Strabo**,
 64 - 1^{AD} Nicolaus of Damascus,
 59 - 17^{AD} **Livy**,
 27^{BC} Valerius Maximus,
 22 Philo Judaeus,
 19^{BC} - 35^{AD} Paterculus,
 1^{AD} Pomponius Mela,
 3^{AD} Curtius Rufus.
 6 - 62 **st Paul**,
 24 - 79 **Pliny**,
 25 *Gospel of Mark*,
 37 - 98 Josephus,
 43 *Gospel of Matthew*,
 48 - 125 **Plutarch**,
 50 *Gospel of Luke, Acts of the apostles*,
 55 *Gospel of John, Apocalypse*,
 56 - 123 **Tacitus**,
 62 - 112 younger Pliny,
 70 - 127 Suetonius,
 93 - 166 Appian,
 98 - 166 Justin Martyr,
 98 Florus,
 121 - 180 **Marcus**,
 121 - 195 Irenaeus,
 133 Pausanias of Magnesia,
 139 Justin,
 150 - 214 **Clement of Alexandria**,
 157 Athenaeus,
 160 - 240 Tertullian,
 164 - 234 Cassius Dio,
 178 Philostratus,

178 Aelian,
 181 Africanus,
 185 - 254 **Origen**,
 219 **Laertius**,
 220 Arnobius,
 227 Solinus,
 250 - 325 Lactantius,
 265 - 339 **Eusebius**,
 323 - 392 Eutropius,
 330 - 396 Ammianus,
 331 Festus,
 340 - 420 Jerome,
 347 *Augustan history*,
 349 Aurelius Victor,
 384 Orosius,
 384 Socrates Scholasticus,
 387 - 468 Prosper of Aquitaine,
 393 - 466 Theodoret,
 397 - 473 Hydatius,
 405 Sozomen,
 430 - 486 Sidonius,
 488 - 585 Cassiodorus,
 500 - 560 Procopius,
 507 Gildas,
 518 Jordanes,
 531 - 582 Agathias,
 535 - 599 Evagrius,
 539 - 594 Gregory of Tours,
 570 - 632 **Muhammad**,
 673 - 735 **Bede**,
 725 - 792 Paul the Deacon,
 751 - 797 Tilpin,
 770 - 840 Einhard,
 784 - 855 Freculph,
 800 - 875 Ado of Vienne,
 930 Widukind of Corvey,
 935 *Suda*,
 1013 - 1054 Hermann the Lame,
 1028 - 1082 Marianus Scotus,
 1030 - 1112 Sigebert of Gembloux,
 1035 Xiphilinus,
 1074 Robert the Monk,
 1078 Zonaras,
 1083 - 1153 Anna Comnena,
 1095 - 1152 Geoffrey of Monmouth,
 1103 Tzetzes,
 1108 - 1159 Hermann of Carinthia,
 1113 - 1158 **Otto of Freising**,
 1120 - 1182 Helmond of Bosau,

1130 - 1185 William of Tyre,
 1155 - 1217 Choniates,
 1175 Saxo Grammaticus,
 1190 - 1264 Vincent of Beauvais,
 1240 - 1314 Hayton of Corycus,
 1254 - 1324 **Polo**,
 1292 - 1360 Gregoras,
 1304 - 1374 Petrarch,
 1313 - 1375 Boccaccio,
 1335 - 1409 Froissart,
 1355 - 1452 Plethon,
 1370 - 1444 **Bruni**,
 1392 - 1463 Biondo,
 1400 - 1453 Monstrelet,
 1405 - 1464 Pius II,
 1407 - 1457 **Valla**,
 1425 - 1490 Chalcocondyles,
 1432 - 1488 Ca' da Mosto,
 1436 - 1506 Sabellicus,
 1444 - 1522 de Nebrija,
 1447 - 1511 de Commynes,
 1451 - 1506 **Columbus**,
 1454 - 1512 Vespucci,
 1462 - 1516 Trithemius,
 1469 - 1527 **Machiavelli**,
 1470 - 1517 di Varthema,
 1470 - 1547 Bembo,
 1470 - 1555 Polydore Vergil,
 1483 - 1540 **Guicciardini**,
 1483 - 1546 **Luther**,
 1483 - 1552 Giovio,
 1488 - 1552 Münster,
 1488 - 1559 Leo the African,
 1490 - 1557 Olaus Magnus,
 1497 - 1560 Melanchthon,
 1504 - 1575 Bullinger,
 1510 - 1581 Postel,
 1512 - 1594 Mercator.

Counting centuries back from the year of birth of Bodin, their distribution – important, not important, and total – is,

871- 772	1	–	1,
771- 672	–	–	–,
671- 572	2	–	2,
571- 472	3	1	4,
471- 372	6	–	6,
371- 272	5	–	5,
271- 172	3	1	4,
171- 72	6	1	7,

71 ^{BC} - 29 ^{AD}	10	3	13,
30- 129	11	2	13,
130- 229	8	5	13,
230- 329	3	—	3,
330- 429	4	7	11,
430- 529	3	2	5,
530- 629	2	2	4,
630- 729	2	—	2,
730- 829	1	3	4,
830- 929	—	—	—,
930-1029	2	2	4,
1030-1129	3	7	10,
1130-1229	2	2	4,
1230-1329	2	3	5,
1330-1429	5	3	8,
1430-1529	6	15	21,
	90	59	149.

Bodin is the broadest and the firmest ground on which to continue the collection of the historians.

And so the collection of the historians continues below. All the historians are also presented in some detail.

dxlv

And the historians in the three-odd centuries from Ashurbanipal to Alexander are these,

662	Deuteronomy,*
599	Pherecydes,
597	Joshua, Judges, Samuel, Kings,*
562	Hecataeus,
529	Priestly code,*
523	Acusilaus of Argos,*
523	Cadmus of Miletus,
505	Xanthus,
484 - 425	Herodotus,*
480 - 402	Hellanicus,*
474	Antiochus of Syracuse,
470 - 394	Hippias,
464 - 399	Thucydides,*
454	Charon of Lampsacus,
445	Ctesias,*
430 - 356	Philistus,
430 - 350	Xenophon,*
429	Chronicles, Ezra, Nehemiah,*
410 - 340	Androtion,
409	<i>History from Oxyrhynchus,</i>
405 - 335	Ephorus,*
396 - 324	Anaximenes of Lampsacus,

384 - 322	Aristotle,
378 - 315	Theopompus,*
376	Aristobulus of Cassandreia,
376	Dieuchidas,
376	Marsyas,
371 - 287	Theophrastus,
371	Aristoxenus,
371	Dicaearchus,
371	Eudemus,
370 - 327	Callisthenes,
366 - 282	Ptolemy,
365	Onesicritus,
360 - 307	Nearchus.

Those with an asterisk are from Bodin.

The enumeration indicates two very general facts.

One. The objects in the enumeration are of two very different kinds. A few are Hebrew holy writings. The rest are the father of history and his predecessors and successors. Those are, in these three-odd centuries, two distinct lines of development, unaware of one another, uninformed by one another. This poses the problem of the relation of the two, and most of all, how and why the Hebrew holy writings belong in the enumeration of the historians. That they do Bodin suffices to show.

Two. Beginning with the father of history, the greatest advance in history begins. There is the father himself. There is in the generation after him Thucydides. One century after him there is Aristotle. In the next generation there are Theophrastus and Eudemus. This poses the problem of the cause of the greatest advance, and most of all, how and why the father of history.

The two lines of development, unaware of one another, uninformed by one another, should be considered one at a time. And first the Hebrew writings. Then the father of history and his predecessors and successors.

Before that, also, the earlier advance in history should be reviewed.

dxlvi

Once again, the foundation of the very great advance in history in the three-odd centuries at issue, the three-odd centuries from Ashurbanipal to Alexander, is the very great advance in history in the previous one century-odd, the one century-

odd from Tiglath-pileser III to Ashurbanipal.

The Assyrian princes from Tiglath-pileser III to Ashurbanipal build the greatest state. They are a very great advance in the description of the surface of the earth. And they are a very great advance in history.

Also, at their time, and within their domain, the accumulation of the Hebrew writings begins, and the attempts to build the first church.

Also, at their time, and just outside their domain, Greek writing begins with Homer and Hesiod, and the state begins among the Greek cities.

The Assyrian princes from Tiglath-pileser III, prince 745-27, to Ashurbanipal, prince 668-627, are the culmination of advance in history which begins with their predecessors five and a half centuries before Tiglath-pileser III.

The inscriptions of the Assyrian princes become chronicles – describing events in detail, systematically, generalizing over them – with Adad-nirari, prince *c.* 1305-273.

The chronicles begin including annals – describing events year by year – with Tiglath-pileser, prince 1116-076.

They begin including true annals – counting the years explicitly – with Adad-nirari II, prince 912-891.

And the advance in the development of the chronicle culminates in Tiglath-pileser III, Sargon II, Sennacherib, Esarhaddon, and Ashurbanipal.

The record of Tiglath-pileser III is massive. The record of Sargon II is more massive than the record of any of his predecessors. The record of Sennacherib is more massive. The record of Esarhaddon is more massive. And the record of Ashurbanipal is more massive.

The inscriptions of Tiglath-pileser III are detailed, systematic, chronicles. The inscriptions of Sargon II are more detailed, more systematic, better chronicles. The inscriptions of Sennacherib are more detailed, more systematic, better chronicles. The inscriptions of Esarhaddon are more detailed, more systematic, better chronicles. And the inscriptions of Ashurbanipal are more detailed, more systematic, better chronicles.

At this time also the Assyrian prince list is compiled. From Ashurbanipal back to the first prince who lived in a tent the list has a succession

of 114 princes.

Back to the first prince who has left his inscriptions behind, Shallim-ahhe, prince *c.* 1960, the list has a succession of 83 princes, reaching thirteen-odd centuries into its past.

At the time of the present writing, thirteen-odd centuries ago would be about 700^{AD}.

Back to Ashur-bel-nisheshu, prince *c.* 1417-08, the list has the succession of the 45 princes, who attempt to build the greatest state, and again, and again, and succeed, leaving behind steadily more and better chronicles, for seven and a half-odd centuries through Ashurbanipal.

At the time of the present writing, seven and a half-odd centuries ago would be about 1250^{AD}.

The chronicles of the princes corroborate the list, the list corroborates the chronicles of the princes. All chronology rests on the labors of the Assyrian princes.

And most dramatically, when Esarhaddon counts:

586 years have passed since my ancestor Shalmaneser, the son of Adad-nirari, built the temple of Ashur,

586 years have in fact passed.

At the time of the present writing, 586 years ago would be 1439^{AD}.

The Assyrian princes have solved the problem of time reckoning over 586 years. They have established the succession of not less than 45 princes over not less than seven and a half centuries. They have compiled the detailed and systematic record of these princes over these centuries. On each of the three counts singly, and the more so on all three counts jointly, history *par excellence*. The three also, time reckoning, the succession, and the record, examine and corroborate one another. And on this count more still than on those three, history *par excellence*.

The Assyrian princes build the greatest state. They greatly advance the description of the surface of the earth. They greatly advance history. And these are one another's causes and effects.

The first, the building of the greatest state, is the principal as well as an immediate cause of the other two, the great advance in the description of the surface of the earth and the great advance in history. The great advance in the description of the surface of the earth is fundamentally the

record of the continuing expansion of the state, further, and further, and further. The great advance in history is fundamentally the record of the continuing labors at building the state, and over not less than seven and a half centuries.

And the great advance in the description of the surface of the earth and the great advance in history are one another's cause and effect as well. The great advance in the description of the surface of the earth is a substantial contributing cause of the great advance in history. The expansion of the reach of the princes in space, further, and further, and further, is the ground of the expansion of their reach in time, as they continue the labors of their predecessors, and over not less than seven and a half centuries.

In the one century-odd from Tiglath-pileser III to Ashurbanipal, and within the domain of the Assyrian princes, the accumulation of the Hebrew writings also begins. By the time of Ashurbanipal, the accumulation includes the Yahwistic document, seven prophetic books, including the first and most important, *Amos*, *Hosea*, and *Isaiah*, as well as the *Psalms*.

The writings have established that you shall have no other gods beside me. That he made the stars and makes day and night. Most of all, also, that he destroys the cities. He is the lord of hosts! And he has a plan. First, he will bring against you the king of Assyria and his multitude, second, he will build the fallen house of David firm as it was in the days of old.

The first attempt to implement the writings has also been made under Hezekiah.

With the Yahwistic document also the relation of the past steered by him begins. The Yahwistic document relates the tribulations of Abraham, Isaac, Jacob, and Joseph, then those also of Moses, earlier those also of the first man, and those also of the man who survived the flood. With the prophetic books this past steered by him acquires its political coherence. First, Assyria is the rod of his anger, second, a king will be born, great in battle, and great will be again the domain of the throne of David.

And this past steered by him has already staked its claim to history. It is not a strong claim. There is no inkling of time reckoning. All that he steers he steers in substantially indefinite time.

The succession of the patriarchs, however, is traced from Abraham, begetting by begetting, back to the first man. And the record of the tribulations of Abraham, Isaac, Jacob, and Joseph, and then also of Moses, is steered by him in great detail and quite systematically. All by itself, the record of these tribulations is not a claim to history. But in its relation to the succession traced back to the first man it is.

There is no inkling of time reckoning. There is no succession from Joseph to Moses, or from Moses to David, or from David to the rod of his anger, or from the rod of his anger to the birth of the king great in battle. And the record which he steers in detail and systematically, of Adam, then of Noah, then of Abraham, Isaac, Jacob, and Joseph, then of Moses, is rather disjointed.

Yet these are only the first writings. There will be time reckoning, number by number by number and back to the 1st day. There will be all those successions, begetting by begetting, and all begettings will be numbered, from Joseph to Moses, from Moses to David, and from David to the rod of his anger. Eventually, begetting by begetting, too, from the rod of his anger to the birth of the king great in battle, too. And he will steer the record of most of their tribulations as well in great detail and very systematically. And all three, numbers, successions, and tribulations, will be integrated remorselessly into one another.

In the one century-odd from Tiglath-pileser III to Ashurbanipal, and just outside the domain of the Assyrian princes, also Greek writing begins with Homer and Hesiod.

Homer and Hesiod create for the Greeks their theogony. The gods they create for the Greeks are, like all gods created earlier, the greatest. These gods are also, however, unlike any gods created earlier, secondary to poetry, secondary to a warrior and a voyager, secondary in wisdom.

The public celebration of Homer in the cities begins.

The cities, as they one and all celebrate the Homeric gods, will also one and all claim descent from Homeric heroes.

Homer and Hesiod are a great advance in the description of the surface of the earth.

But the claim of Homer and Hesiod to history is very weak. It is not stronger than the claims of

the cities to descent from Homeric heroes.

In Homer and Hesiod there is no inkling of time reckoning. All that the gods and heroes do they do in substantially indefinite time. There is in Hesiod the procreation of the gods from one another. Other than that, there is no succession in either Homer or Hesiod, and of princes as little as of any other ancestors. The Homeric heroes are, within a generation or two, the direct progeny of the gods. And the poet sings of the two events, the wrath of Achilles and the homecoming of Odysseus, in great detail and – poetry being, by being poetry, systematic – quite systematically. Yet, in indefinite time, not fixed in any succession of ancestors, the two events are but poetry.

And that the claim of Homer and Hesiod to history is very weak, the father of history already will show. It is yet another reason he is the father of history.

Next, in the three-odd centuries at issue, in the enumeration of the historians there are no princes. There are Hebrew writings and the father of history and his predecessors and successors.

After the Assyrian princes, the princes their successors build a yet greater state, and continue the great advance in the description of the surface of the earth. But they are not great historians.

The Hebrew writings continue and complete the relation of the past steered by him.

And the advance in history, as the advance in geography, the philosophers take over.

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In the enumeration of the historians in the three-odd centuries at issue there are 4 Hebrew holy writings, the 4 which continue and complete the relation of the past steered by him. *Deuteronomy*. *Joshua*, *Judges*, *Samuel*, *Kings*. The Priestly code. And *Chronicles*, *Ezra*, *Nehemiah*.

These, and all other Hebrew holy writings, have been presented above in some detail.

Deuteronomy is the book of the law.

It is the time now of the Babylonian princes, and of the final destruction of Judah.

The code of *Deuteronomy* is promulgated under Josiah, and this is the successful beginning of the first church.

And *Deuteronomy* introduces the law with the relation of the events of the lawgiving.

The main event is the lawgiving itself. God gives the law to Moses, and Moses gives it to the Israelites.

Also, before giving them the law, Moses tells them what they have just done.

They have just begun the conquest of the promised land. They have conquered Heshbon and Bashan. They have captured all cities, killed man, woman, and child, and taken the cattle and all other booty.

These are important additions to the past steered by him.

These additions, however, still occur in indefinite time. There is still no inkling of time reckoning. The relation of these events continues the earlier relation of the past steered by him. These events are an extension and elaboration of the tribulations of Moses related by the Yahwistic document, as the code of *Deuteronomy* is an extension and elaboration of its earlier code. Still, as there is no succession to fill the gap from Moses back to Joseph in the Yahwistic document, so there is no such succession in *Deuteronomy*. As there is no succession to fill the gap from Moses forward to David in any of the earlier writings, so there is no such succession in *Deuteronomy* either. Worst, as there is no succession to fill the gap from David forward to the rod of his anger, so there is no such succession in *Deuteronomy* either. And this last has become a difficulty of great urgency, now that, after the rod of his anger Assyria, there is the rod of his anger Babylon.

A couple of generations later, *Joshua*, *Judges*, *Samuel*, *Kings* resolves decisively the most pressing of these difficulties.

It is the time now of the first rise of the great kings. For a couple of generations Judah has been destroyed, the Israelites exiled. But the church continues.

Elsewhere, it is the time also of the first philosophers.

Joshua, *Judges*, *Samuel*, *Kings* begins where *Deuteronomy* ends, and relates events from the Mosaic lawgiving through the fall of Judah. All events steered intimately by him.

It relates the conquest of the promised land by Joshua in great detail and very systematically. Then the tribulations of the succession of judges

from Joshua to David in less detail but very systematically as well. Then the glory days of David and Solomon again in great detail and very systematically. And then the tribulations of the succession of kings of Israel and Judah again in less detail but very systematically as well.

There is thus no gap between Moses and David any longer, all events in between are related. There is no gap between David and the rods of his anger any longer either. All these events in between are related as well. The succession from Moses to David is very tight, too, judge by judge by judge, assisted by a number of prophets and prophetesses. The succession from David to the rods of his anger is even tighter, prince by prince by prince, assisted by a greater number of prophets and prophetesses.

Nor do these events occur in indefinite time any longer. All events are numbered. There is time reckoning now. Joshua is 110 years old when he dies (*Judges*, 2), after him, under Othniel, the land is at peace for 40 years (3), after him, under Ehud, the land is at peace for 80 years (*id.*), and number by number by number, through the last king of Judah, Zedekiah, who reigns 11 years (*Kings*, II, 25).

The claim of the past steered by him to history is very strong now.

And a couple of generations later, the Priestly code resolves all remaining difficulties.

It is the time now of the flourishing of *pax Persica*. The Hebrews have returned to Jerusalem and have built the second temple.

Elsewhere, philosophy also flourishes. It is at this time that Parmenides discovers that the earth is a sphere and the principle of contradiction.

The Priestly code is the conclusive redaction of the law. It is the conclusive redaction also of the foundational writings into the unity of the five books of the torah.

And it is the conclusive redaction of the past steered by him. The Priestly code relates events from the creation of the world through the Mosaic lawgiving, incorporating the Yahwistic document into itself, and ending with *Deuteronomy*. All events steered intimately by him.

The Priestly code relates the creation of the world in more detail and more systematically than the Yahwistic document. The events after cre-

ation and through Joseph it lets the document tell. It does not relate events from Joseph to Moses either. The following event of the exodus, however, the event preceding immediately the event of the lawgiving, it relates in the greatest detail and most systematically.

Most important, it supplies all events with a superabundance of numbers. Time reckoning now begins with the 1st day. After the 7th day, Adam is 130 years old when he begets Seth, Seth is 105 years old when he begets Enosh, and number by number by number, through Joseph. Then from Joseph to Moses the sojourn in Egypt continues 430 years. Then the exodus continues 40 years. Then *Joshua*, *Judges*, *Samuel*, *Kings* continues.

And now the claim of the past steered by him to history is as strong as he who steers it is.

The Assyrian princes solve the problem of time reckoning over 586 years. – The Hebrew writings solve the problem of time reckoning back to the 1st day. – The Assyrian princes establish the succession of the princes under whom Assyria rises over seven and a half centuries. – The Hebrew writings establish the succession of the princes under whom Israel and Judah are ruined, the earlier succession of judges, and 470 years before the judges, the succession of patriarchs back to the first man. – The Assyrian princes compile the detailed and systematic record of seven and a half centuries. – The Hebrew writings compile the detailed and systematic record of not less than three and a half millennia, including the detailed and systematic record of the first man and woman. – Time reckoning, succession, and record of the Assyrian princes corroborate one another. – Time reckoning, successions, and record of the Hebrew writings reinforce greatly one another.

The claim of the past steered by him to history is very strong.

It is also impossible.

Given the independent evidence, the past steered by him is impossible. And committed to numbers as it is, the past steered by him is not difficult to compare with the independent evidence.

On calculation from the Hebrew writings, the conquest of the promised land occurred between 1477-2 and 1437-2.

On the independent evidence, Thutmose, prince c. 1521-09, conquered the Mediterranean littoral up to the Euphrates, and the Egyptian princes remained in control of the littoral until Merneptah, prince c. 1224-14. The conquest of the promised land did not occur in these three centuries. On other independent evidence, all of it presented above, the conquest of the promised land did not occur earlier either. It did not occur later either.

On calculation from the Hebrew writings, the glory days of David and Solomon occurred c. 1003-923.

On the independent evidence, for some time before that time, at that time, and for some time after that time, hordes of wild men pillaged both valleys. The valley of the Nile hordes of Libyans, peoples of the sea, and Asiatics pillaged. The valley of the two rivers hordes of Arameans pillaged. Other parts of the two valleys the two sets of hordes pillaged separately, the promised land they pillaged jointly. The glory days of David and Solomon did not occur at this time. On other independent evidence, all of it presented above, the glory days of David and Solomon did not occur earlier either. They did not occur later either.

But even if the independent evidence is ignored, if the past steered by him is then not altogether impossible, it yet has to be most implausible. He is the creator of the world. He made the stars. He makes day and night. He destroys the cities. He is the lord of hosts! All kings are his captains. The king of Assyria is an ax that he wields. The great king he leads by the hand. And yet, the past that he steers, he keeps steering as he does not want steered. The first man and woman eat the forbidden fruit. Cain kills Abel. Things then deteriorate so much, he has to send the flood. Things improve with Abraham, Isaac, and Jacob, then Joseph is sold into slavery, 430 years of slavery. Things improve again with the conquest of the promised land, then again the Israelites keep doing what is displeasing to the lord, judge after judge after judge. Things improve again with David, then again the Israelites keep doing what is displeasing to the lord, king after king after king.

If history is a search for truth, this past steered

by him is not history.

This past steered by him is not a search for truth. This past steered by him is the means of building the first church. Obey the lord your god, and the lord your god will raise you above all peoples on earth. You will always be at the top, never at the bottom. Disobey the lord your god, and you will be cursed in your city and in your country. Cursed will be your basket and your bowl. Cursed will be the issue of your womb and the produce of your land. Cursed will be your comings and your goings.

And to this end, these historians have not just annihilated the remotest inkling of truth. In these historians, from one to the next, fabrication is steadily more decisive steadily more deliberate.

Deuteronomy relates the event of the Mosaic lawgiving and the earlier event of the conquest of Heshbon and Bashan. For the event of the Mosaic lawgiving the source is the Yahwistic document. For the event of the conquest of Heshbon and Bashan the source is nothing but itself.

Joshua, Judges, Samuel, Kings relates the events of the kingdoms of Judah and Israel back to the glory days of David and Solomon, reaching, on its own count, four and a half centuries before the time of writing, and the earlier events from David back to the conquest of the promised land, reaching, on its own count, nine centuries before the time of writing. For the events from four and a half centuries before the time of writing to the time of writing, the source are, the historian reports, the chronicles of the kings of Israel and Judah. These are the chronicles of the 41 kings of Israel and Judah who have not left behind – between the 41 of them – 1 inscription. For the events from nine centuries before the time of writing to four and a half centuries before the time of writing the source is nothing but itself.

The Priestly code relates events from the exodus, reaching, on its own count, one millennium before the time of writing, back to the 1st day, reaching, on its own count, three and a half millennia before the time of writing. For the events the source is the Yahwistic document. For when the events occurred, from three and a half millennia before the time of writing to one millennium before the time of writing, the source is nothing but itself.

And the last of those historians, *Chronicles*, *Ezra*, *Nehemiah*, rounding off the relation of the past steered by him, does take the ultimate step. Negatively, in the annihilation of the remotest inking of truth. Affirmatively, by fabrication.

The time is now one and a half centuries into the flourishing of *pax Persica*.

Elsewhere, the time also two centuries into the flourishing of philosophy. In particular, it is after Herodotus, and Thucydides.

The earlier historians relate events of the more distant past. *Chronicles*, *Ezra*, *Nehemiah* relates the contemporary event of the great assembly under Ezra. The source is once again nothing but itself. This historian, however, appreciates the importance of official documents. And the relation of the contemporary event is witnessed incontrovertibly by contemporary official documents. A proclamation of Cyrus. A proclamation of Darius. A proclamation of Artaxerxes. Another proclamation of Artaxerxes. Thus said king Cyrus of Persia, the lord of heaven has given me all the kingdoms of the earth and has charged me with building him a house in Jerusalem, which is in Judah. Artaxerxes, the king of kings, to Ezra, the priest, expert in the law of god in heaven, you, Ezra, by the divine wisdom which you possess, teach those, who do not know them, the laws of your god.

And how and why this past steered by him, impossible as it is, and impossible as it should be, becomes possible, should not be too difficult to explain.

First, by relentless writing. And this is unprecedented.

By the time of *Deuteronomy* the Hebrew writings have been accumulating for 6 generations, and *Deuteronomy* is the 10th of the writings. By the time of *Joshua*, *Judges*, *Samuel*, *Kings* the writings have been accumulating for 8 generations, and *Joshua*, *Judges*, *Samuel*, *Kings* is the 14th of the writings. By the time of the Priestly code the writings have been accumulating for 11 generations, and the Priestly code is the 19th of the writings. By the time of *Chronicles*, *Ezra*, *Nehemiah* the writings have been accumulating for 14 generations, and *Chronicles*, *Ezra*, *Nehemiah* is the 27th of the writings.

Second, by restricting explicitly, and severely,

those to whom the writing is addressed. And this is also unprecedented.

The writing is addressed to the congregation of the church. In the great assembly under Ezra the congregation counts itself. Not counting their slaves, singers, horses, mules, camels, and asses, the entire congregation of the people numbers 42 360.

Third, by isolating, also explicitly, also severely, the writing and those to whom it is addressed, both, from everything without. And this is also unprecedented.

How successful the isolation is, the fact attests that while Israel and Judah are ruined, they are noted often by the princes who ruin them. The Hebrew writings, or the church, are never noted by anyone without them. Neither at the time when Israel and Judah are noted, nor at any later time through the time of the great assembly, when all the 27 writings are completed, nearly four and a half centuries of writings, are the Hebrew writings noted by anyone without them. They are not noted by the great kings, who are their lords, and vigorously collect the tribute of their subjects. They are not noted by the philosophers, who, beginning with the first, vigorously travel the east. They are not noted by the historians, who of all the philosophers most vigorously travel the east. They are not noted by the father of history either, who travels the land which would be the promised land, in particular, too, and researches everywhere, explicitly, most particularly what all peoples say about the gods.

Moreover, on the evidence of the Assyrian princes, the building of the greatest state is the principal as well as an immediate cause of the great advance in history. Similarly, on the evidence of the Hebrew writings, the attempt to restore the ruined state of Judah, and when the state is ruined, to build the first church in place of the ruined state, is the principal as well as an immediate cause of the relation of the past steered by him.

Thus, the past steered by him is not history.

Yet its claim to history is very strong.

In the three-odd centuries at issue its claim remains confined to its congregation. The past steered by him remains unaware of history and uninformed by history. History remains unaware

of the past steered by him and uninformed by the past steered by him.

Yet some centuries on, this will change. As again, Bodin suffices to show.

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In the enumeration of the historians in the three-odd centuries from Ashurbanipal to Alexander the first predecessor of Herodotus is Pherecydes.

It is the time of Cyrus. The rise of Sparta and of Athens also begins.

It is also some one generation into the development of philosophy.

And Pherecydes is associated with the first philosophers. Like several of them, he is one of the many more than seven counted among the seven wise men. He is one of the 102, one of the earliest, on whom Laertius writes under his own head each in *The lives and doctrines of the philosophers*. Aristotle notes him twice, once quite philosophically: Pherecydes seems to make the first the best (*Metaphysics*, XIV, 4), once not so philosophically, or perhaps even more philosophically: Pherecydes also suffered from lice (*Hist. animals*, V, 31).

Strabo reports: Cadmus, Pherecydes, and Hecataeus first began imitating poetry by writing prose (I, 2.6).

Pherecydes is the earliest of the three.

He imitated Hesiod, in particular.

The *Suda* reports: Pherecydes wrote a theogony (s. v.).

Laertius quotes the beginning of the book:

Zeus and Time and Ground always were, and Ground was called Earth, because Zeus gave her the gift of earth (I, 119).

The gift of earth is a pun, γῆν γέρας.

There are a few more fragments, dealing in more detail with how Zeus wed Ground and gave her the gift of earth (fr. 2), as well as with the battle of Cronus with Snake (fr. 4).

Pherecydes is a step from Homer and Hesiod toward the father of history. He first wrote prose. He wrote another theogony. A very small step.

Next is Hecataeus.

It is the time now of Darius. The rise of Sparta and of Athens continues.

It is also some two-odd generations into the

development of philosophy.

Hecataeus, accordingly, is only one of the predecessors of Heraclitus whom much learning did not teach sense. The others are Hesiod, Pythagoras, and Xenophanes.

And Hecataeus is a decisive step toward the father of history.

With Hecataeus geography begins, the description of the surface of the earth becomes a systematic and deliberate investigation. His fragments attest the collection of 300-odd localities. A few are burdened with their Homeric provenance. The large majority are where Hecataeus says they are. Their distribution is from Scythia to the Indus to Ethiopia to the strait of Gibraltar, coinciding precisely with the reach of the expeditions of the great kings. Hecataeus also drew the second map of the earth. The map attests the solution of the problems of orientation and distance from the Aegean to the Persian Gulf, of orientation qualitatively, of distance also quantitatively.

Hecataeus wrote two treatises.

One is the first geographical treatise.

The other is recorded variously as the *Genealogies*, the *Histories*, and the *Stories of heroes*.

The fragments do not attest histories. They attest genealogies and stories of heroes:

the Deucalionids (fr. 13-6),

the Argonauts (fr. 17-8),

the Danaids (fr. 19-22),

the Heraclidae (fr. 23-30).

They attest genealogies and stories of heroes well attested by Homer and Hesiod. Hecataeus is the second of the writers who, Strabo reports, first began imitating poetry by writing prose.

The *Genealogies*, or *Stories of heroes*, began very auspiciously:

I will write down what I believe is the truth, because many stories are told among the Greeks which seem to me ridiculous (fr. 1).

And the fragments attest, remotely, the attempt to tell the truth from the ridiculous stories told among the Greeks. A couple of the fragments correct Homer and Hesiod. For instance:

Hesiod makes the sons of Aegyptus 50, but I say they were not even 20 (fr. 19).

And it does seem somewhat less ridiculous that the sons of Aegyptus, betrothed to the 50 daughters of Danaus, were not 50, and not even 20.

More important, in the *Histories* Herodotus notes Hecataeus explicitly 4 times. Of all the poets and writers of prose before him, he notes explicitly more often only Homer, 8 times. Even if Herodotus is quite clear that Hecataeus has left it to him to tell the truth from the ridiculous stories told among the Greeks.

The *Genealogies*, or *Stories of heroes*, is not a decisive step toward the father of history. A decisive step is the first geographical treatise, the localities, the map, the solution of the problems of orientation and distance.

Next are Acusilaus of Argos, Cadmus of Miletus, and Xanthus.

It is the time now of Xerxes. Sparta and Athens have defeated the great king, and continue to rise.

It is also some three-odd generations into the development of philosophy.

With Acusilaus of Argos and Cadmus of Miletus the genealogies continued to accumulate.

Xanthus wrote a book on Lydia. Athenaeus said that Ephorus said that Herodotus used Xanthus (XII, 515d-e). If so, to judge by the fragments Xanthus has left behind, there was not much to use. Xanthus said that the Mysians were Lydians because the Lydians call the beech tree the Mysian tree (Strabo, XII, 8.3). He said that the Phrygians came from Europe to Asia after the Trojan war (XIV, 5.29). He said that Zoroaster was 6 000 years before the expedition of Xerxes (Laertius, I, 2).

Next is Herodotus.

And how massive an advance Herodotus is over his predecessors, his predecessors show.

There have been other very massive advances in the acquisition of knowledge. In the earlier centuries of philosophy. Eudoxus. Aristotle. In the later centuries. Galileo. Descartes. Newton. Leibniz. There have been. Not too many.

Cicero first calls Herodotus the father of history (*Laws*, I, 5). Cicero also writes: history is the true witness of time, the light of truth, the life of memory, the schoolmistress of life, the messenger of antiquity (*On the orator*, II, 36).

History is all this. And of all this Herodotus is the father.

It is the time now of Artaxerxes. Sparta is the dominant power among the Greek states. Athens

has built the first maritime empire.

It is also not quite five generations into the development of philosophy.

The geography of the *Histories* has been presented above. And here is the history of the *Histories*.

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Histories is ἱστορίαι, researches.

And the *Histories*, or *Researches*, begins:

the researches of Herodotus of Halicarnassus are here set down so that the past not be lost by the passage of time and the great and magnificent deeds of Greeks and barbarians not fail to have their renown as well as the cause why they fought one another (I, 1).

The *Histories* are set down so that the past not be lost by the passage of time and the great and magnificent deeds of Greeks and barbarians not fail to have their renown.

As well as the cause why they fought one another.

And Herodotus turns right away to the cause, and rather what the Persians say is the cause. He continues:

the Persians say that the Phoenicians were the cause;

having come to Argos to trade, some Phoenicians stole the king's daughter, Io (*id.*);

then some Greeks went to Tyre and stole that king's daughter, Europa, and to Colchis and stole that king's daughter, Medea, too (2);

then Paris went to Greece and stole Helen (3);

until that time it was just insolence on both sides, but after that the Greeks were greatly to blame because, to take Helen back, they invaded Asia before the Persians invaded Europe (4);

this is what the Persians say (5).

It is an excellent *casus belli*. We invaded you because you invaded us. It had been one for a long time before that, and has remained one ever since. Nor should it seem strange that Homer and Hesiod are the Persians' authorities on who invaded whom. Before and since, we have found our *casus belli*, and you have found yours, in stranger places.

Herodotus continues:

this is what the Persians say; but I will not say that those things happened this way or that; I

will begin instead with the man I know first committed unjust deeds against the Greeks; and in pursuing my account I will report on both small cities and great, because some of those that were once great are now small and some of those that are now great were once small (*id.*).

I will not say that those things happened this way or that.

I will begin instead with the man I know first committed unjust deeds against the Greeks.

And in pursuing my account I will report on both small cities and great, because some of those that were once great are now small and some of those that are now great were once small.

And he then sets down the *Histories*, nine books of it.

So that the past not be lost by the passage of time, then, Herodotus has made three promises in those introductory lines.

To research the great and magnificent deeds of Greeks and barbarians. So that they not fail to have their renown.

To research as well the cause why they fought one another.

And to report on both small cities and great. Because some of those that were once great are now small and some of those that are now great were once small.

Beginning with the man he knows first committed unjust deeds against the Greeks.

That man is the Lydian prince Croesus (6), and in order to begin with him, Herodotus begins rather with his predecessors on the Lydian throne.

And in the rest of the *Histories*, the nine books of it, he delivers on his three promises very differently.

Research into the great and magnificent deeds of Greeks and barbarians abounds.

Research into the cause why they fought one another is nowhere to be found.

And reports on cities abound, but very much more reports on states abound. The difference between cities and states is clear. And it turns out that the states, not the cities, are of those two kinds, once great now small and now great once small.

Research into the cause is nowhere to be found. Herodotus never returns to the cause why

Greeks and barbarians fought one another. Those introductory pages are all that there is in the *Histories* about the cause, and about rather what the Persians say is the cause. And that he will not concern himself with the cause, even as he has promised it, is indicated by the following promise. I will not say that those things happened this way or that. Similarly, he will begin with the man he knows first committed unjust deeds against the Greeks. But in the rest of the *Histories* he hardly ever says of anything that it is just or unjust.

Research into the great and magnificent deeds of Greeks and barbarians abounds. The *Histories* is most of all, beginning to end, the great and magnificent deeds.

And reports on cities abound. Research into the deeds, however, leads to reports on the states. The great and magnificent deeds lead to the states, those once great now small and those now great once small. Herodotus, in fact, has collected all three possible kinds. The states once great now small. The states once small now great. And the states once small now small. – The impossible kind, the state once great now great, two generations later Plato will write. – But as it is most of all, beginning to end, the great and magnificent deeds, so the *Histories* is most of all, beginning to end, the great states, once great now small and now great once small. The great deeds, it turns out, are the great states.

Also, even as Herodotus has not promised it in those introductory lines, there is even more in the *Histories*.

Below, then, is how and why the great and magnificent deeds of Greeks and barbarians lead to the states, those once great now small and those now great once small.

After that, also, what else there is in the *Histories*, and how and why.

dl

There are in the *Histories* 2 020 objects which Herodotus identifies with its proper name each.

1 012 are localities on the surface of the earth. Many of them cities.

804 of the remaining 1 008 are predecessors of his.

These 804 are the Greeks and barbarians whose deeds Herodotus researches. And the

deeds of some of them he researches more than the deeds of others, the deeds of some of them very much more than the deeds of the rest. These last are the Greeks and barbarians whose deeds are the greatest and most magnificent.

The *Histories* was divided into nine books by the Alexandrian grammarians, and has since been divided into sections, for a total of 1 534 sections. Counting the sections, rounding to the nearest pentad below – as, granted its editorial virtue, the division into sections is often arbitrary – and dividing them into important, on the left, and not important, on the right, the Greeks and barbarians whom Herodotus researches the most are these,

Xerxes	220+ sections,
Darius	170+,
Cyrus	100+,
Croesus	75+,
Mardonius	65+,
Cambyses	55+,
Cleomenes	35+,
Astyages	30+,
Pausanias	30+,
Amasis	25+,
Polycrates	25+,
Histiaeus	25+,
Aristagoras	25+,
Demaratus	25+,
Leonidas	25+,
Themistocles	25+,
Harpagus	20+,
Artabanus	20+,
Alexander	20+,
Alyattes	15+,
Pisistratus	15+,
Anaxandridas	15+,
Hystaspes	15+,
Ariston	15+,
Miltiades	15+,
Bardiya	15+,
Gelon	15+,
Eurybiades	15+.

These are the Greeks and barbarians whose deeds are the greatest and most magnificent.

28 Greeks and barbarians.

14 Greeks, 14 barbarians.

These two kinds can be divided into smaller kinds. The Greeks into these five kinds, 7 are Spartans, 3 are Athenians, 2 are Milesians, 1 is

Samian, 1 is Syracusan. The barbarians into these five kinds, 8 are Persians, 2 are Lydians, 2 are Medes, 1 is Egyptian, 1 is Macedonian.

They can be divided into kinds also differently. The barbarians into these three kinds, 4 are the great kings, 6 served the great kings, 4 did not serve the great kings. And the Greeks into the same three kinds, 0 are the great kings, 2 served the great kings, 12 did not serve the great kings. Combining them, either barbarians or Greeks, 4 are the great kings, 8 served the great kings, 16 did not serve the great kings.

And counting the sections, these are the totals for these three kinds. The total for the great kings is 545+. The total for those who served the great kings is 210+. Adding these two numbers, the total is 755+. The total for those who did not serve the great kings is 390+.

The deeds of the great kings are by far the greatest and most magnificent.

Indeed, to a first approximation the *Histories* is just that, the deeds of the great kings. The contents of the nine books are:

the antecedents of the deeds of Cyrus (I, 1-74),
the deeds of Cyrus (I, 75-216),
the deeds of Cambyses (II, 1-III, 66),
the deeds of Darius (III, 67-VII, 4),
and the deeds of Xerxes (VII, 5-IX, 122).

Moreover, Herodotus concerns himself with the deeds of all the other 24 of the 28 in this enumeration, because he concerns himself with the deeds of the great kings, and always in their relation to the deeds of the great kings.

Those in the enumeration are 28 of all the 804 Greeks and barbarians in the *Histories*. The rest are 776. And Herodotus concerns himself with the deeds of all these 776 as well, because he concerns himself with the deeds of the great kings. Always in their relation to the deeds of the great kings as well, even if in many of these cases the relation is remote and indirect.

To show this more particularly, the deeds of the 28 in the enumeration are reviewed. Briefly. The deeds of all the important among them and all but two of the not important have been presented above in the course of the collection of the states. As they cannot not have been. Herodotus is the fundamental source for the states.

4 of the 28, then, are the great kings, Cyrus,

Cambyes, Darius, and Xerxes.

The remaining 24 are reviewed in the chronological order determined by the great kings.

Herodotus writes:
the Assyrians held sway over Asia for 520 years
(I, 95).

Counting from Adad-nirari, prince c. 1305-273, to Ashurbanipal, prince 668-27, the Assyrians held sway over Asia for 650 years.

It is one of the many results of the *Histories* reaching most successfully deep in the past.

Assyria had been once great, it was now small.

It fell, and the four kingdoms rose, Media, Lydia, Babylon, and Egypt.

Cyrus conquered three of them, Media, Lydia, and Babylon, in this order.

First Media.

Herodotus writes:
the Medes first rose against the Assyrians (*id.*);
Cyaxares was a far greater warrior than his predecessors;

he defeated the Assyrians;
and he brought under his rule all Asia beyond the Kizilirmak (103).

Media had been once small, it was now great.

Cyaxares was succeeded by Astyages. And under Astyages Media fell to Cyrus (107-30).

1 of the 28 is thus Astyages.

Media was now again small.

Persia had been once small, it was now great.

Herodotus has turned to Media after asking the question:

we must now ask, who was that Cyrus (95)?

And to begin answering the question, he has established the succession of the 4 princes, under whom Media had been once small, become great, and was now again small, and has written the history of Media. And Media has no history other than the *Histories*.

Cyrus then conquered Lydia.

Herodotus has proposed to begin with Croesus, and in order to do so, has begun rather with his predecessors, tracing them back to the first Lydian prince. The fourth Lydian prince is Alyattes.

Herodotus writes:
the Lydians were the bravest and most valiant soldiers in all of Asia (*id.*);
Alyattes established the Kizilirmak as the bound-

ary of his kingdom in the east;
and he first attacked the Greek cities on the coast of Asia Minor in the west (16-7).s

Lydia had been once small, it was now great.

Alyattes was succeeded by Croesus. And under Croesus Lydia fell to Cyrus (46-91).

2 of the 28 are thus Alyattes and Croesus.

Lydia was now again small.

Persia was now yet greater.

It is when Lydia falls that Herodotus asks, more particularly:

we must now ask, who was that Cyrus who took the dominion of Croesus? and how did the Persians become the masters of Asia (95)?

And to prepare the question and its answer, he has established the succession of the 5 princes, under whom Lydia had been once small, become great, and was now again small, and has written the history of Lydia. And Lydia as well has no history other than the *Histories*.

Harpagus completed the conquest of Asia Minor.

Herodotus writes:

Harpagus was a Mede, an official of the Mede king Astyages before becoming an official of Cyrus;

Harpagus reduced the Greek cities on the coast, and subdued Caria and Lycia (162-71).

Harpagus is thus 1 of the 28.

Cyrus then conquered Babylon.

Herodotus writes:

there were many princes of Babylon, and I will report on them in my Assyrian book (184).

It is the single major error of the *Histories*. That Herodotus did not write that book.

He has written the history of Lydia. He has written the history of Media.

When Cambyes conquers Egypt, he will write the history of Egypt. And he will discover the antiquity of Egypt. He will establish the fact that the succession of the Egyptian princes reaches far the deepest in the past. Long before the Lydian princes, long before the Mede princes, long before any other barbarians or Greeks had any inkling of princeship. His successor Manetho will correct the history of Egypt. And the fact of Egyptian antiquity will be neglected and abused, but will be never altogether lost in ignorance.

Herodotus notes in passing 2 Babylonian

princes: Nabonidus, who fell to Cyrus (188), and his predecessor Nebuchadnezzar (74). He notes in passing 3 earlier Assyrian princes: Ashurbanipal (II, 150), Sennacherib (141), whom he confuses with Esarhaddon, and queen Semiramis (I, 184).

But that book remained unwritten. Herodotus did not write the history of Babylon and Assyria. He did not discover the antiquity of Mesopotamia. He did not establish the fact that the successions of these princes reach nearly as deep in the past as the succession of the Egyptian princes. There will be thus no history of Assyria and Babylon to correct either. His successors will not write this history either. And the fact of Mesopotamian antiquity will be altogether lost in ignorance until the nineteenth Christian century.

Babylon had been once great, it was now small.

Persia was now yet greater.

Cyrus fell. Cambyses succeeded, and he conquered the fourth kingdom, Egypt.

Herodotus writes:

under Amasis Egypt was very prosperous, there were 20 000 cities in the country (II, 177); Cambyses made war on Amasis, and conquered Egypt (III, 1-13).

1 of the 28 is thus Amasis.

Egypt had been once great, it was now small.

Persia was now yet greater.

Egypt, however, had not been just great. It had been great for a very long time. Herodotus, accordingly, writes the history of Egypt in great detail and more systematically than any other (II, 99-III, 14).

He writes:

the Egyptian priests counted 341 generations of kings before Psamtik (II, 142);

the first king was Min;

of the first 330 kings, 18 were Ethiopians and 1 was a native woman, the rest were men and Egyptians; the woman was Nitocris (100).

He writes briefly on the deeds of Nitocris, and continues:

of the rest of the 330 the priests had no great deeds to tell, except for the last, Moeris (101).

He writes briefly on the deeds of Moeris, and continues:

I will now tell of the kings who came after that (102).

And he writes in some detail on the deeds of the last 11 of the 341:

Sesostris (102-10),

Pheros (111),

Proteus (112-20),

Rhampsinitus (121-3),

Cheops (124-6),

Chephren (127-8),

Mycerinus (129-35),

Asuchis (136),

the blind Anysis,

the Ethiopian Sabacos (137-40),

and Sethos (141).

He then calculates:

3 generations are 100 years, so 300 generations are 10 000 years, and 41 generations are 1 340 years, for a total of 11 340 years (142).

And he concludes by writing in greater detail on the deeds of Psamtik and his 5 successors through the fall of Egypt to Cambyses (151-III, 14).

And first, Herodotus has established the succession of the last 6 princes, beginning with Psamtik, under whom Egypt had been great, and was now small, has written the history of Egypt under these princes, and the history of Egypt under these princes has no history other than the *Histories*.

Second, through all the errors, the great deeds which he ascribes to them identify unambiguously, Sesostris as either Senwosret, prince c. 1976-32, or Senwosret III, prince c. 1878-45, Cheops, Chephren, and Mycerinus as Khufu, prince c. 2580, Khafre, prince c. 2540, and Menkaure, prince c. 2520, the Ethiopian Sabacos as Shabaka, prince c. 708-693. Herodotus has reached deeper in the past than any of his predecessors, by far, has begun establishing the succession of the princes under whom Egypt had been great for a very long time, and has begun writing the history of Egypt under these princes. Manetho, when, four-odd generations later, he writes the history of Egypt, will correct explicitly Herodotus throughout.

Third, Herodotus has established the fact of the first prince. Manetho will correct his calculation of when the first prince was, corroborating the fact of the first prince. And after the recovery of the Egyptian record in the nineteenth Christian century Manetho's calculation will also be cor-

rected, corroborating conclusively the fact of the first prince. The first prince was,

Herodotus	c. 12011 ^{BC} ,
Manetho	c. 6303 ^{BC} ,
correction	c. 3000 ^{BC} .

It is one of the two most spectacular feats of the *Histories*, establishing the fact of Egyptian antiquity. The other is reaching explicitly to the limits of knowledge in the north, east, south, and west.

The great kings had conquered the Greek cities on the coast of Asia Minor. But not the nearby islands. And on Samos Polycrates became tyrant.

Herodotus writes:

Polycrates was the tyrant of Samos; none of the tyrants of the Greek cities rivaled him in magnificence (III, 125);

he was the first mortal to try to master the sea (122); he built a navy of 100 fifty-oared ships (39);

he provided Cambyses with 40 ships in his conquest of Egypt (44);

later on, he was captured by the satrap of Lydia and crucified (125).

Polycrates is thus 1 of the 28.

Samos had been once small, tried to become great with Polycrates, and was now again small.

Herodotus has written the history of Samos, and Samos as well has no history other than the *Histories*.

Bardiya was a brother of Cambyses.

Herodotus writes:

when Cambyses was king, Bardiya, a son of Cyrus and brother of Cambyses, was suspected of plotting against the king, and was killed on the king's orders (30);

after the death of Cambyses an usurper claiming to be Bardiya ruled for seven months (67-79).

1 of the 28 is thus Bardiya.

Cambyses died. Darius succeeded.

Herodotus writes:

Hystaspes was the father of Darius; he served Cyrus (I, 209-10);

he was the satrap of Persia when Darius became king (III, 70).

Hystaspes is thus 1 of the 28.

The main Greek city on the coast of Asia Minor was Miletus, under the great kings since Cyrus.

Herodotus writes:

Histiaeus was the tyrant of Miletus; he held power at the mercy of Darius (IV, 137);

he accompanied Darius on the king's expedition in Thrace and Scythia (137-41);

in charge of Miletus he left Aristagoras (V, 30);

Aristagoras led the Ionians in revolt against the great king (36);

he fell when the revolt was suppressed (126);

Histiaeus was impaled by the satrap of Lydia (VI, 30).

2 of the 28 are thus Histiaeus and Aristagoras.

Miletus had been once small, tried to become great with Aristagoras, and was now again small.

Herodotus has written the history of Miletus, and Miletus as well has no history other than the *Histories*.

After the suppression of the Ionian revolt Darius sent heralds throughout Greece to ask the cities to submit earth and water. Most cities did. Sparta and Athens did not.

Sparta had been once small, it was now great.

Athens also had been once small, it was now great.

Thus, through this time, 3 of the 28 are Anaxandridas, Ariston, and Cleomenes with whom Sparta had become great.

Through this time, 1 of the 28 is Pisistratus with whom Athens had become great.

Herodotus has written the histories of Sparta and of Athens as well. And the place of these two histories in the *Histories* is more like that of the history of Persia than like those of the histories of Lydia, Media, and Egypt.

To prepare the question, who was that Cyrus? and how did the Persians become the masters of Asia? and begin answering it, Herodotus has written the histories of Lydia and then of Media as a unity each. Also, Lydia and Media both had been once great, but were now small. Their histories are over. The history of Persia is different. It is the fundamental in the *Histories*. Persia had been once small, but was now great, and continued to be great. Its history is not over. All other histories are thus part of this history. And the first two, those of Lydia and of Media, prepare this history, but all other subsequent histories are inserted into this history. Of these other subsequent histories first is inserted the history of

Egypt. It is also written as a unity. Egypt also had been once great, but was now small. Its history is also over. The histories of Samos and Miletus are inserted into the fundamental history as well. Samos and Miletus both had been once small, and were now small.

Sparta and Athens also had been once small. But both were now great, and continued to be great. The histories of Sparta and of Athens are not over either. And the histories of Sparta and of Athens are inserted into the fundamental history, that of Persia, and inserted in parts throughout the parts of the fundamental history.

The histories of all the different states are thus not a unity each. The history of the whole of all the different states, on the other hand, is the tightest unity.

Herodotus has written the history of Sparta as well, and through the Persian war the history of Sparta is fundamentally the *Histories*. His successors will add the importance of Theopompus, whom Herodotus already notes.

He has written the history of Athens as well, and through the Persian war the history of Athens is fundamentally the *Histories*. His successors will add the importance of Draco, whom Herodotus does not note, and more of the importance of Solon and Cleisthenes, on both of whom Herodotus writes in some detail.

Sparta and Athens did not submit earth and water. Darius sent an army against them.

Miltiades defeated it at Marathon (VI, 109-13).

1 of the 28 is thus the Athenian Miltiades.

Darius began preparing an expedition to lead against Sparta and Athens himself. He died. Xerxes succeeded, and continued the preparation of the expedition.

Sparta and Athens, themselves preparing to meet the great king, solicited the help of Gelon. Gelon was tyrant of Syracuse.

Herodotus writes:
his war with the Carthaginians prevented Gelon from taking sides in the war of Xerxes against the Spartans and the Athenians (VII, 163).

1 of the 28 is thus Gelon.

Syracuse had been once small, it was now great under Gelon.

And Herodotus inserts the history of Syracuse

(153-67).

And through the Persian war the history of Syracuse is the *Histories*.

In the preparation for the expedition and during the expedition Xerxes had two chief advisors.

Herodotus writes:

Artabanus was a brother of Darius, and his advisor (IV, 83);

after the death of Darius, he advised Xerxes (VII, 10),

and:

the king of Sparta Demaratus was deposed (VI, 65-7), and he then entered the service of Darius (70);

after the death of Darius, he entered the service of Xerxes, and advised him throughout the expedition (VII, 101-237).

Artabanus and Demaratus are thus 2 of the 28.

Xerxes embarked on the expedition. All peoples of the empire joined the expedition. When it passed through Macedon, the Macedonians joined it.

Herodotus writes:

Alexander was the king of Macedon; his father had first submitted earth and water to Darius (V, 18).

Alexander is 1 of the 28.

Macedon had been once small, and it was now small.

Herodotus nevertheless inserts its history (VIII, 136-9).

Through the Persian war Macedon has no history other than the *Histories*.

Leonidas with the 300 stood at Thermopylae (VII, 222-8).

The Spartan Leonidas is thus 1 of the 28.

At Salamis Themistocles, aided by Eurybiades, defeated the Persian navy (VIII, 83-91).

The Athenian Themistocles and the Spartan Eurybiades are thus 2 of the 28.

At Plataea Pausanias defeated Mardonius (IX, 59-65).

And the Spartan Pausanias and the Persian Mardonius are thus the last 2 of the 28.

Among the other 776 Greeks and barbarians collected in the *Histories* are the tyrants of Corinth Cypselus and Periander. Corinth had been once small, tried to become great with Cypselus

and Periander, and was now again small. And Herodotus has written the history of Corinth (V, 92-5). Another of the 776 is the tyrant of Sicyon Cleisthenes. Sicyon had been once small, tried to become great with Cleisthenes, and was now again small. And Herodotus has written the history of Sicyon (V, 67-8; VI, 126-31). Another of the 776 is the Carthaginian general Hamilcar. Carthage had been once small, and was now great, even if it was not yet as great as it was to become, and even if Hamilcar had just been defeated. And Herodotus, even if he did not write the history of Carthage, noted some of it in the *Histories* (I, 165-6; III, 19; V, 42; VI, 17; VII, 165-7).

Thus, the great and magnificent deeds have led Herodotus to the states. The great deeds, it has turned out, are the great states.

And he has written the history of Lydia, once small, then great, now small.

The history of Media, once small, then great, now small.

The history of Persia, once small, now the greatest.

The history of Egypt, once, a very long time ago, small, then for a very long time great, now small.

The history of Samos, once small, and after an attempt to become great, now small.

The history of Miletus, once small, and after an attempt to become great, now small.

The history of Sparta, once small, now very great.

The history of Athens, once small, now very great.

The history of Syracuse, once small, now great.

The history of Macedon, once small, now small.

The history of Corinth, once small, and after an attempt to become great, now small.

The history of Sicyon, once small, and after an attempt to become great, now small.

He has noted some of the history of Carthage, once small, now great.

He has noted a couple of hundred other cities and peoples, once small, now small.

He has not written the history of Assyria and Babylon. He has promised to write it. But he has

not written it. With dire consequences.

All the histories he has written he has integrated into the tightest unity.

Spatially, it is the history of all states at the time of writing from the Atlantic to the Indus.

Temporally – other than that single direly consequential error, postponing the writing of the history of the states in the valley of the two rivers – it is the history of all states within this domain, from the Atlantic to the Indus, back to the beginning of the state.

There is nothing remotely like this before the *Histories*.

Herodotus is a very massive advance in the acquisition of knowledge.

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History has advanced greatly before him.

The great advance begins sixteen centuries before him with the Sumerian prince list. The list has collected 120 princes from 10 states, reaching far in space and in time beyond any one of these states. And there is nothing remotely like this either in the sixteen centuries between the list and Herodotus.

The advance before him culminates in the Assyrian princes. They have solved the problem of time reckoning over 586 years, established the succession of 45 princes over seven and a half centuries, compiled the detailed and systematic record of these princes over these centuries. The Assyrian princes are a very great advance.

Their record is yet the history of but one state, theirs.

There is continuity between the Assyrian princes and Herodotus. He has promised to write an Assyrian book. He has established that the Assyrians held sway over Asia for 520 years. He notes Semiramis. He notes Sennacherib. He notes Ashurbanipal. In Egypt, Ashurbanipal notes Psamtik, and Herodotus notes Psamtik. In Phrygia, Ashurbanipal notes Midas, and Herodotus notes Midas. In Lydia, Ashurbanipal notes Gyges, and Herodotus notes Gyges.

Where the Assyrian princes leave off, there Herodotus continues.

And Herodotus is a very massive advance over the Assyrian princes.

His immediate predecessors are the Greek

writers in the not quite three centuries before him. And the great kings in the one century-odd before him.

Homer wrote the stories of heroes and gods. Hesiod wrote theogony. Pherecydes wrote theogony. Hecataeus wrote stories of heroes and genealogies. More writers wrote more stories of heroes and genealogies.

Over all this Herodotus is not a very massive advance. With all this he has nothing in common. From all this he is a radical departure.

Of these predecessors of his he continues the labors of description of the surface of the earth. In Homer there is a list of 241 localities, most of them real. In Hesiod there is a list of 25 rivers, 23 of them real. Hecataeus describes 300-odd localities, draws the map of the earth, solves the problems of orientation and distance. With Hecataeus geography begins. Hecataeus is a very great advance.

And Herodotus is a very massive advance over Hecataeus.

Hecataeus describes 300-odd localities, and draws the map of the earth. The distribution of the localities and the map reach from the Atlantic in the west to the Indus in the east and from the northern shores of the Black Sea in the north to the southern shores of the Red Sea in the south, coinciding precisely with the reach of the expeditions of the great kings. Herodotus describes 1 012 localities, and draws the map of the earth very much better. The distribution of the localities and the map reach from the Atlantic in the west to the Indus in the east, coinciding precisely with the reach of the expeditions of the great kings, and from the problem of the source of the Dnieper in the north to the problem of the source of the Nile in the south, reaching a little further than the expeditions of the great kings.

The great kings are one of the two principal as well as immediate causes of the very massive advance which the *Histories* is.

In order to draw the map of the earth, Herodotus follows the great kings expedition by expedition, east, south, north, and west. Everywhere trying to reach further than the great kings, too, and as far as the limits of knowledge.

In order to research the great and magnificent deeds of Greeks and barbarians, he researches the

deeds of the great kings. And he writes the history of the state of the great kings. And he writes the histories of three of the great states which the great kings conquer, and promises to write the history of the fourth. And he writes the histories of the two great states which stop the great kings. Everywhere trying to reach further than these states, too, and in time as well as in space, and as far as the limits of knowledge, and writes all the histories that there are to write.

The other principal as well as immediate cause of the massive advance which the *Histories* is are the physicists and mathematicians.

Philosophy has begun, and by the time of Herodotus has developed for not quite five generations.

Philosophy is theoretical and practical. And practical philosophy has not begun. Ethics will begin in the next generation with Socrates. Politics has not begun either, the philosophers are just making the first attempt to speak about the state with Herodotus's contemporary Protagoras.

Theoretical philosophy has begun, and theoretical philosophy has advanced very greatly. Physics and mathematics have begun, and physics and mathematics have advanced very greatly.

Herodotus is the successor of Thales, Anaximander, Anaximenes, Pythagoras, Xenophanes, Hecataeus, Heraclitus, Alcmaeon, Parmenides, Anaxagoras, Empedocles. The investigation of the heaven has advanced very greatly. Observations have accumulated. Pythagoras has discovered proof. Proofs have accumulated. Anaxagoras has made the first attempt to square the circle. Herodotus's contemporary Oenopides measures the ecliptic. His younger contemporary Meton will measure the summer solstice, the solar year, and the period synchronizing the motions of the moon and the sun. His younger contemporary Hippias, who will also fix chronology, will trisect the angle. Less than a generation after him Hippocrates of Chios will write the first *Elements*.

And Herodotus draws on the map of the earth a south-north line of reference from the Persian Gulf to the Black Sea. Measures the Black Sea. Measures the Bosphorus. Measures the sea of Marmara. Measures the Dardanelles. Measures the distance from the mouth of the Danube to the sea of Azov. Measures the distance from the sea

of Azov to the Rioni. Measures the Caspian. Measures Asia Minor. Measures the distance from western Asia Minor to the country abutting on the Persian Gulf. Measures the distance from the Mediterranean to the Red Sea. Measures the Red Sea. Measures the Nile. All in standard units of distance on land and on the sea.

And he does to objects in time what he does to objects in space. He measures, calculates, and arranges them in their temporal series and order.

This is the series of the great kings:

Cyrus reigned 29 years (I, 214);
 Cambyes reigned 7 years and 5 months (III, 66);
 the pretender Bardiya reigned 7 months (67);
 Darius reigned 36 years (VII, 4);
 Xerxes embarked on the expedition against Sparta and Athens in his 5th year (20).

This is the series of the Mede kings:

Diocles reigned 53 years (I, 102);
 Phraortes reigned 22 years (*id.*);
 Cyaxares reigned 40 years (107);
 Astyages reigned 35 years (130).

The two series are correlated. The reign of Astyages ends with the conquest of Media by Cyrus.

This is the series of the Lydian kings:

Gyges reigned 38 years (15);
 Ardys reigned 49 years (16);
 Sadyattes reigned 12 years (*id.*);
 Alyattes reigned 57 years (25);
 Croesus reigned 14 years (86).

This series is correlated with the other two. The reign of Croesus ends with the conquest of Lydia by Cyrus, and Cyrus conquered first Media, then Lydia, then Babylon.

In Babylon, Herodotus calculates:

the Assyrians held sway over Asia for 520 years (95).

He did not write that book. And he does not distinguish Assyria from Babylon very clearly temporally. He takes it also that before the Persians: the Medes held sway over Asia beyond the Kizilirmak (130). It is thus not very clear where the count of the 520 years begins, back some time before the fall of Babylon, or back from the fall of Babylon, or back from the first Mede prince. However counted, the 520 years of the sway of the Assyrians over Asia are correlated with the other series.

This is the series of the last Egyptian kings:

Psamtik reigned 54 years (II, 157);
 Necho reigned 16 years (159);
 Psamtik II reigned 6 years (161);
 Apries reigned 25 years (*id.*);
 Amasis reigned 44 years (III, 10);
 Psamtik III reigned 6 months (14).

This series is also correlated with the others. Cambyes conquered Egypt.

The series of these princes – the 4 great kings, the 4 Mede kings, the 5 Lydian kings, and the last 6 Egyptian kings – Herodotus has reduced to measurement. And he has reached two and a half centuries into the past.

To reach further he calculates:

341 generations of kings before Psamtik;
 3 generations are 100 years, for a total of 11 340 years (II, 142).

And he has reached quantitatively back to the first prince.

This is the series of the Spartan Agiad kings:

Leonidas,
 he was the son of Anaxandridas,
 the son of Leon,
 the son of Eurycratidas,
 the son of Anaxandrus,
 the son of Eurycrates,
 the son of Polydorus,
 the son of Alcamenes,
 the son of Teleclus,
 the son of Archelaus,
 the son of Agesilaus,
 the son of Dorussus,
 the son of Leobotes,
 the son of Echestratus,
 the son of Agis,
 the son of Eurysthenes,
 the son of Aristodemus,
 the son of Aristomachus,
 the son of Cleodaeus,
 the son of Hyllus,
 the son of Heracles (VII, 204).

There are no reign years. There is, however, the unit of measurement used in Egypt: 3 generations are 100 years. Elsewhere Herodotus calculates: Heracles was 900 years before my time (II, 145). And if Heracles was not too young when he sired Hyllus – if he was about one and a half centuries old – his date is consistent with a mea-

surement of the series of the Spartan kings by the unit used in Egypt. Also, the Lydian kings were, like the Spartan, the descendants of Heracles, and Herodotus calculates also: from Heracles to Gyges, son has succeeded father on the Lydian throne for 22 generations, or 505 years (I, 7). And if Heracles was not too young when he sired the first of the sons succeeding fathers on the Lydian throne either – if he was about one century old – his date obtained by this calculation, although using a different unit, is consistent with the other calculation of his date.

The series of the Spartan kings is correlated with the other series, Leonidas is correlated with the great king Xerxes, Anaxandridas is correlated with the Lydian Croesus.

The Athenians are correlated with the other series, Solon with the Lydian Croesus, Cleisthenes with the Spartan Cleomenes, Miltiades and Themistocles with the great kings Darius and Xerxes. The Samian Polycrates is correlated with the Egyptian Amasis and the great king Cambyses. The Milesians Histiaeus and Aristagoras are correlated with the great king Darius and the Spartan Cleomenes. The Syracusan Gelon is correlated with the great king Xerxes. The Macedonian Alexander is correlated with the great king Xerxes. The Corinthian Periander is correlated with the Lydian Alyattes. The Sicyonian Cleisthenes is correlated with the Athenian Cleisthenes. The Carthaginian Hamilcar is correlated with the Syracusan Gelon.

And so all the 804 Greeks and barbarians in the *Histories* are correlated with one another.

Herodotus has described the system of the seas and the rivers. All in all, he has described 1 012 localities, and in their relation to the system of the seas and the rivers. And on the map of the earth he has arranged all these 1 012 objects in their spatial series and order, many of them quantitatively.

He has described the system of the states and the cities. All in all, he has described 804 Greeks and barbarians, and in their relation to the system of the states and the cities. And in the history of the states he has arranged all these 804 objects in their temporal series and order, many of them quantitatively.

And he has integrated the map of the earth and

the history of the states into one another. The localities are under the states and the cities, the states and the cities are over the localities. The 1 012 objects arranged in space are correlated with the 804 objects arranged in time, directly or indirectly, and more often than not explicitly, and the 804 objects arranged in time are correlated with the 1 012 objects arranged in space, directly or indirectly, and more often than not explicitly. It is a unitary series of 1 816 objects in space and time. In relation to all other objects, every one of the 1 816 objects is assigned a particular place and time.

And there is nothing remotely like this before the *Histories*.

Never mind the stories of heroes, theogonies, and genealogies. Philosophy – and physics and mathematics, not politics or ethics – has been advancing very greatly for nearly five generations by this time. And nothing remotely like this can be extracted from all the earlier philosophers combined – from all the earlier physicists and mathematicians combined.

There are in the *Histories* more numbers, more measurements, more calculations, more explicit arrangements in series, more inferences, more chains of inferences, many more, than in all the earlier philosophers combined.

Herodotus has brought the entire accumulated power of philosophy – of physics and mathematics – to bear on the research of the great and magnificent deeds of Greeks and barbarians.

Herodotus is a very massive advance in the acquisition of knowledge.

With Kepler: the position, order, and motion of the parts of the world is the system of the world.

With Minkowski: the multiplicity of all thinkable x , y , z , t systems of values is the world.

Herodotus has described the position, order, and motion of 1 816 parts of the world. Small parts. But 1 816 parts.

He has described 1 816 x , y , z , t systems of values. Small systems. But 1 816 systems.

With Herodotus the description of the world has decisively, unambiguously, begun. And the other way around, the description of the world has decisively, unambiguously, begun with Herodotus.

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And there is more in the *Histories*.

There are many stories. As again, Cicero writes: everything in history aims at truth, although there are many fables even in the father of history Herodotus (*Laws*, I, 5). There are many fables in the father of history.

There is also much about Homer and Hesiod.

And there is also very much about the gods.

The three overlap largely. Many of the stories, or fables, are about the gods. Many of the stories, or fables, are also from Homer and Hesiod. And much about the gods is also from Homer and Hesiod.

As he researches the history of the states and the map of the earth, so Herodotus also researches those, the stories, Homer and Hesiod, and the gods. In how he researches those, however, there is one substantial difference. He writes the history of the states and draws the map of the earth without ever appealing explicitly to any particular predecessor of his. The history of the states and the map of the earth are substantially new with him, and with respect to these, Herodotus does not presume that it is important to judge explicitly the judgments of his predecessors. When he researches those, the stories, Homer and Hesiod, and the gods, he appeals explicitly to particular predecessors of his. With respect to those, Herodotus presumes that it is important to judge explicitly the judgments of his predecessors.

One century after him, Aristotle will convoke the council of our predecessors formally. We call the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous.

But the council is in evidence nearly two centuries earlier.

Three generations before Herodotus, Xenophanes is the fifth philosopher, and Xenophanes already judges 6 predecessors of his explicitly, including Homer and Hesiod. Hecataeus is the seventh philosopher, and Hecataeus judges explicitly Hesiod. Two generations before Herodotus, Heraclitus is the eighth philosopher, and Heraclitus judges explicitly 11 predecessors of his, including Homer, Hesiod, and Hecataeus.

And the council of our predecessors is clearly in evidence in the *Histories*. Herodotus explicitly adopts the sound in what our predecessors have said and avoids the erroneous. With respect to those, the stories, Homer and Hesiod, and the gods. As again, the three overlap largely.

And here are the most important results which Herodotus obtained in his researches in those, the stories, Homer and Hesiod, and the gods.

The book of Hecataeus began: I will write down what I believe is the truth, because many stories are told among the Greeks which seem to me ridiculous.

It is a very great advance, truth, on one side, the ridiculous stories, on the other.

It remains to tell the two apart, truth from the ridiculous stories.

Early on in the *Histories*, there is this story: the greatest miracle to happen to Periander was when Arion, a singer second to none and the first to write dithyrambs, was carried by a dolphin back to Tarentum;

Arion lived in the court of Periander in Corinth; he then went to Italy, and made a fortune there;

he decided to go home, and hired at Tarentum a Corinthian boat to take him home; but when the boat was at sea, the Corinthians plotted to take his money; Arion begged for his life, but the Corinthians told him either to kill himself, so that they bury him on land, or to jump into the sea right away;

so Arion put on his gear, took his lyre, and sang; a dolphin was lured by his song, Arion jumped into the sea, and the dolphin carried him safely ashore (I, 23-4).

The story is ridiculous. But also, is it true?

One way to try and answer the question is this. One of the great and magnificent deeds of Arion is being carried safely ashore by the dolphin. Another, however, if not quite as great and magnificent, is having first written dithyrambs. And other Greeks and barbarians after him have continued to write dithyrambs. The great and magnificent deed of the dolphin of carrying Arion safely ashore is singular. Neither this dolphin, nor any other dolphins after him, nor any Greeks or barbarians, for that matter, have continued to carry Arion, or other poets, or anyone, safely

ashore. Hence it can be concluded that, on balance, Arion is real, the dolphin is not real. And the story is not true.

The difficulty with this way of trying to answer the question is that many of the great and magnificent deeds, and all the greatest and most magnificent, are as singular as the deed of the dolphin. Each of these deeds is not, cannot have been, and cannot be, repeated by any other Greek or barbarian, or dolphin. Cyrus conquered half the known earth. Xerxes led 1 700 000. Themistocles and Pausanias stopped Xerxes. Arion, for that matter, first wrote dithyrambs. Most important, all too many of the stories involve the gods, and the question, is it true? cannot be answered in this way with respect to these stories. The deeds of the gods are far the greatest and most magnificent, and in each case quite singular. And not just the deeds of the gods in the stories collected in the *Histories* are quite singular. The deeds of the gods in stories collected in other writings are quite singular as well, in the Hebrew writings, for instance, in the Christian writings, in the Muslim writings.

But there is another way, and much the better way, to try and answer the question, is it true? It is to try and assess the sources of the stories.

It is one of the very great advances in the acquisition of knowledge with Herodotus. That in the *Histories*, throughout, and for the first time, he quotes his sources.

In particular, he tells the story of Arion and the dolphin, and adds:

this is what the Corinthians say, and the Lesbians agree with them (*id.*).

The sources are 2:
the Corinthians,
and the Lesbians.

That the Corinthians are one of the sources of the story is not strange. The story happened in Corinth. That the Lesbians, on the other side of the Aegean, are the other source is stranger. Strangest of all is that the historian has examined the 2 sources against one another. He has examined what the Corinthians say against what, on the other side of the Aegean, the Lesbians say.

It is another of the very great advances in the acquisition of knowledge with Herodotus. That in the *Histories*, throughout, and also for the first

time, he not only quotes his sources, he examines his sources.

Thus, he does not ask explicitly, is it true? here. He does elsewhere. Here as elsewhere, however, he has examined his sources.

Hence, this is what the Corinthians say, and the Lesbians agree with them. Hence, it has to be concluded – pending further evidence – that, on balance, the story is true. Arion and the dolphin are both real.

Later on in the *Histories*, there is this story, and rather multiplicity of stories:

there was this man who lived by the sea of Marmara, Aristetas, who, inspired by Apollo, wrote a poem;

in that poem he says that north of the Issedones live one-eyed men, north of the one-eyed men live griffins guarding gold, and north of the griffins guarding gold live the Hyperboreans; but with that story of Aristetas all Scythians disagree;

from the men who live by the sea of Marmara I heard another story about Aristetas;

he died in some fuller's shop; the fuller closed the shop and went to tell his relatives that Aristetas had died; but when they went back to the shop, there was no Aristetas, dead or alive; yet seven years later, Aristaeus came back, and wrote that poem called *The one-eyed*;

then he disappeared again;

this is the story they tell in his city;

and the Metapontians, in Italy, tell another story, of something that happened, as I have calculated it, 240 years after the second disappearance of Aristetas;

the Metapontians say that Aristetas appeared in their city, and told them to build an altar to Apollo; the god had come to them, he told them, appearing as a crow, and he had followed the god;

then he vanished for good;

so they built an altar to Apollo, and set up a statue of Aristetas next to the altar; and there the statue still stands, in their marketplace; and enough about Aristetas (IV, 13-5).

Enough about Aristetas, but not enough about what Aristetas says in that poem called *The one-eyed*, which he wrote seven years after he died.

With that story of Aristetas all Scythians

disagree, Herodotus has at first reported. Not quite so, however, he establishes upon further research. The Issedones are the Scythians who live the furthest in the north, and:

the Issedones do say that there are one-eyed men and griffins guarding gold (27).

The Issedones corroborate the one-eyed men and the griffins. It is the Hyperboreans that they do not corroborate:

as to Hyperboreans, Hesiod also talks about Hyperboreans and so does Homer, if indeed the *Epigones* is by him, but neither the Scythians nor any other people living in these parts, not even the Issedones, have anything to say about Hyperboreans (32).

The sources are 7:

the poem *The one-eyed*, which Aristeas, inspired by Apollo, wrote seven years after he died;
the men from his city by the sea of Marmara;
the Metapontians, in Italy;
the Issedones who live at the end of the known earth in the north;
other Scythians;
Hesiod;
and Homer, if indeed the *Epigones* is by him.

Spatially, the sources are distributed from the Issedones, at one end of the known earth, through the men by the sea of Marmara, across the Black Sea, to the Metapontians, in Italy, across the Aegean, Greece, and the Ionian Sea, not too far from the other end of the known earth. Temporally, the sources reach back to the oldest poets, and both Hesiod and Homer, if indeed the *Epigones* is by him.

And Herodotus has examined them against one another, all 7, northeast to southwest and back to Homer, if indeed the *Epigones* is by him.

Clearly, for all the labors of the historian, the question, is the story told by Aristeas in that poem, which he wrote seven years after he died, true? has remained difficult to answer.

Still, the Issedones corroborate the poem on the one-eyed men and the griffins guarding gold. On the Hyperboreans Hesiod corroborates the poem, and so does Homer, if the *Epigones* is by him. And rather the other way around, for the historian's calculation of when Aristeas followed the god appearing as a crow indicates that Aristeas, even at the time when he died in the fuller's

shop, postdates Homer and Hesiod, and hence, rather, the poem corroborates Hesiod and Homer, if the *Epigones* is by him. Neither the Scythians, however, nor any other people living in those parts, not even the Issedones, corroborate the poem on the Hyperboreans. On balance, then, pending further evidence, this story is part true, part not true. It is true about the one-eyed men and the griffins. But it is not true about the Hyperboreans. The one-eyed men and the griffins are real, the Hyperboreans are not real.

The question, are the stories told about Aristeas, the one about the fuller's shop and the one about the crow, true? has also remained difficult to answer. But not quite impossible to answer.

The story about the fuller's shop the men from Aristeas's city by the sea of Marmara tell, and that is that. There is no further evidence, no one else tells this story. Thus, it is yet evidence that there is no further evidence, that no one else tells this story. It is not clear, for instance, whether the Lesbians agree or disagree. And Lesbos is not far from the sea of Marmara.

The story about the crow the Metapontians, in Italy, tell. There is in this case also Aristeas's statue. There it still stands, in their marketplace, next to the altar of the crow. But no one else tells this story either. There is no further evidence. And this, again, is yet evidence. It is evidence that it is not clear whether the Lesbians agree or disagree, and if Lesbos is rather far in this case, whether anyone else agrees or disagrees. Moreover, the historian has brought calculation to bear on this story. That happened, as he has calculated it, 240 years after the second disappearance of Aristeas. 3 generations are 100 years. 240 years are 7-odd generations. On balance, then, this story cannot be as likely to be true as the one about the dolphin. Aristeas and the crow cannot be as likely to be real as Arion and the dolphin.

In concluding the examination of these difficult matters, Herodotus adds:

and I will not tell the tale of the Hyperborean Abaris who carried an arrow around the earth without eating anything at all (36).

And this is now, at this point of the examination of these difficult matters, rather conclusive. This tale is not true. The Hyperborean Abaris is not real. And the successors of the historian will

rather corroborate this conclusion, when they tell the tale, and the arrow begins carrying Abaris around the earth (Iamblichus, *Pythagoras*, 19).

To examine these difficult matters, Herodotus has examined also Hesiod and Homer.

Hesiod also talks about Hyperboreans.

And so does Homer, if indeed the *Epigones* is by him.

It is yet another result without precedent. Herodotus is the first to question the authenticity of the *Epigones*, in particular, and the first to question the authenticity of any writing, in general.

This is 1 of but 8 occasions in the *Histories* on which Herodotus writes explicitly about Homer.

Homer, however, without being named – nor is there any need to name him – has entered the *Histories* with its introductory lines already. Herodotus reports what the Persians said was the cause why Greeks and barbarians fought one another. The Greeks were greatly to blame, the Persians said. To take Helen back, the Persians said, the Greeks invaded Asia before the Persians invaded Europe.

The Persians knew their Homer.

All men did.

Xenophanes already has established: all learned from Homer from the first.

And on 2 more of the 8 occasions on which he writes explicitly about Homer Herodotus corroborates Xenophanes. All learned from Homer.

Herodotus reports:

when Cleisthenes made war on Argos he banned the contests of the rhapsodes in Sicyon, because they sang verses of Homer and the verses of Homer celebrate most of all Argos and the Argives (V, 67).

Also, when Sparta and Athens sent envoys to Syracuse to solicit the help of Gelon against the great king, Gelon consented, but asked to lead the army himself. The Spartan was incensed:

loud indeed would be the lamentation of Agamemnon, scion of Pelops, if he heard that the command of the army has been taken away from the Spartans (VII, 159)!

Gelon asked to lead the navy then. Now the Athenian was incensed:

Homer himself said that at Troy ours was the best man to order the host (161)!

And Gelon had nothing more to say. Homer himself said nothing about his city.

Never mind the rhapsodes. The Argives, the Sicyonians, the Spartans, the Athenians, the Syracusans, the Persians, all knew their Homer. And more important than all those, too, Herodotus will show that the Egyptian priests also knew their Homer.

All knew their Homer. The philosophers, for their part, not only knew their Homer. By the time of Herodotus, the council of our predecessors had begun vigorously adopting the sound and avoiding the erroneous in what this predecessor of ours, Homer, and this other predecessor of ours, Hesiod, have said. Still only vigorously avoiding, too, not yet adopting anything.

Xenophanes said that all learned from Homer from the first. He said that Homer was older than Hesiod. He said that Homer and Hesiod ascribed to the gods everything shameful among men, stealing, cheating, lying to one another.

Hecataeus said that Hesiod made the sons of Aegyptus 50, but they were not even 20.

Heraclitus said that Homer, wiser than all Greeks, was deceived by boys. He said that Homer, too, was an astronomer. He said that Homer should have been thrown out of the contests and flogged. He said that Hesiod was the teacher of most men, they thought he knew the most, he who did not know that day and night are one. He said that Hesiod said that days are good and bad but by nature days are all the same. He said that much learning did not teach Hesiod sense.

The philosophers have opened very widely the question of whether there is any knowledge at all in Homer and Hesiod. And that the question is about knowledge, the philosophers cannot have been more explicit. What they avoid in Homer and Hesiod, and very vigorously, is all about learning, being wise, being deceived, being an astronomer, teaching, knowing, not knowing, by nature, much learning, failure to be taught.

Xenophanes has discovered also that the two teachers of all men pose the problem of their dating.

He has discovered also that the two teachers have not spoken very well about the gods.

Herodotus, for his part, is clear that Homer has

told a story. He is clear that in that, that someone tells it, the story of the Trojan war is like any other story, that of the dolphin, that of the one-eyed men, that of the fuller's shop, that of the crow. This story is different from all other stories in that the poet has told it, the oldest poet and the greatest. It is very different also in that all agree with it, Argives, Sicyonians, Spartans, Athenians, Syracusans, Persians.

The more – for both these reasons – this story demands examination.

And the historian examines it, this story told by the oldest and the greatest poet, with which all men agree, and examines it in just the way in which he examines all stories. He examines the sources of the story.

In the course of the examination of this story, also, he asks explicitly: did it happen, or did it not happen? Is the story true, or false?

It is one of the greatest advances in the acquisition of knowledge with Herodotus. That in the *Histories*, for the first time, he asks explicitly: did it happen, or did it not happen?

How he answers the question is another of the greatest advances.

The Egyptian priests have told Herodotus of 341 generations of kings before Psamtik. One of these kings is:

a man from Memphis, whose name in Greek is Proteus (II, 112).

And this Egyptian king, a man from Memphis, not only has the Greek name Proteus. Proteus is prominent in the *Odyssey*. In the *Odyssey*, Menelaus is himself a voyager, if not quite as great as Odysseus, and on his voyages Menelaus encounters: the Egyptian god Proteus, the old man of the sea (IV, 343-86).

On the authority of the poet, there is Menelaus, and Menelaus encounters the Egyptian god Proteus. On the authority of the Egyptian priests, there is Proteus, and Proteus is a man, a man from Memphis.

And yet, it is not just a coincidence in the name. Herodotus reports:

I had heard the story that Helen stayed with Proteus in Egypt; so I asked the priests about that; and they told me what happened;

Paris carried off Helen from Sparta, but adverse winds took him to Egypt; there Proteus was

the king; and Proteus, when he learned that Paris had violated the laws of hospitality by stealing Helen from Menelaus, punished him by taking her from him;

so Helen was not in Troy, but in Egypt;

and I think that Homer knew this, but chose to have Helen in Troy, because this story was more suitable for poetry (II, 113-6).

Herodotus quotes 4 verses from the *Iliad* and 6 verses from the *Odyssey*, in which the poet tells how Paris sailed to Sidon, and continues:

from these verses it is clear that Homer knew of Paris's wanderings to Egypt, because Sidon is in Phoenicia, and Phoenicia is next to Egypt; and these verses also show that the *Cypria* is not by Homer but by some other poet, because in the *Cypria* the poet says that Paris came from Sparta to Troy in two days, but in the *Iliad* that he strayed far from his course;

and enough about Homer and the *Cypria* (116-8).

Literary criticism, too, begins with Herodotus. Homer chose to have Helen in Troy because this story was more suitable for poetry.

Of the *Cypria* he has not just questioned the authenticity. He has established that it is spurious.

And enough about Homer and the *Cypria*, but not enough about the Trojan war. Herodotus continues:

I then asked the priests about the story told by the Greeks about Troy, did it happen, or did it not happen?

and the priests told me that they had researched the matter, and that they knew what happened from Menelaus himself;

Menelaus had told them that the Greeks had sailed to Troy and defeated the Trojans; but when they had captured the city, there had been no Helen;

so Menelaus had sailed to Egypt, and taken Helen back from Proteus;

this is what the priests told me (118-9).

Did it happen, or did it not happen?

The sources are 3:

Homer,

the Egyptian priests,

and the *Cypria*, which is not by Homer.

The sources are not as many as in other cases. 2 of the sources in this case, however, are far the

best. These are not Corinthians or Lesbians, men who live by the sea of Marmara or Metapontians, Issedones or other Scythians. These are the oldest and the greatest poet, and the Egyptian priests who have told of 345 generations of kings back to the first. Both. And they are far the best sources, both, because of their antiquity. Homer is the oldest poet, and tells of the most distant past among the Greeks. The Egyptian priests have kept the record of 345 generations of kings, and tell of the most distant past among all men, including the Greeks. The antiquity of the stories told by the priests thus also surpasses, by far, the antiquity of the stories told by Homer. The authority of the Egyptian priests is accordingly far the weightier.

Moreover, Herodotus has brought geography to bear on the examination of the matter. Sidon is in Phoenicia, and Phoenicia is next to Egypt.

Moreover, he has brought consistency to bear on the matter. In the *Cypria* Paris comes from Sparta to Troy in two days, in the *Iliad* he strays far from his course.

Moreover: the priests told me that they had researched the matter. The priests told the historian that they had done, just like himself: ἱστορία.

Moreover, their source is Menelaus, an eyewitness. The poet says that Menelaus was at Troy. And the Egyptian priests corroborate the poet, Menelaus came to Egypt after Troy.

The conclusion is unavoidable. The story which the poet has told is part true, part false.

The Trojan war did happen. But Helen was not in Troy, she was in Egypt.

The likelihood that Proteus, Helen, Paris, and Menelaus are all real is excellent.

But there is now a difficulty, as there always is with the search for truth. The Trojan war did happen. But Helen was not in Troy, she was in Egypt. So why did they fight one another? And as, clearly, this is again a matter of consistency, Herodotus resolves the difficulty:

the Trojans did not have Helen; but when they told the Greeks that they did not have her, the Greeks did not believe them, because, it seems to me, a god was preparing the Trojans for utter destruction; because for great injustices there are great punishments from the gods; this

is what I think (120).

It is one of the couple of occasions on which he returns, and always implicitly, never explicitly, to the question of the introductory lines, why did Greeks and barbarians fight one another? There, the barbarians had said that the Greeks were greatly to blame. Here, a god was preparing the barbarians for utter destruction.

Homer, then, has told a story.

All men have learned the story.

The philosophers have begun questioning whether all men should have learned the story.

The historian among the philosophers has asked, is the story true, or false? And has begun answering the question by the examination of the sources of the story.

The examination has raised also the question, Proteus, was he a god, or a man? Homer says he was a god. The Egyptian priests say he was a man.

This settles the matter, he was a man. This is another part of the story told by the poet which is not true.

It is a small part. But a consequential part.

For, after all, Homer's is not just another story. Homer's is the story of the gods.

It is for this reason, too, because it is the story of the gods, that all men have learned it.

It is for this reason, too, because of what Homer has said about the gods, and what Hesiod also has said about the gods, that the philosophers have begun disapproving of Homer and Hesiod.

The historian among the philosophers, for his part, researches the gods. The first Baconian and Cartesian among the philosophers, he collects the particulars, makes enumerations so complete and reviews so general as to omit nothing, and on this ground examines what Homer and Hesiod have said about the gods.

Herodotus researches nothing more vigorously than he researches the gods.

There are in the *Histories* 2 020 objects which he identifies with its proper name each. 1 012 are localities. 804 are Greeks and barbarians. These are all 1 816 not gods. The remaining 204 are first and foremost gods. And the not gods, the localities and Greeks and barbarians, the historian researches extensively more, there are more of those, nearly 9 times more, and extensively those

demand more research. The gods, however, the historian researches intensively more. There are fewer of these, nearly 9 times fewer, but these demand more research intensively, and so the historian researches them, more vigorously than he researches anything else. And he researches these, the gods, most particularly, in order to separate them sharply, the gods, on one side, from the not gods, on the other. And in order to do so, he keeps asking, is it a god, or not? and keeps answering the question explicitly.

It is another of the very great advances in the acquisition of knowledge with Herodotus. That in the *Histories*, throughout, and also for the first time, he asks, is it a god, or not?

Herodotus researches the gods throughout the *Histories*. What the Persians say about the gods (I, 131), what the Massagetae say about the gods, (216), what the Ethiopians say about the gods (II, 29), what the Scythians say about the gods (IV, 59), what the Libyans say about the gods (188).

Here is what the Getae say about the gods. It is quite singular in that it turns out to involve Pythagoras. It is quite singular also in that it will turn out to anticipate what most everybody will say about the gods.

Herodotus reports:

before reaching the Danube, Darius conquered the Getae;

the Getae are the bravest and the justest of the Thracians;

the Getae also believe that they are immortal, they say that they do not die but go to Zalmoxis; and they say that there are no other gods but this god of theirs;

and I heard from some Greeks who live by the Black Sea that, when he was a man, this Zalmoxis was a slave of Pythagoras, then he became free, made a fortune, and went back home;

having lived with Greeks, indeed with Pythagoras who was not the least of the wise men among them, Zalmoxis had learned Greek ways and back home he taught his countrymen, who live hard and are rather stupid, that whoever drinks with him will not die, nor will his descendants; in the meantime he had built himself a house under the ground, he hid in it, and his countrymen thought that he had died; but he returned

three years later and now they believed what he taught them;

this is what they say;

the house under the ground I neither doubt nor do

I believe it too much; but I do think that Zalmoxis lived long before Pythagoras;

and whether this Zalmoxis was a man, or is just a god of the Getae, enough about that (IV, 93-6).

Herodotus has described the transmission of belief in immortality in some detail. He has traced it from Pythagoras to the Getae, and by teaching. Elsewhere he has traced the belief back to its beginning, in Egypt:

the Egyptians first said that the soul of man is immortal, that when the body dies it creeps out and enters into some other animal born at this time, and that in this way it goes through all things living on land, in the sea, and in the air, until it creeps back into a human body; the cycle, they say, is 3 000 years (II, 123).

As to this Zalmoxis, was he a man, or is just a god of the Getae?

Herodotus quotes explicitly only 2 sources:

the Getae,

and some Greeks who live by the Black Sea.

Nor are these 2 sources the best. They are like the Corinthians, the Metapontians, the Scythians. These are not the poet and the Egyptian priests.

Still, there are two possibilities.

On the one hand, this Zalmoxis was a slave of Pythagoras. Then he made a fortune. Then he went back home, and taught his countrymen that whoever drinks with him will not die, nor will his descendants. The Getae are the bravest and the justest of the Thracians, but they live hard and are rather stupid. And the house under the ground I neither doubt nor do I believe it too much. But when Zalmoxis returned from the house under the ground they believed what he taught them. They say also that there are no other gods but this god of theirs. It can be concluded that this Zalmoxis was a man and is now just a god of the Getae.

On the other hand, I do think that Zalmoxis lived long before Pythagoras. It can then be concluded, that whether Zalmoxis was a man or is just a god of the Getae, depends on how long before Pythagoras, exactly, Zalmoxis lived. If he lived more than 11 481 years before Pythagoras,

he is just a god of the Getae. If he lived less than 11 481 years before Pythagoras, he was a man.

This is when the first king was, 11 581 years before the *Histories*, and as Pythagoras is 3 generations before Herodotus, and 3 generations are 100 years, the first king was 11 481 years before Pythagoras. And Herodotus has established that the first king was a man, and that the first king is a decisive divide. Beginning with the first king, men. Gods before the first king.

He has established that the first king was a man on the authority of the Egyptian priests. He reports:

the Egyptian priests counted 341 kings from the first king to Psamtik;

and they said that there had never been a god among them in the shape of a man;

before me, Hecataeus came to Thebes to trace his ancestry and found that he was descended from a god in the sixteenth generation;

but what the priests showed him they showed me as well, even if I did not go there to trace my ancestry; they showed me wooden figures of all the kings kept in a great hall; so Hecataeus connected himself to a god, but the priests reckoned differently and did not agree with him that a man had ever been born from a god; they counted the entire line of 345 figures and did not reckon that any of them had been a god (142-3).

Hecataeus went to Egypt to trace his ancestry. I did not go there to trace my ancestry.

And Hecataeus found that he was descended from a god in the sixteenth generation. Herodotus found that there had never been a god among the kings of Egypt. All 345 of them, back to and including the first, men. In general, also, a man had never been born to a god.

The sources are 2:

Hecataeus,
and the Egyptian priests.

One of the sources, however, is the best. And Herodotus appreciates that it is the best. There is the entire line of 345 wooden figures in a great hall. Moreover:

the priests read to me the names of the kings from their papyrus rolls (100).

Moreover:

the priests of Thebes and Heliopolis are the

greatest storytellers among the Egyptians; and many of their stories are about the gods (3).

Moreover:

they know these things perfectly, because they calculate all the time and write down the number of years (145).

Moreover, he himself calculates all the time and writes down the number of years, and in particular:

341 kings from the first king to Psamtik;

3 generations are 100 years, so 300 generations are 10 000 years, and 41 generations are 1 340 years, for a total of 11 340 years (142).

Thus to Psamtik. From Psamtik to the fall of Egypt to Cambyses 145 years, as Herodotus has also established. Egypt fell to Cambyses in 526. The latest event recorded in the *Histories* is in 430. For a total of 11 581 years from the *Histories* back to the first king.

Thus, Hecataeus found that he was descended from a god in the sixteenth generation. But the priests reckoned differently and did not agree with him. Moreover, 16 generations are 533 years, and Hecataeus was 2 generations before Herodotus, for a total of 600 years. That ancestor of Hecataeus's was not a god.

And this is how Herodotus has established that the first king is a decisive divide. Beginning with the first king, men. Gods before the first king.

Cambyses conquers Egypt, and the historian then researches Egypt with the greatest determination.

He researches the kings.

He researches the animals. He describes the cats (66), reports that cats are mummified, but dogs, ferrets, and shrews are buried, that bears are rare and wolves are not much larger than foxes (67), describes in some detail the crocodile (68-70), describes the hippopotamus (71), otters, fish (72), birds, snakes (73-4), reports that, having heard stories about flying snakes, he went to a place near Buto to research this matter also in more detail (75), describes the ibis (76).

And he researches the gods.

He reports:

the priests of Thebes and Heliopolis are the greatest storytellers among the Egyptians; and many of their stories are about the gods; now, what I heard about the gods I am not eager

to tell, for I think that all men know equally about the gods; but I will tell about the gods when my researches force me to do so (3).

All men know equally about the gods.

And the historian is not eager to tell about the gods. But his researches force him to do so. And, in fact, they force him to do so right away. The priests tell him:

the Greeks learned about the gods from the Egyptians (4).

And this matter the historian positively has to research.

And this matter the historian researches more systematically even than he researches the histories of the states and the map of the earth.

In particular, the stories of the Egyptian priests are about the gods. And the stories of Homer are also about the gods. Clearly, here as everywhere, these sources have to be examined. These best of all sources have to be examined. The priests who are the greatest storytellers, and calculate all the time and write down the number of years. And the poet with whom Argives, Sicyonians, Spartans, Athenians, Syracusans, and Persians agree, and with whom, in fact, on his fundamental story – the Trojan war did happen – the Egyptian priests themselves agree.

Also, all men know equally about the gods. Clearly, here as everywhere, the historian has to trot the known earth from one end to the other in search of independent evidence.

He positively has to clear up this matter, did it happen, or did it not happen? is it a god, or not?

The outcome is the longest and tightest chain of inferences that has yet been produced, the longest and tightest by far, and on any matter at all. After Herodotus, too, many longer and tighter chains of inferences will be produced, and very much longer and very much tighter. But not on this matter, the gods. On this matter, the gods, very few chains of inferences will be produced, and a longer and tighter chain of inferences will not be produced for twenty-one centuries, until Spinoza.

A Baconian and Cartesian *par excellence*, in order to examine the gods in general Herodotus examines the gods in particular.

And he establishes that in the stories of the Greeks and in the stories of the Egyptians the

particulars are the same. The names are in many cases different, but the gods are the same:

Zeus the Egyptians call Amun (42);

Isis the Greeks call Demeter (59);

Bubastis the Greeks call Artemis (137);

Horus, the son of Osiris, the Greeks call Apollo,

Osiris himself is Dionysus (144).

The examination focuses on the 3 particulars, Heracles, Dionysus, and Pan.

This is what the fundamental Greek sources report on these particulars.

Heracles. Homer reports: Heracles is the son of Zeus and Alcmene (*Iliad*, XIV, 323-5). There is a complication: Heracles is the son also of Amphitryon (V, 392). Hesiod, however, resolves the complication: Heracles is the son of Zeus and Alcmene (*Theogony*, 939-40), of Amphitryon: Heracles is the stepson of Amphitryon (315-7).

Dionysus. Homer reports: Dionysus is the son of Zeus and Semele (*Iliad*, XIV, 323-5). Hesiod corroborates: Dionysus is the son of Zeus and Semele (*Theogony*, 950-1). There is no complication.

Pan. The complication here is of a different kind. Pan does not occur either in the *Iliad* and *Odyssey* or in the *Theogony*. He occurs for the first time in one of the Homeric hymns. As Herodotus has established that the *Cypria* is not by Homer, so it will be established, two-odd millennia after Herodotus, that the Homeric hymns are not by Homer, or by Hesiod. The hymns were yet composed in the following century, some two centuries before Herodotus. And the *Hymn to Pan* reports: Pan is the son of Hermes and the lovely daughter of Dryops (1-34). What the name of the lovely daughter of Dryops is, the hymn does not report.

Thus Homer and Hesiod.

And this is the chain of inferences:

as to Heracles, I heard the story that Heracles was one of the 12 gods;

but I did not hear a word about that other Heracles, the one of whom the Greeks tell; and certainly the Greeks learned the name Heracles from the Egyptians, not the Egyptians from the Greeks; when the Greeks learned the name Heracles, then, they called the son of Amphitryon Heracles;

I have many proofs of this;

the main is that both parents of Heracles, Amphitryon and Alcmene, were descended from Egypt;

moreover, the Egyptians do not know the names of Poseidon or of the Dioscuri either, and if the Egyptians had taken the names of any gods from the Greeks, they certainly would have remembered these names;

and there is an ancient Egyptian god Heracles; and they say that it was 17 000 years before Amasis when the 8 gods became 12, and one of the 12 was Heracles (II, 43).

The names are in many cases different, but not in all cases. In the case of Heracles the name is the same. This is why Heracles is the main focus of the examination.

There is an ancient Egyptian god Heracles. It was 17 000 years before Amasis when the 8 gods became 12, and one of the 12 was Heracles. Amasis is not quite 4 generations before Herodotus. Rounding to the nearest century, the 8 gods became 12, and one of the 12 was Heracles, 17 100 years before the time of research.

Heracles became one of the gods 17 100 years before the time of research.

Certainly the Greeks learned the name Heracles from the Egyptians, not the Egyptians from the Greeks.

And when they learned the name, they called the son of Amphitryon Heracles. This explains the complication which occurs in Homer, and which the more pedantic Hesiod has to remove.

At least about Heracles the Greeks learned from the Egyptians.

How?

The chain of inferences continues:

and because I wanted to clear up the matter, and I had heard that in Tyre, in Phoenicia, there is an especially holy shrine of Heracles, I sailed to Tyre (44).

In a long day's journey a ship covers about 700 stades and in one night about 600 stades. To clear up the matter Herodotus sailed from Heliopolis to Tyre some 2 days and 2 nights. He continues:

in Tyre I asked the priests how long ago the shrine was established; and they said that it was at the same time that their city was established, and that people had lived in Tyre for 2 300 years (*id.*).

This date is with respect to the time of research.

Heracles became one of the gods 17 100 years before the time of research. His shrine in Tyre was established 2 300 years before the time of research.

Certainly the Phoenicians learned about Heracles from the Egyptians, not the Egyptians from the Phoenicians.

The chain continues:

in Tyre I saw also another shrine of Heracles, named after Heracles of Thasos; so I went to Thasos (*id.*).

He does not say how he went to Thasos, by boat or on foot. If by boat, he sailed some 10 days and 10 nights. If on foot, 1 day of walking for a hardy man is 200 stades, and he walked some 2 weeks from Tyre to the royal road, some 3 weeks to the end of the royal road at Sardis, and not quite 3 weeks to the coast opposite Thasos, having had to take a boat to cross the Dardanelles, and Thasos is then very close to the coast, but again it has to be by boat. All in all, not quite 2 months. He continues:

on Thasos I found a temple of Heracles; it was established by the Phoenicians when they settled Thasos, and this was at least 5 generations before the birth of Heracles, the son of Amphitryon (*id.*).

He has fixed the date of Heracles, the son of Amphitryon, while researching the Lydian kings: 505 years from Heracles to Gyges. From Gyges to the fall of Lydia to Cyrus 170 years, as he has also established. Lydia fell to Cyrus in 546. From the fall of Lydia to the time of research 116 years. The total is 791 years. Heracles was the greatest hero. It can be presumed that he was born some 100 years before he sired the first in the line of ancestors of Gyges. Rounding to the nearest century, Heracles, the son of Amphitryon, was born 900 years before the time of research. The temple of the god Heracles was established on Thasos by the Phoenicians at least 5 generations before the birth of Heracles, the son of Amphitryon. 5 generations are 167 years. The temple was established earlier, say, 1 or 2 generations before the birth of Heracles, the son of Amphitryon. Rounding again, the temple of Heracles was established by the Phoenicians on Thasos 1 100 years before the time of research.

The shrine of Heracles in Tyre was established 2 300 years before the time of research. The temple of Heracles on Thasos was established by the Phoenicians 1 100 years before the time of research.

This is how.

The Phoenicians learned about Heracles from the Egyptians, the Greeks learned about Heracles from the Phoenicians.

Other than on Thasos, in the northern Aegean, Herodotus found Phoenician foundations on Thera (IV, 147) and Cythera (I, 105), in the southern Aegean, and on the mainland, in Boeotia.

Nor did the Phoenicians bring with them only the gods:

the Phoenicians who came with Cadmus to Boeotia brought with them much learning, and in particular the alphabet, which, I think, the Greeks did not know before that (V, 58).

Herodotus has established the route of the transmission of the gods. From the Egyptians to the Phoenicians to the Greeks.

He has established also that the Greeks learned the alphabet and about the gods simultaneously. This explains the fact that the poet is not just another poet in this, too, that the *Iliad* and *Odyssey* are 27 801 lines of writing.

The matter of Heracles is thus cleared up. Heracles became one of the gods 17 100 years before the time of research. The son of Amphitryon, a great hero, but a man, not a god, was born 900 years before the time of research. And when the Greeks learned the name of the god Heracles from the Phoenicians, they named the son of Amphitryon Heracles.

The historian continues:

these researches show clearly that Heracles is an ancient god;

I thus think that those Greeks are right, who have two cults of Heracles, one to worship an Olympian god, the other to worship a hero (II, 44).

yet the Greeks keep telling ridiculous stories, like the one where Heracles went to Egypt, the Egyptians tried to sacrifice him to Zeus, and he slaughtered them all;

those who tell this story know nothing about the Egyptians; for here is a people who do not

sacrifice even beasts, except for pigs, bulls, calves, and geese; so how could they sacrifice a man?

those who tell this story say that Heracles was not yet a god, he was still a man; but if he was still a man, how does it accord with nature that one man slaughtered many thousands (45)?

It is another question not too many of his successors will ask, how does it accord with nature?

Having cleared up the matter of Heracles, the historian proceeds to clear up the matter of Dionysus.

The chain continues:

Melampus introduced Dionysus among the Greeks, the name, the sacrifices, and the phallic procession;

Melampus did not introduce all of the cult, for other wise men advanced it further after him; but I think that Melampus was a wise man who devoted himself to divination and, having learned many new things in Egypt, introduced them to the Greeks, including the worship of Dionysus;

nor do I believe that the rites of the Egyptians and those of the Greeks resemble one another by chance;

nor can I admit that the Egyptians have taken these rites from the Greeks (49).

Herodotus has thus established the secondary route of the transmission of the gods as well. Wise men learned many new things in Egypt and introduced them to the Greeks.

Melampus was one such wise man.

Another such wise man was Pythagoras. Herodotus writes about Pythagoras explicitly on 2 occasions. One is the report that Zalmoxis was a slave of Pythagoras, who was not the least of the wise men among the Greeks, and Zalmoxis, having learned Greek ways, went back home, and taught the Getae immortality. The other is this: the Egyptians do not bring wool into their temples, nor are they buried in wool, and in this their rites are like the Orphic and the Bacchic which are actually Egyptian and Pythagorean (81).

Nor do I believe that the rites of the Egyptians and those of the Greeks resemble one another by chance. Nor can I admit that the Egyptians have

taken these rites from the Greeks. The Greeks have taken these rites from the Egyptians. The Orphic and the Bacchic rites are thus actually Egyptian. They are also actually Pythagorean, because the Pythagoreans are also actually Egyptian.

And Melampus is a seer in the poet (*Odyssey*, XI, 291), and not very well attested between the poet and the historian.

But Pythagoras is not a seer in the poet, and he is very well attested before the historian. Heraclitus said that much learning did not teach Pythagoras sense, Pythagoras made himself a wisdom, much learning, a sham, and Pythagoras was the prince of cheats.

Immortality is also very well associated with Pythagoras before the historian. Pythagoras recognized the soul of his friend in a puppy, Xenophanes reports.

Nor do the rites of the Egyptians and those of the Greeks resemble one another by chance. Nor do their beliefs. The belief of the Egyptians and the belief of Pythagoras. Nor do their beliefs and the beliefs of others resemble one another by chance. Among the others, those of the Getae. Back among the Greeks, those of Plato. Back among the others, later on, those of many others.

The matter of Dionysus is thus cleared up as well. Melampus learned about Dionysus in Egypt and introduced the god to the Greeks.

The historian is now ready to clear up the matter of the gods in general.

The chain continues:
the names of nearly all the gods have come to Greece from Egypt;
except for those of Poseidon, the Dioscuri, Hera, Hestia, Themis, the Charites, and the Nereids, the Egyptians know the names of all other gods; and when I say this, it is what the Egyptians themselves told me (50);
so, whence the gods came, or whether they are forever, and what they look like, these things were not known, as it were, until the day before yesterday;
for I think that Homer and Hesiod were 400 years before my time and no more, and it is they who created for the Greeks their theogony, they distinguished the gods according to their descent from each other and described their

honors, arts, and appearances (53).

The historian has dated the oldest poets. Homer and Hesiod were 400 years before the time of research and no more.

Homer and Hesiod were also 500 years after Heracles, the son of Amphitryon – 700 years after the Phoenicians established the temple of the god Heracles on Thasos, and the Greeks learned about Heracles from the Phoenicians – 1 900 years after the shrine of Heracles was established in Tyre, by which time the Phoenicians had learned about Heracles from the Egyptians.

And Homer and Hesiod were 16 700 years after Heracles became one of the gods.

Whence the gods came, or whether they are forever, and what they look like, these things were not known until the day before yesterday.

Homer and Hesiod created for the Greeks their theogony, distinguished the gods according to their descent from each other and described their honors, arts, and appearances.

And the chain yet continues.

The historian next researches the oracles and the festivals of the Egyptians (54-64). He next researches the animals in Egypt, and both, what they are and how they are worshiped (65-76). He next researches the customs of the Egyptians, including rites, divination, burial, embalming (77-98). He next researches at great length the Egyptian kings, and both, writes the history of Egypt and establishes that there has never been a god among the kings of Egypt, all 345 of them have been men (99-143).

He dates the first king, a man. Rounding to the nearest century, 11 600 years before the time of research.

And he is now ready to clear up the entire matter conclusively.

The chain of inferences concludes:
the Greeks think that Heracles, Dionysus, and Pan are the youngest gods, but among the Egyptians Pan is one of the oldest, those they call the 8;
Heracles is among the second oldest, those they call the 12;
and Dionysus is among the third oldest, those who were born to the 12;
how many years there were between Heracles and Amasis I have already said;

between Dionysus and Amasis there were 15 000 years; and the Egyptians know these things perfectly, because they calculate all the time and write down the number of years;

on the other hand, Dionysus, the son of Semele, the daughter of Cadmus, was 1 600 years before my time;

Heracles, the son of Alcmena, was 900 years before my time;

and Pan, the son of Penelope and Hermes, was after the time of the Trojan war and about 800 years before my time (145).

Tabulating with respect to the time of research:

god Pan	> 17 100 years,
god Heracles	17 100,
god Dionysus	15 100,
first king	11 600,
shrine in Tyre	2 300,
Dionysus, son of Semele	1 600,
temple on Thasos	1 100,
Heracles, son of Alcmena	900,
Pan, son of Penelope	800,
Homer and Hesiod	< 400.

The historian has written the history of the gods.

The oldest gods, before 17100^{BH}, were 8. One of them was Pan.

In 17100^{BH} the gods became 12. One of these newer gods was Heracles.

Then yet newer gods were born to the older. One of these, born in 15100^{BH}, was Dionysus.

In 11600^{BH} the state began with the first king. The first king was a man, not a god. All kings after the first king had also been men, not gods. More generally, the historian has found no evidence, anywhere, that there had been a new god after this time, after 11600^{BH}. Beginning at this time, 11600^{BH}, men only.

By 2300^{BH} the Phoenicians had learned about the gods from the Egyptians.

By 1600^{BH} wise men had begun learning about the gods in Egypt and introducing them to the Greeks. At this time Melampus learned about the god Dionysus and introduced him to the Greeks. When they learned the name of the god, the Greeks called the son of Semele Dionysus.

By 1100^{BH} the Phoenicians had brought the gods to Greece, and the Greeks had begun learning about the gods from them.

By 900^{BH} the Greeks had learned the name of the god Heracles, and called the son of Alcmena Heracles.

By 800^{BH} they had learned the name of the god Pan, and called the son of Penelope Pan.

And in 400^{BH}, and not earlier, Homer and Hesiod created for the Greeks their theogony.

All men know equally about the gods.

The historian, for his part, knows very much more than all men combined.

As he has written the history of the states, and drawn the map of the earth, so he has researched the gods. He has examined the sources against one another. He has trotted the known earth from one end to the other in search of independent evidence. He has done to these objects what he has done to all other objects, he has measured, and calculated, and arranged them in their temporal and spatial series and order. He has kept asking, is it a god, or not?

The outcome is the history of the gods.

And he has answered the question, is it a god, or not? particular after particular after particular.

It is for this reason, too, that the 2 020 objects in the *Histories* with its own name each can be divided sharply, 1 816 localities and Greeks and barbarians, all real. 204 gods as well as poets writing poems after they have died and Hyperbo-reans carrying arrows, or being carried by arrows, around the earth.

Homer, then, wrote the story of the gods.

Then Hesiod wrote their theogony.

Then philosophy began.

Two generations into the development of philosophy, Xenophanes said: Homer and Hesiod ascribe to the gods everything shameful among men, stealing, cheating, lying to one another. Also: the Ethiopians say the gods are snub-nosed and black, the Thracians say they are blue-eyed and red-haired. Also: if oxen, horses, and lions had hands and could draw and make statues like men, horses would draw the gods like horses, oxen would draw them like oxen, and every kind like itself.

And having begun as propitiously as that, not quite five generations into the development of philosophy, the sessions of the council of our predecessors on the gods reached the highest peak with Herodotus. Herodotus examined the sources,

searched for independent evidence, calculated, wrote the history of the gods.

Then the sessions of the council on the gods increasingly devoted themselves to the veneration of the gods. Then the sessions of the council on the gods, like all its other sessions, were closed to anyone but lovers of god. Then, at great length, not lovers of god began breaking into the other sessions of the council, and eventually into its sessions on the gods. Throughout, for twenty-one centuries, no one examined the sources, searched for independent evidence, calculated, tried to continue writing the history of the gods. Until Spinoza.

With Aristotle: to affirm of what is that it is not, and of what is not that it is, is false, to affirm of what is that it is, and of what is not that it is not, is true.

With Frege: the striving for truth is what forces us to advance from the thought and the sense to the reference and the true.

With Herodotus the striving for truth has forced us to the reference and the true decisively, unambiguously, very far. And the other way around, the striving for truth has forced us to the reference and the true decisively, unambiguously, very far, with Herodotus.

The map of the earth shows this. The history of the states shows this. The history of the gods shows this.

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For the sake of completeness, as the fourth rule of the method demands, three more results of Herodotus have to be noted. One archeological. One geographical. One biological.

He writes:

Miltiades captured Lemnos, and he punished severely the Pelasgians;
the Pelasgians had been driven out of Attica by the Athenians; whether justly or unjustly I cannot say;
Hecataeus says in his book that it was unjustly; for when the Pelasgians were in Attica and the Athenians came, the Pelasgians gave the Athenians a piece of land; then the Athenians, seeing that that land was worthless, drove the Pelasgians out of their own land;
but the Athenians say that the Pelasgians violated

their girls and were planning to attack them, and they say also that they were so much better men than the Pelasgians, that when they just told the Pelasgians to go, the Pelasgians left Attica and went to Lemnos;

the one Hecataeus says, the other the Athenians say (VI, 137).

Hecataeus says it was unjustly. Whether justly or unjustly I cannot say.

It is one of the few occasions on which Herodotus says of anything that it is just or unjust. In particular, he cannot say whether it is just or unjust.

The sources here are 2:

Hecataeus,
and the Athenians.

Hecataeus has begun researching the peoples. Herodotus continues researching the peoples.

And the Pelasgians are a people which particularly demands research. The Pelasgians are now on Lemnos. Earlier the Pelasgians were in Attica. The Pelasgians are also in the poet. In the catalogue of the *Iliad*, the Pelasgians march with the Trojans: Hippothous led the Pelasgians who dwell in the rich soils of Larissa (II, 840-1). In the *Odyssey*, the Pelasgians dwell not in the rich soils of Larissa, but on Crete (XIX, 172-9). Elsewhere in the *Iliad*, Zeus himself appears to be a Pelasgian (XVI, 233).

So on this matter, too, Herodotus examines the sources and trots the known earth. He finds stories about the Pelasgians or Pelasgian remains: on Lemnos, in Attica, in northern Italy, by the sea of Marmara, in Lacedaemon (IV, 145); in Arcadia (I, 146); in Epirus (II, 52); on Imbros (V, 26); on Samothrace (II, 51); in Mysia (VII, 42); and in Egypt (II, 50-1).

On 2 more of these occasions he notes his sources:

this is what I was told at Dodona (II, 52);
this is what the people on Samothrace say (51).

And from stories about who gave a piece of land to whom, who violated whose girls, and who were so much better men than whom that when they just told them to go they left, Herodotus obtained these results:

at one time the Pelasgians held all of what is now Greece; at that time the Athenians themselves were Pelasgians (VIII, 44);

what language the Pelasgians spoke I do not know; but to judge by those who are still Pelasgians and live now north of the Etruscans, but once lived by the sea of Marmara, and by those who live in cities that were once Pelasgian, but have now changed their names, the Pelasgians spoke a barbarian language; the Greeks I think always spoke Greek;

the Greeks were at first only a few, but they have multiplied by the accretion of the Pelasgians and other barbarian peoples (I, 57-8).

And the council of our predecessors had nothing more or better to say about the human population of Greece before the Greeks for the following twenty-three centuries, until the nineteenth Christian century, when the excavation of Greece began with Schliemann and Evans.

None of the Egyptians could tell Herodotus anything about why the Nile floods in the summer. But Greeks eager to be known for wisdom have proposed three explanations. One of these Greeks is once again Hecataeus. Herodotus states his explanation:

the Nile floods because it flows out of the Ocean, the river surrounding the earth (II, 21), and vigorously avoids it:

this tale was taken far enough to vanish where it cannot be refuted; for I do not believe that there is a river Ocean, surrounding the earth, but rather think that Homer or another of the old poets found this name somewhere and introduced it in his poems (23).

Elsewhere he writes:

many have drawn maps of the earth, but these are all ridiculous; they surround the earth with a circular ocean as if drawn by a compass (IV, 36).

It is a trivial result for the geographer who has measured half a dozen seas and organized seven dozen rivers into a system.

But the circular ocean will not go away.

One century after Herodotus, Aristotle writes: the early writers have a river Ocean flow in a circle around the earth (*Meteorology*, I, 9), and has to write also: the way they draw the map of the earth is ridiculous; they draw it as circular,

and both reason and observation show that this is impossible (II, 5).

Reason and observation did not help either. Two centuries later, three after Herodotus, Hipparchus has to write: the ocean does not behave uniformly, and even if it did, it would not follow that it runs around the earth in an unbroken circle (Strabo, I, 1.9).

Hipparchus did not help either. One century-odd later, four-odd after Herodotus, Strabo reports what Hipparchus has said about the ocean in order to avoid it and adopt explicitly what Homer has said about it: a circular ocean surrounds the earth (1.7-9).

One and a half centuries later, this is how Ptolemy describes the limits of knowledge in the *Geography*: the known earth is bounded to the east by the unknown land next to the Seres; to the south by the unknown land enclosing the Indian Sea; to the west by the unknown land surrounding the western ocean; and to the north by the continuation of the ocean north of Europe and the unknown land in northern Asia (VII, 5).

Ptolemy did not help either. Three centuries later, eight and a half after Herodotus, in the *Histories against the pagans*, Orosius begins with a description of the known earth, and: the known earth is circular, surrounded by the circuit of the ocean (I, 2).

Nine and a half centuries later, eighteen after Herodotus, in the *Introduction to history*, ibn Khaldun also begins with a description of the known earth, and: the known earth is circular, surrounded by a watery circuit (I, 1.2).

Two generations later, eighteen and a half-odd centuries after Herodotus, in 1459, Fra Mauro drew the first map of the earth which took a step beyond Ptolemy. The map is informed by the voyages of Polo in the east, and by the discoveries of prince Henry's knights down the African coast. Nevertheless, the known earth is surrounded by a circular ocean.

It was nineteen-odd centuries after Herodotus, in 1500, and after Columbus, with the map of de la Cosa, which first showed the lands across the Atlantic, that the map of the earth at long last committed itself to avoiding the circular ocean.

Finally, the following result is without precedent in this also, that Herodotus is the first phi-

losopher to find something in our predecessors to adopt, not avoid. He writes:

I think that the cold is the reason why the cattle in Scythia do not grow horns; and Homer supports this, for there is this verse in the *Odyssey*,

Libya, where even the lambs are born with horns; and this is right, for in hot places horns grow quickly, but in cold places they either do not grow or grow only a little (IV, 28-9).

Examining sources, trotting the earth, Herodotus has come to compare horns in Scythia with horns in Libya and both with the poet.

When in the *History of animals* Aristotle argues: variety in animals can be produced by variety in locality (VIII, 28), some of his evidence is: in Libya horned animals are born with horns, and not just the ram, as Homer says, but others as well, while in Scythia they are born without horns (*id.*). Explicitly Aristotle quotes Herodotus earlier in the *History of animals* (III, 22) and in the *Generation of animals* (II, 2; III, 5).

In *The variation of animals and plants under domestication*, Darwin writes: different races of sheep present constitutional differences (3); the several races have become adapted to different kinds of pasture and climate (*id.*); great heat seems to act directly on the fleece (*id.*); and wool is correlated with horns, and as horns and hair are homologous structures, we can understand the meaning of this correlation (*id.*).

The sessions of the council on the variation of animals and plants also begin with Herodotus.

And enough about Herodotus.

dliv

Next, still in the generation of Herodotus, are Hellanicus, Antiochus of Syracuse, and Hippias.

Hellanicus wrote stories of heroes, some of them in verse. More important, he wrote an *Attic book*. Hellanicus is the only earlier writer – other than Homer and Hesiod – whom Thucydides notes explicitly. Before turning to the greatest war, Thucydides records the events of the five decades preceding the war, and to introduce this record, notes: I will write down these events, because the earlier writers have concerned themselves with what happened before the Persian war

and with the Persian war itself, but the only one to touch on the events of the five decades after the Persian war is Hellanicus in his *Attic book*, and he also does not say much and his dates are inaccurate (I, 97). Hellanicus also compiled a list of the priestesses of Hera at Argos (Dionysius of Halicarnassus, *Antiquities*, I, 72).

Antiochus of Syracuse wrote a *Sicilian book*.

Xanthus in the previous generation had written a *Lydian book*. Hellanicus had just written an *Attic book*. The book concerned with one country or another was becoming a genre.

Hippias discovered the quadratrix.

Hippias also compiled the list of victors at the Olympic games. He fixed the date of the 1st olympiad in 776/3^{BC}. And the series of olympiads became the foundation of chronology. Every city reckoned time by its own magistrates. Olympiads made time reckoning independent of the reckonings of the cities, and made it possible to correlate all the reckonings with this one reckoning. And the historians will begin reckoning time by olympiads.

dlv

Next is Thucydides.

It is the time now of the greatest war. The great king is Darius II.

It is also five-odd generations into the development of philosophy.

Thucydides, not quite one generation after Herodotus, is the next great advance in history.

With Thucydides, however, history acquires complexity which it does not have before him. With Thucydides, there are advances which are unmitigated advances. There are also advances which are mitigated advances. There are also developments which are not advances at all. And the more important these last are, the developments which are not advances, because they have not left history since.

Thucydides wrote the *History*.

He begins:

Thucydides of Athens wrote down the war of the Athenians and the Spartans, beginning to write at the very outbreak of the war, because he saw that it was going to be a great war and more important to write down than any earlier war (I, 1).

The *History* ends in 411, seven years before the end of the war, its completion prevented, presumably, by the death of Thucydides.

It is in 8 books.

Book I is introductory. The concerns are four. Thucydides shows that, in fact, it was not just a great war, it was the greatest war (1-23). He states how and why he will write down the war (20-2). He describes the events of the five decades after the Persian war, where Herodotus has ended, because, ignoring Hellanicus, no one has written down these events (89-118), including in this account the deeds, in some detail, of Themistocles and of Pausanias after the Persian war (126-38). And he describes in detail the events of the four years from 435 to 432, leading immediately to the greatest war (24-88) and culminating in the declaration of war in Sparta (119-25) and in Athens (139-46).

The following 7 books are the record of the war from 431 to 411. The record is annalistic. Book II are the events of the three years from 431 to 429, book III of the three years from 428 to 426, book IV of the three years from 425 to 423, book V of the seven years from 422 to 416, book VI of the two years 415 and 414, book VII of the one year 413, book VIII of the two years 412 and 411. Where the *History* abruptly ends.

Thucydides has been quoted above systematically. As he cannot not have been. The history of the greatest war is Thucydides's *History*.

To try now and analyze him into unmitigated advances, mitigated advances, and developments which are not advances.

First, Thucydides does not just affirm that it was the greatest war. He proves it.

He begins:

Thucydides of Athens wrote down the war of the Athenians and the Spartans, because he saw that it was going to be a great war and more important to write down than any earlier war; I thought this, because I saw that the two sides were at the very height of their power and preparation for war, and that all other Greeks were committed to the one side or the other; and it was the greatest war ever among the Greeks, and it affected many of the barbarians as well, and indeed all of humanity; for, looking carefully in the past, everything leads

me to conclude that there was nothing great earlier in either war or anything else (I, 1).

He reviews the past explicitly:

in the earliest times people were unsettled (2); their weakness is shown by the fact that there was no joint action of the Greeks before the Trojan war (3); piracy on sea and brigandage on land prevailed (4-8); as to the Trojan war, Homer was a poet, and his numbers are probably exaggerated; the Trojan expedition was small, and not so much because of the shortage of men, but because of the shortage of money (11); after the Trojan war the unsettled times continued; then Corinth grew more powerful, then Polycrates on Samos; but even the largest navies did not have triremes (12-4); no war led to the acquisition of an empire; all wars were small, quarrels between neighbors; nothing great was achieved either by an alliance of cities or by any one city (15-7); the greatest earlier war was the Persian; yet even that war was decided quickly, in two sea battles and two land battles (23).

And he concludes:

the present war, on the other hand, lasted a long time; it brought suffering to all Greece greater than ever before; never before were so many cities devastated; never before were so many exiled from their homes; never before was there such a loss of life (*id.*).

Thucydides has begun by looking carefully into the past, and establishing the general proposition:

it was the greatest war ever among the Greeks, and it affected many of the barbarians as well, and indeed all of humanity.

And this general proposition, and the propositions which are its premises:

the two sides were at the height of their power, all other Greeks were committed to the one side or the other, the war lasted a long time, it brought suffering to all Greece greater than ever before, never before were so many cities devastated, never before were so many exiled from their

homes,
never before was there such a loss of life,
all these propositions Thucydides establishes in
the rest of the *History*, by looking carefully into
the present war, in particular.

The *History* is a proof. It is a deduction.

Next, Thucydides assigns a cause to the greatest war.

Herodotus in his introductory lines promises to research the cause why Greeks and barbarians fought one another. But he never returns to the cause. In those introductory lines the barbarians say that the Greeks were to blame. And if that is the cause, who was to blame, Herodotus was wise never to return to that cause. About that cause, who was to blame, the less said the better.

But the cause does not have to be that, who was to blame. The cause can be, and it had better be, the efficient cause, what originated the motion. And Thucydides first assigns such a cause to what happened.

He writes:

the true cause of the war, and what made it inevitable, was the growth of the power of Athens and the fear which this caused in Sparta (23). And this is the true cause of the war.

Next, Thucydides fixes the chronology of the war immaculately.

He writes annals, and divides the events of each year further into two, summer and winter.

He writes:

it is better to reckon time the way I have done, by summers and winters, than by the magistrates of the cities or the holders of other offices, for an event may happen early in the office, or late, or at any time during the office, and there can be no accuracy in this way (V, 20).

His way is better, and he also reduces the other ways to his way:

the war began in the 15th year of the thirty years' truce, in the 48th year of the priesthood of Chrysis at Argos, the year when Aenesias was ephor in Sparta, two months before the end of the archonship of Pythodorus in Athens, six months after the battle of Potidaea, just at the beginning of spring (II, 2).

Only the last step remains, to reduce this reckoning to the standard of olympiads.

Next, the *History* of Thucydides abounds in

numbers more even than the *Histories* of Herodotus.

The belligerents in every action in the *History*, without an exception, are numbered.

Thucydides measures the past:

Gela was founded 45 years after the foundation of Syracuse; and to the best of our reckoning Acragas was founded 108 years after the foundation of Gela;

the first Greeks to come to Sicily founded Naxos; the following year Corinthians came and founded Syracuse; 5 years after that Catana was founded; at the same time colonists from Megara came and founded Megara Hyblaea; they lived there for 245 years, until Gelon drove them out (VI, 3-4).

Rounding to the nearest pentad, this yields:

Naxos	c. 735
Syracuse	c. 735,
Catana	c. 730,
Megara Hyblaea	c. 730,
Gela	c. 690,
Acragas	c. 580.

It is the first, and the firmest, series of dates for the early centuries of the Greek cities.

He measures power:

Athens entered the war collecting 600 talents annually from its allies, with 6 000 talents in its treasury, 16 000 infantrymen in garrisons abroad, 13 000 infantrymen guarding the city, 1 200 cavalrymen, 1 600 archers, and 300 triremes in active service (II, 13).

He records a treaty between Athens and Argos stipulating:

3 obols for the maintenance of one infantryman for one day, and 1 drachma for the maintenance of one cavalryman for one day (V, 47).

It provides the first, and for a long time the best, explicit assessment of value.

Thus, for instance, the amount with which Athens entered the war in its treasury alone sufficed to maintain 19 726 infantrymen for 10 years.

Proof, the cause, chronology, measurement, these are all unmitigated advances.

Next, Thucydides is an eyewitness.

Later in the *History*, he reports:

I lived through the entire war;

I was of an age to understand what was happen-

ing, and I applied myself to its study in order to understand it;

it also so happened that I was banished from my country for 20 years after my command at Amphipolis; I saw what was done by both sides and especially, because of my exile, by the Spartans;

and the leisure I had gave me exceptional opportunities to observe things (V, 26).

His command at Amphipolis, which led to his banishment, he describes earlier, he was one of the generals who lost the northern Aegean coast to Brasidas (IV, 104-5).

He is an eyewitness. More than that, however.

In the introductory pages, in book I, he states how and why he will write down the war:

when investigating the past, one cannot rely on the old stories; men are gullible and do not question these stories; they have many false opinions not only about the past, however, but about recent events as well; most men do not go to the trouble to find out the truth, they tend to accept the first story they hear;

the evidence on which I rely is better; it is better than that of the poets, who exaggerate the things they sing about, and better than that of the earlier writers of stories, who are not interested in telling the truth, only in entertaining their audiences;

my principle has been not to write down the first story I hear and not to follow my preconceptions;

what I have written down either I saw for myself or it was reported to me by some who saw it and I have then examined their reports as thoroughly as possible (20-2).

He has elevated eyewitnessing into a principle.

His principle is part negative part affirmative.

Negatively: not to write down the first story I hear and not to follow my preconceptions.

And the degree to which Thucydides has succeeded in not following his preconceptions can be judged by the fact that, had he not stated that he was an Athenian, it could not have been inferred from the *History* whether he was an Athenian, or a Spartan, or a barbarian. It can be inferred, too, that, although not a general of the quality of Brasidas, he is a philosopher *par excellence*.

Affirmatively: what I have written down either I saw for myself, or it was reported to me by some who saw it and I have then examined their reports as thoroughly as possible.

And nothing is wrong with eyewitnessing.

Eyewitnessing can be the ground of observation. Thucydides reports: the leisure I had gave me exceptional opportunities to observe things. And the *History* attests, replete with numbers beginning to end, that he availed himself of these opportunities exceptionally.

Everything is wrong, however, with elevating eyewitnessing into a principle.

It is only the minor difficulty that neither is eyewitnessing the principle of any of advances of the *History* nor can eyewitnessing be the principle of any of these advances.

It is not the principle on which it is proved that it was the greatest war, nor is this proof, nor is any proof, accessible to eyewitnessing. It is not the principle on which a cause is assigned to the greatest war, nor is this cause, nor is any cause, accessible to eyewitnessing. It is not the principle on which chronology is fixed, nor is the improvement of chronology, nor is chronology, accessible to eyewitnessing. It is not the principle of the numbering of all belligerents in all actions, or of the measurement of the past, or of the measurement of power, and none of these is accessible to eyewitnessing either.

This is the minor difficulty.

The major difficulty is that men are gullible and do not question the stories they hear. They have many false opinions not only about the past, but about recent events as well. And most men do not go to the trouble to find out the truth, but tend to accept the first story they hear.

And men are very much more gullible about what they have seen, or think they have seen. They have many very much falser opinions about what they have seen, or think they have seen. And all men, except Thucydides and a very few others, do not go to the trouble to find out the truth most of all about what they have seen, or think they have seen, and tend to accept it.

The *History* is a great advance not because of eyewitnessing. It is a great advance because Thucydides has overcome the limitations of eyewitnessing.

The following two new developments as well can be traced back to the presumption of decisive importance of eyewitnessing.

Next, the *History* is restricted severely in scope, spatially and temporally.

Hence, on the one hand, the history of the greatest war is, both, the tightest unity and moving with relentless suspense.

Hence, also, on the other hand, as the *History* is restricted in space and in time so are all its results limited.

Spatially, the purview of the *History* is the theater of war, from the northern Aegean coast in the north to the coast of Asia Minor in the east to the eastern Mediterranean in the south to Sicily in the west. Thucydides reaches beyond this domain only once, to describe briefly events further north, in Macedon and in Thrace (II, 95-9). Persia is barely mentioned before book VIII, when, in 411, it becomes involved in the war directly.

Thus: it was the greatest war ever among the Greeks, and it affected many of the barbarians as well, and indeed all of humanity. – But the second half of the proposition, how it affected many of the barbarians as well, and indeed all of humanity, is not within the purview of the *History*.

Temporally, the purview of the *History* is the greatest war. Herodotus has ended in 479, so Thucydides appends a brief review of events from 478 to 436 – 43 years in 43 sections. He describes in more detail the events preceding the war immediately from 435 to 432 – 4 years in 78 sections. And he focuses on the events of the war from 431 to 411 – 21 years in 771 sections. He reaches beyond this temporal domain only once as well, to describe briefly the earlier history of Sicily (VI, 2-5). The purview of the *History* is in any case not more than 68 years, and it is rather not more than 25 years.

Thus, the true cause of the war, and what made it inevitable, was the growth of the power of Athens and the fear which this caused in Sparta. – But the true cause of the war, how and why the power of Athens grew, and how and why this caused fear in Sparta, is not within the purview of the *History*.

Eyewitnessing, to the degree to which it can be the ground of observation, and restriction of scope, to the degree to which it can hone the

unity and the suspense of the greatest war, are advances.

They are mitigated advances in Thucydides. Eyewitnessing, alas, is inseparable from gullibility, false opinions, and the refusal to go to the trouble to find out the truth. Restriction of scope, alas, is much like eyewitnessing, a limitation.

And the presumption of decisive importance of eyewitnessing, not hampered by the possibility of becoming observation, and restriction of scope, not hampered by the possibility of honing the unity or the suspense of anything great, have never since, twenty-four-odd centuries now, left history. Why, the prevalence of gullibility, false opinions, and the refusal to go to the trouble to find out the truth, very nearly suffices to explain. In addition, however, Thucydides first grafted those onto a great advance. It can be concluded that Thucydides is a major contributing cause of their continuing indestructibility. A cause not of that kind, who is to blame. A cause of the other kind, what originated the motion.

The following are not advances at all.

Next, the *History* is a history of the present.

Thucydides writes:

men are liable to think that the war which they fight is the greatest of all wars; but if one examines the facts, one will see that the present war was the greatest (I, 21).

What are the odds that one will examine the facts? Indeed, why should one?

Thucydides was favored by fortune. The war which he fought, and accordingly thought the greatest of all wars, was the greatest of all wars.

All men are not so favored by fortune. Yet, all men are not only favored by fortune with his own war each. All men are very much more liable to think that the war they fight is the greatest of all wars than they are gullible, have false opinions, and will not go to the trouble to find out the truth. The former vastly reinforced by the latter, too.

And not only the histories of one's own war greatest of all wars have never since left history. Two and a half centuries later Polybius has to complain: there are all those historians who seem to think that the things that happen to them are the most important and most wonderful events in history (XV, 36). More generally, the histories of one's own most important and most wonderful

events in history have never since left history.

Why, again the prevalence of the liability to think that the war which one fights is the greatest of all wars, and more generally, to think that the things that happen to one are the most important and most wonderful events in history, very nearly suffices to explain. Again, in addition, however, Thucydides first grafted that onto a great advance. It can be concluded that he is a major contributing cause of the continuing indestructibility of that as well.

Finally, the *History* abounds in rhetoric and fiction.

Thucydides is a superb writer.

This is how Dionysius of Halicarnassus describes his style: the characteristic marks of Thucydides are poetic vocabulary, great variety of figures, harsh syntax, and swiftness in what he has to say (*Thucydides*, 24).

Enviably virtuous all.

In about two thirds of the *History* they are employed in the service of history.

The following, enfeebled as must be in translation, can illustrate:

there was death in every shape and form; fathers killed their sons; men were butchered on the altars of temples (III, 81);

human nature being what it is, there was a general degeneration into savagery; war is a stern mistress; depriving men of the means to satisfy their daily needs, it debases the deeds of most of them to their miserable conditions (82);

there was a general deterioration of character throughout Greece; men abandoned hope and strived only to escape harm;

and it was not the best men who were the best at survival (83);

the norms of civilized life were shattered, and human nature, always ready to offend against the law, proudly showed itself in its true colors (84).

In about one third of the *History* they are not employed in the service of history, they are employed against it.

In the introductory pages, where he states how and why he will write down the war, Thucydides writes also:

in my history I have recorded speeches; the speeches that I myself heard, however, I did

not remember word for word, and those who told me of other speeches reported the same difficulty; thus, what I have done is to keep to the general sense of the speeches and make the speakers say what, as I thought, the occasion required (I, 22).

Book I, for instance, is divided into 146 sections. The argument that it was the greatest war and the statement of how and why he will write it comprise 23 sections. The description of the events of the five decades after the Persian war comprises 43 sections. The remaining 80 sections are the events which precipitated the war. And 41 of these 80 sections are speeches.

Another instance. Plataea was an ally of Athens:

in the winter of 429 the Spartans besieged Plataea;

the Plataeans sent their wives and children and the older men and all others unfit for service to Athens;

in Plataea remained 400 Plataeans and 80 Athenians, with 110 women to cook for them; and those were all who stayed in the city, there were no others, slaves or free (II, 78);

one and a half years later, Plataea capitulated; the Spartans brought out all men, who had remained to the end, and asked them one after the other, have you done anything to help the Spartans or their allies? and as each man answered, no, he was taken away and put to death;

200 Plataeans and 25 Athenians were put to death; the women were enslaved (III, 68).

Thucydides needs 2 sections to describe the beginning of the siege and its end.

Before the execution, he needs 12 sections to write two speeches, one against the execution, by the Plataeans (53-9), one for by the execution, by the Thebans, allies of the Spartans (60-7). One generation after Protagoras and Gorgias began teaching rhetoric, the two speeches – and all other speeches in the *History* – display all the art pioneered by the teachers of rhetoric.

And if history is served poorly by the rhetorical flourishes, the dignity of the event is served worse.

And there is worse yet.

The island of Melos was a colony of Sparta:

in the summer of 416 the Athenians invested Melos with 30 of their own ships, 6 ships from Chios, and 2 ships from Lesbos, carrying 1 200 hoplites, 300 archers, and 20 mounted archers of their own and 1 500 hoplites from their allies (V, 84);

the Athenians demanded that the Melians surrender; the Melians refused to surrender;
the Athenians besieged the island;
six months later, the Melians surrendered;
the Athenians put to death all men of military age and sold the women and children in slavery;
later on the Athenians settled on the island a colony of 500 of their own (114-6).

1 section for the beginning of the event and 3 sections for its end. The 29 sections in between are a dialogue of the Athenians and the Melians, for surrender and against surrender (85-113), of literary quality superior to that of many of the dialogues which Plato will write in the next generation.

And as history is served worse by the philosophical fiction than it is by the rhetorical flourishes, so the dignity of this event is served worse than the dignity of that.

Rhetoric and fiction, devoid of the virtues of Thucydides or of any other, have never since left history either. And of this Thucydides is not a contributing cause. Of this he is a principal cause.

Thucydides is a philosopher *par excellence*.

Philosophy has developed for five-odd generations.

Philosophy is theoretical and practical. Theoretical philosophy is physics and mathematics. Practical philosophy is politics and ethics.

Philosophy has begun as theoretical philosophy, physics and mathematics. And for five-odd generations theoretical philosophy, physics and mathematics, has continued to advance very greatly.

And – proof, the cause, chronology, measurement – Thucydides is very much part of this continuing advance.

Five-odd generations into its development, however, philosophy has also just lost its innocence. Philosophy has also just begun becoming practical philosophy as well. Politics has just made its first steps. In the generation before Thucydides, with Protagoras, the philosophers

have begun making the first attempts to speak about the state. Ethics has just begun. Socrates is an older contemporary of Thucydides. In the generation before Thucydides, too, when the philosophers have first begun making the rounds of the cities in order to teach, they have in order to teach rhetoric.

And – eyewitnessing, restriction of scope, concern with the present, rhetoric and fiction – Thucydides is very much part of this new development as well.

In the introductory pages of the *History*, where he states how and why he will write down the greatest war, Thucydides concludes:

my history may not be very entertaining; it will be enough for me, however, if it proves useful to those who want to understand what happened in the past and, human nature being what it is, will one way or another happen again in the future;

I am not writing for the present, I am writing for all time (I, 22).

And for all time the *History* is.

dlvi

Next, still in the generation of Thucydides, are Charon of Lampsacus and Ctesias.

Charon of Lampsacus wrote a *Persian book*.

Ctesias also wrote a *Persian book*.

It was a well established genre now, the book concerned with one country or another. The book would collect *varia*, and especially *curia*, about the country, the animals, the people, their customs, the shrines, the gods, the stories the people told, their ancient traditions, their kings.

The *Persian book* of Ctesias was an early high point in the development of this genre.

It was big, in 23 books. It is an important source of Aristotle. It is a major source of Siculus.

It is a source of Siculus on Media, for instance. Siculus writes: on the history of Media the early writers disagree; and as it behooves the historian, who is a lover of truth, to set down side by side the different accounts, here is the account of Herodotus, who lived in the time of Xerxes (II, 32). Siculus sets down the account of Herodotus, and continues: Ctesias, on the other hand, became a prisoner of Artaxerxes II, and because of his

great skill as a doctor, was kept by the great king in his court for seventeen years; Ctesias says also that he studied the records of the kings (*id.*). And Siculus sets down the account of Ctesias as well. On this account, the series of the Mede kings is: Arbaces who defeated Ashurbanipal and reigned 28 years; Maudaces who reigned 50 years; Sosarmus who reigned 30 years; Artycas who reigned 50 years; Arbianes who reigned 22 years; Artaeus who reigned 40 years; Artynes who reigned 22 years; Astibaras who reigned 40 years; and Astyages who was defeated by Cyrus (32-4).

Siculus, as it behooves the historian, was a lover of truth. As to the early writers, if one of them was, the other was not.

Ctesias is a source of Aristotle on animals. This is important, because the early writers on animals are not many. So in all the five treatises on animals Aristotle quotes Ctesias 4 times, and quotes more often only Democritus, Empedocles, and Anaxagoras. And Aristotle reports, for instance: Ctesias assures us that there is in India a beast which has a triple row of teeth in both its upper and its lower jaw, it is as big and as hairy as a lion, resembles man in the face, its eyes are blue, its hide is vermilion, its tail is like that of the scorpion with a sting at the end, shoots out the spines attached to its tail, hoots like a trumpet, runs swiftly like a deer, and eats men (*Hist. animals*, II, 1).

Clearly, it did not eat the man who described it.

Next are Philistus and Xenophon.

It is the time now of Epaminondas, the discovery of tactics, and the end of the dominion of Sparta over the Greek cities. The great king is still Artaxerxes II, who reigned 46 years.

It is also two centuries into the development of philosophy.

Philistus wrote a *Sicilian book* and Xenophon wrote a *Greek book*. These are not specimens of that genre, however. Even if they have borrowed their titles from that genre, these are, respectively, a *Sicilian history* and a *Greek history*.

Philistus was a general and official of Dionysius and Dionysius II in Syracuse.

The *Sicilian history* was in 13 books. It recorded events in Sicily. The first 7 books recorded events before the beginning of the reign of

Dionysius in 405. The next 4 books recorded events in the reign of Dionysius to his death in 367. The last 2 books recorded events in the early years of the reign of Dionysius II through 362. The record of events Philistus began: 800 years before the beginning of the reign of Dionysius (*Siculus*, XIII, 103). 800 years before the beginning of the reign of Dionysius would be the Trojan war.

From the *Sicilian history* of Philistus fragments remain. Three generations later Timaeus wrote the *Sicilian history*, in 38 books, and the *Sicilian history* of Timaeus superseded the *Sicilian history* of Philistus.

With Philistus a new genre begins. Rid of most of the *varia*, and *curia*, of the older genre, rid of the description of the country, the animals, the customs, the shrines, the gods, the stories the people told, and focused on the events, the genre now becomes, more properly historical, apparently, local history. And the genre local history, the record of events in one place to the exclusion of all others, will also prove indestructible.

To Philistus – and if not to Philistus himself, then to his successors' concern with Philistus – can be traced back also the historians' preoccupation with, good or bad? noxious or beneficial?

Philistus served tyrants. Clearly, this all by itself raises the question. Nor was the second of those tyrants just another tyrant. He was the tyrant whom Plato tried to educate into a philosopher king. This also raises the question. Philistus was the active enemy of the Platonic project. This also raises the question. And Philistus wrote the history of the tyrants. Clearly, this cannot be incidental to all of the above. Thus, Ephorus is in the generation after Philistus. Plutarch reports: Ephorus lavishes praise on Philistus (*Dion*, 36). Timaeus is two generations later. Plutarch reports: Timaeus lavishes abuse on Philistus (*id.*). Plutarch himself is four centuries later still. He writes: Philistus is the greatest lover of tyrants and admirer of their luxury, power, wealth, and dynastic alliances (*id.*). Lavish abuse, presumably, not lavish praise.

Xenophon is the next very important historian.

He wrote the *Greek history*.

The *Greek history* is in 7 books. Xenophon records events from 411 to 362.

Herodotus has ended in 479. Thucydides has begun in 478, because since that year events have not been written down. Xenophon begins in 411, where Thucydides has ended. He ends in 362, and Duris will begin where he has ended. It will remain a fundamental concern of the historians, to leave no gap in the record, there will be for a long time ever more historians, then there will be for some time fewer, but then there will be again ever more, and there will be no gap in the record, not even in the darkest centuries of the darkest of dark ages.

Beginning where Thucydides ends, Xenophon begins with the events of the greatest war. The subsequent events, consequences of the greatest war, continue to be momentous. Sparta continues to dominate the Greek cities and begins an attempt at expansion, Athens attempts to rebuild its empire, Thebes rises under Epaminondas, destroys the dominion of Sparta, and itself dominates the cities.

The *Greek history* is thus restricted in scope temporally. Xenophon is also contemporary with the events, and writes about his present. But it is not too restricted, it is the record of 50 years. It is not too restricted spatially either. Those are momentous events, the barbarians are directly involved in them, too, and the historian follows events further east. Events further west he also notes at least in passing, in a sentence or two. The *Greek history* is general.

The *Greek history* is also not a history of the states, Sparta, Athens, Thebes, Persia. It is not a history of the wars either, the greatest war, the Corinthian war, the war of Sparta and Thebes. It is fundamentally a chronicle, the record of events as they follow one upon another. But the chronicle is clear about what is important, and what is the most important. The most important are the battles, Aegospotami (II, 1), Coronea (IV, 3), Leuctra (VI, 4), Mantinea (VII, 5), and next to the battles, the overthrow of the thirty tyrants in Athens (II, 4), the king's peace (V, 1), the takeover of the government in Thebes (4). Implicitly as it is, the *Greek history* is an analysis of the events.

Xenophon is not Herodotus. He is not Thucydides. Yet after the *Histories*, and the *History*, with the *Greek history* within a couple of generations

of the *Histories*, history has established itself firmly as one of the fundamental ways of describing the world and searching for truth.

Xenophon wrote other treatises as well.

He wrote *The march of Cyrus*. Cyrus, a brother of the great king, led an unsuccessful attempt to seize the Persian throne. Xenophon was one of the commanders in his army. Thucydides writes: men are liable to think that the war which they fight is the greatest of all wars. *The march of Cyrus* is the first *in extenso* corroboration of that proposition. That was Xenophon's war. In the *Greek history* it merits one sentence, to note that it is written elsewhere (III, 1). Elsewhere, in *The march of Cyrus*, it merits 7 books, as many as the *Greek history* merits.

Xenophon wrote also the *Agésilas*, *The education of Cyrus*, and the *Hiero*. With these the attempts to subjugate history to ethics begin. – Agesilaus led Sparta for four decades. Xenophon served under Agesilaus. The *Agésilas* is in two parts. First, briefly, Xenophon lists the deeds of Agesilaus (1-2), then, at length, he dwells on the virtues of Agesilaus (3-11). – Cyrus built the greatest empire. In *The education of Cyrus* there are a few deeds, some true, some not true. Both, the true and the not true, serve 8 books of disquisitions on virtues and education. – Hiero built Syracuse into the most powerful state in the west. In the *Hiero* there are no deeds. Only the tyrant's lamentation of how unhappy he is compared to the ordinary citizen.

Xenophon wrote also, on the one hand, the *Cavalry commander*, the first treatise concerned with the art of war. – He wrote also, on the other hand, the *Spartan constitution*, more virtues, more education. On the same hand, like his contemporary and fellow student of Socrates Plato, he wrote also 4 treatises of Socratic disquisitions, more virtues, more education.

Next are Androtion, the *History from Oxyrhynchus*, Ephorus, and Anaximenes of Lampsacus.

It is the time now of Philip and the rise of Macedon. The great king is Artaxerxes III.

It is also not quite two and a half centuries into the development of philosophy.

Androtion, active in Athenian politics, wrote an *Athenian history*.

The subgenre Athenian history of the genre local history became well established all by itself. A dozen specimens are attested.

Under the name *History from Oxyrhynchus* go two fragmentary papyri unearthed in 1906 and 1942, respectively. On the papyri minor events around 396 and around 406, respectively, are recorded, events variously recorded or ignored by Xenophon. The scholarship, which prevented the attempt of the record, in its wisdom, to consign the two papyri to oblivion, has concentrated unwaveringly on the attempts to assign a personality to the papyri.

Ephorus is the next very important historian.

He wrote the *Histories*, in 30 books.

It was the history of all countries and states, Greek and barbarian.

Ephorus, first after Herodotus, also described the entire known earth. He is a major source of Strabo in the *Geography*.

Siculus reports: Ephorus began two generations after the Trojan war with the Heraclidae, the progenitors of the Peloponnesians (IV, 1). More particularly, Polybius writes: those who are fond of genealogies, the stories of colonies and of the foundation of cities, and their ties of blood, will find all these things in Ephorus (IX, 1).

Siculus again: Ephorus ended with Philip's siege of Perinthus in 340 (XVI, 76).

More than one half of the 30 books of the *Histories* was devoted to the last 50 years. For, as Ephorus said, why dwell on the past (fr. 3)?

Events from the Trojan war to Philip's siege of Perinthus in 340 Siculus records in books VII-XVI of his *Library*. His main source is Ephorus.

Plutarch quotes Ephorus in the lives of Themistocles (27), Cimon (12), Pericles (27), Alcibiades (32), Lysander (25, 30), Pelopidas (17), Dion (35-6), and Timoleon (4).

By this time it has become the explicit concern of the historian, is he better than the orator? or the orator is better? Polybius reports: Timaeus writes that there are those who say that rhetoric requires more talent, more hard work, and more skill than history; Ephorus disparaged all that; and Ephorus is nevertheless admirable both in style and in the construction of his arguments; he is most eloquent in his digressions and when he expresses his own opinions, in short, when he

enlarges on his subject; and his remarks on the difference between the historian and the orator are particularly persuasive (XII, 28).

Anaximenes of Lampsacus wrote a *Greek history*. It began with the birth of the gods and ended in 362 (Siculus, XV, 89). Dionysius of Halicarnassus writes: Anaximenes wanted to write everything, history, on poetry, a manual on rhetoric, speeches (*Orators*, *Isaeus*, 19). Anaximenes wrote also on Homer, on Philip. The *Rhetoric to Alexander*, the oldest manual on rhetoric, preserved in the Aristotelean corpus, is ascribed to Anaximenes.

Next are Aristotle and, in the enumeration of the historians above, 12 other historians, all younger contemporaries of Aristotle, in the same generation, the last generation in the three-odd centuries from Ashurbanipal to Alexander.

It is the time now of Alexander.

It is also two and a half centuries into the development of philosophy.

dlvii

Aristotle, as he is the most important philosopher, in general, so he is a most important historian, in particular.

Three facts about Aristotle and history.

One. Aristotle wrote *The constitution of Athens*. He analyzes the history of Athens into 11 changes of its constitution, and describes the changes. And the history of Athens is substantially and essentially *The constitution of Athens*. Aristotle's research recovered the entire earlier development of the state in Athens, the legislation of Draco, the legislation of Solon, the legislation of Cleisthenes, the legislation of Ephialtes. None of this can be recovered from his predecessors, Herodotus, or Thucydides, or Xenophon. Or Plato. Never mind the subgenre Athenian history in its entirety.

Two, and most important. The acquisition of knowledge acquired its history with Aristotle.

He writes in book I of the *Metaphysics*:

let us now call on our predecessors who have investigated being and searched for truth and see what they have said about the principles (3).

And he calls on 20 predecessors of ours who have investigated being and searched for truth.

In the *Physics*:
whether the principles are one or more the physicists differ (I, 4).

And he reviews 9 physicists who differ.

Later in the *Physics*:
all who have studied nature in a way worth considering have spoken about the infinite and made it a principle of things (III, 4).

And he reviews 5 who have studied nature in a way worth considering.

In *On the heaven*:
we now turn to the earth, its position, whether it is at rest or in motion, and its shape; and on this there are different judgments (II, 13).
And he reviews 9 different judgments.

Later in *On the heaven*:
whether there is generation, earlier judgments differ from one another as well as from truth (III, 1).

And he reviews 10 earlier judgments differing from one another as well as from truth.

Later in *On the heaven*:
the following predecessors of ours have discussed heavy and light (IV, 2).

And he reviews 3 who have.

In *On generation and corruption*:
whether alteration is the same as generation, the philosophers before us disagree (I, 1).
And he reviews 4 philosophers who disagree.

Later in *On generation and corruption*:
how action takes place, this is what the philosophers before us think (8).

And he reviews what 4 philosophers think.

In the *Meteorology*:
let us now explain comets, after first reviewing the judgments of others (I, 6).

And he reviews the judgments of 5 others.

Later in the *Meteorology*:
let us now explain the origin, cause, and nature of the Milky Way, again beginning with the judgments of others (8).

And he reviews the judgments of 3 others.

Later in the *Meteorology*:
about earthquakes 3 explanations have been proposed (II, 7).

And he reviews the 3 explanations.

In *On the soul*:
beginning now the investigation of the soul, in order to formulate the problems we are to

solve we call the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous (I, 2).

And 13 of our predecessors participate in the following session of the council.

In the *History of animals*:
on the veins the following have written (III, 2).
And he reviews the 3 who have.

In *On youth, old age, life and death, and respiration*:
few of the physicists before us have concerned themselves with respiration (7).

And he reviews 5 who have.

In the *Sophistical refutations*, concluding his logical investigations:

in these investigations it was not that something was done before us, something was not done; nothing at all was done (34).

And he yet reviews 4 predecessors of ours who have taught contentious arguments.

In the *Politics*:
in order to consider which is the best state, we must examine constitutions, and not just those of well-governed states, but those also conceived in speech and held in high esteem (II, 1).

And he reviews 25 predecessors of ours who have either given laws to states or conceived states in speech.

These are only the 16 occasions on which Aristotle most deliberately calls the council of our predecessors into session.

It is not yet a systematic history of the acquisition of knowledge. His students Theophrastus and Eudemus will write this history. Aristotle's researches already, however, have collected the materials of this history, and established its most important facts.

In the 16 reviews Aristotle notes 56 distinct predecessors of ours.

1 of the 56 is,
625 Thales.

Aristotle established that Thales first solved the problem of the principles of all things and first solved the problem of the earth. Thales is noted by many of Aristotle's predecessors. Neither that Thales solved the problem of the principles of all things nor that he solved the problem of the earth is noted by any of Aristotle's predecessors.

Aristotle discovered the first philosopher.

These are 9 more of the 56,
 611 - 541 Anaximander,
 590 Anaximenes,
 532 Alcmaeon,
 519 Hippasus,
 480 Leucippus,
 479 Cleidemus,
 470 Hippo,
 460 Democritus,
 460 Hippocrates of Chios.

Anaximander improved on the solution of the problem of the earth. Anaximenes improved on the solutions of both problems, of the principles and of the earth. Alcmaeon first assigned cause to disease and made dissections. Hippasus was the follower of Pythagoras who did not follow precepts as divine revelations. Leucippus formulated the theory of atoms and void. Cleidemus wrote on plants. Hippo was an atheist. Democritus advanced greatly the atomic theory. Hippocrates of Chios wrote the first *Elements*.

The first 4 predate Herodotus by more than one generation. All 9 predate Plato by more than one generation. None of the 9 is noted before Aristotle at all.

Three. Next to all the other treatises that he wrote, Aristotle wrote also the *Poetics*.

In the *Poetics*, in passing, he began writing the history of poetry, too. All the following, too, he is the first to record:

the Dorians claim the discovery of both tragedy and comedy;

the Megarians claim that of comedy; those in Greece say that it began when Megara became a democracy, those in Sicily claim it because Epicharmus was from their country and he was much earlier than Chionides and Magnes;

the discovery of tragedy the Peloponnesian Dorians claim, pointing to the origin of the words, comedy, and drama (3);

Aeschylus increased the number of actors to two; Sophocles increased the number to three (4).

And it is in the *Poetics*, of all places, that the only occasion occurs on which Aristotle talks about history explicitly. In particular, he says: the difference between the historian and the poet is not that the one writes prose, the other verse; you can put Herodotus to verse and he

will still be a historian; the difference is that history is about what has been, poetry is about what would be;

poetry is thus more philosophical and more elevated than history, poetry being more about the general, history being more about the particular (9).

And if poetry is about what would be, history is about what has been, whether poetry is more philosophical than history is very important. Whether poetry is more elevated than history is not important.

In particular. In Thucydides, the descriptions of the sieges of Plataea and Melos are about what has been, the speeches for and against the execution of the Plataeans and the dialogue for and against the surrender of the Melians are about what would be. In Ctesias, Ashurbanipal, Astyages, and Cyrus are about what has been, the other Mede princes and the vermilion beast are about what would be. In Xenophon, the deeds of Agesilaus and Cyrus are about what has been, virtues and education are about what would be. In Aristotle himself, the constitution of Athens and the 56 predecessors of ours in the 16 reviews are about what has been, nothing – very nearly – is about what would be.

There is thus the question, are the speeches, the dialogue, the vermilion beast, the virtues, the education, more philosophical?

In general. Aristotle writes: philosophy is the search for truth. He writes: to affirm of what is that it is not, and of what is not that it is, is false, to affirm of what is that it is, and of what is not that it is not, is true. He writes: every sentence means something, but not every sentence is a proposition; a proposition is a sentence which affirms what is true or false; a prayer, for instance, is neither true nor false; we are thus concerned only with propositions, the rest we can ignore, they belong to rhetoric or poetry.

They belong to poetry because they are, like prayers, about what would be, neither true nor false.

Thus, in whatever other ways poetry be more philosophical than history, if there be other ways, poetry is not more philosophical than history in this way, search for truth, for the straightforward reason that it cannot be philosophical at all, never

mind more or less.

For the same straightforward reason poetry cannot be more about the general, history being more about the particular. Being about what would be, poetry cannot be about the particular, and not being about the particular, it cannot be about the general either, never mind more or less. Being about what has been, history is about the particular, and for this reason, because it is about the particular, it is, implicitly if not explicitly, about the general as well. And the better history it is, the more it is about the particular, the more it is explicitly about the general as well.

And one way or another, you can put Aristotle to verse and he will still be a historian.

dlviii

The remaining 12 historians can be divided into two kinds. 5 are students of Aristotle, all 5 important. 7 are not students of Aristotle, 2 of them important, 5 not important.

To take the not students of Aristotle first.

Theopompus wrote a *Greek history*, in 12 books, recording events from 411 to 394.

Xenophon wrote the *Greek history*, beginning where Thucydides ended. So did Theopompus. Xenophon needed a little more than 3 books to reach the year 394. Theopompus needed 12 books.

To Theopompus thus can be traced back this new development, writing ever more about ever less. And writing ever more about ever less has never since left history either. Even as the record, in its wisdom, has preserved Xenophon's *Greek history* in its entirety, from Theopompus's *Greek history* but 19 fragments (fr. 5-23).

To Theopompus as well can be traced back another new development, a very sinister new development.

The main work of Theopompus was the *History of Philip*, in 58 books. Of this work of his the record has preserved several hundred fragments.

This is how Polybius assesses this work. Polybius has had to write on Philip V at some length, because, Polybius writes:

my predecessors have treated this matter inadequately, instead of writing history, they have either extolled the king or reviled him (VIII, 8);

and in this way Theopompus is the historian most at fault; he begins his history of Philip, the father of Alexander, by saying that he undertook to write it because Europe had never before seen such a man;

and immediately after this sentence, in his preface already and throughout the book, he writes about nothing but the debauchery of Philip, his promiscuity, his lust for power, his treachery, his deceit, his drunkenness (9);

can anyone not condemn Theopompus's passion, lack of restraint, foul language, contradictions, and falsehoods? he is either a flatterer in his first sentence, or he is a complete fool in everything that he writes after it (10).

This is the judgment of Polybius.

Dionysius of Halicarnassus, for one, disagrees. This is the judgment of Dionysius:

the great achievement of Theopompus is the examination of the hidden motives for actions; in his books souls are searched as they are searched in Hades (*Imitation*, 6).

And the searching of souls as they are searched in Hades has never since left history either.

Dieuchidas wrote a *Megarian history*.

Marsyas wrote a *Macedonian history*.

Local history is not a new development.

But there is yet another new development, of which the cause is Alexander.

The deeds of Alexander launched the first historical industry, writing the deeds of Alexander, great deeds, petty deeds, real deeds, fictional deeds, more deeds, and more deeds, and more deeds.

Ptolemy was one the finest generals of Alexander, and became after Alexander's death the king of Egypt.

Nearchus was a senior officer of Alexander, and the admiral of the fleet dispatched to sail the Indian Ocean.

Onesicritus was a junior officer of Alexander, and the pilot of the fleet which sailed the ocean.

Aristobulus of Cassandreia was another junior officer.

All 4 wrote the deeds of Alexander.

Chares was the royal usher. He also wrote the deeds of Alexander.

On the single deed of Alexander of meeting

the queen of the Amazons, Plutarch lists 14 authorities, next to 4 of those above, also: Clitar-chus, Polyclitus of Larissa, Antigene, Ister, Anticlides of Athens, Philo of Thebes, Philip of Theangela, Hecataeus of Eretria, Philip of Chalcedon, Duris (*Alexander*, 46).

So the deeds of Alexander were written more than any earlier. His soul was also searched as no soul had been searched in Hades.

The 5 important historians among the students of Aristotle are Callisthenes, Aristoxenus, Dicae-archus, Theophrastus, and Eudemus.

Callisthenes was one of the philosophers in Alexander's train who followed the king on his expedition in the east. Callisthenes also wrote *The deeds of Alexander*. He said: without my history Alexander will be forgotten (Arrian, *Alexander*, IV, 10). Not really. Fragments from this work of Callisthenes's survive.

He wrote also a *Greek history*, in 10 books, recording events from 386 to 346. Fragments from this work of his as well survive.

He and Aristotle also compiled the list of victors at the Pythian games (fr. 1, T23). Chronology was already firmly based on olympiads.

Callisthenes is important, if not very important. The other 4 are all very important.

Aristoxenus wrote on Pythagoras and the Pythagoreans, on Socrates, on Plato, and on Archytas.

For all these philosophers Aristoxenus is an important authority in the later writers, for Pythagoras and the Pythagoreans he is the decisive authority. All main sources, book VIII of Laertius, Porphyry's *Life of Pythagoras*, and Iamblichus's *Life of Pythagoras*, depend for their facts entirely on him.

Aristoxenus wrote also *The Elements of harmonics* and the *Elements of rhythm*, the oldest treatises on music.

Dicaearchus advanced greatly geography. He made the second measurement of the radius of the earth, improving vastly on the first. He measured the Mediterranean.

Dicaearchus also wrote *The life of Greece*, as the *Suda* describes it: the cultural history of Greece (s. v.).

Dicaearchus is also an important authority for the early philosophers in the later writers.

Dicaearchus writes also:

from the remotest antiquity of human life man has descended to our own time step by step; the first stage was the state of nature, when man lived on the products of the virgin earth; from this stage he descended into the second, the pastoral stage, when he gathered acorns, berries, and other fruits, and caught and tamed wild animals;

the third stage began when man descended from the pastoral life into that of the agriculturalist (Varro, *Rustic*, II, 1).

And this is how from the remotest antiquity of human life man has descended to our own time.

Dicaearchus also wrote a treatise, in 3 books, arguing that the soul is nothing.

Theophrastus wrote the history of physics.

And Eudemus wrote the history of mathematics.

And for the development of philosophy through this time, for the first two and a half centuries of the development of philosophy, Theophrastus and Eudemus are the ultimate authorities and the ultimate sources. The later writers are of two kinds, such as quote their sources and such as do not quote their sources. Those who quote their sources all quote Theophrastus and Eudemus, and all depend for some of their facts on Aristotle, for the rest of their facts on Theophrastus and Eudemus. And those who do not quote their sources, like those who do, can only depend for some of their facts on Aristotle, for the rest of their facts on Theophrastus and Eudemus.

Other than numerous smaller fragments, from the history of Theophrastus is preserved one substantial part under the name *On the senses*, from the history of Eudemus one substantial passage in Proclus (comm. *Euclid*, 65-8).

Aristotle analyzed philosophy into theoretical and practical. Theoretical philosophy is the search for truth. Practical philosophy is a search for action. Theoretical philosophy is physics and mathematics. Practical philosophy is politics inclusive of ethics.

Theophrastus and Eudemus wrote the history of theoretical philosophy. The history of the search for truth.

Theophrastus wrote also the *History of plants*

and *Causes of plants*, in 15 books, describing 550 kinds of plants.

dlix

These, then, are the philosophers who have concerned themselves with the state, the geographers, and the historians in the three-odd centuries from Ashurbanipal to Alexander.

And the following conclusions can be drawn from the development of politics, geography, and history in these centuries.

A principal cause of the development of all three, politics, geography, and history, is the great advance in the development of the state. The advance in the development of the state in these centuries is very great, and the very great advance in the development of the state in these centuries is a very powerful cause.

As this cause, however, is variously, joined or not joined, by another very powerful cause, so the three effects vary substantially from one another.

The development of geography is an advance in the acquisition of knowledge in its entirety.

The development of history is an advance in the acquisition of knowledge as well, but not in its entirety. There are in history developments which are not an advance in the acquisition of knowledge.

And little of the development of politics, very little compared with the development of geography, or the development of history, is an advance in the acquisition of knowledge. Most of the development of politics is not an advance in the acquisition of knowledge.

dlx

Here is, first, a review of the advance in the development of the state.

The great advance begins in the previous one century-odd, the one century-odd from Tiglath-pileser III to Ashurbanipal. And in the three-odd centuries from Ashurbanipal to Alexander the great advance continues, and accelerates, and more, and more.

It is first of all an advance in the development of warfare.

In the previous one century-odd, the Assyrian princes develop an army of not less than 100 000, deploy it in each of not less than 70 of their 101

reign years, deploy it across 1 700 km. The advance over earlier forces and the capability of deploying them is by at least an order of magnitude.

In these three-odd centuries, the great kings deploy their armies across 4 400 km, and further afield than any of their predecessors in all directions, east, south, west, and north. The increase in the capability of deploying armies far afield is more than twice more in three generations than in the previous two-odd millennia. In the next generation the great king leads a force of 1 700 000 men and 1 207 ships. It is larger than any earlier force by at least an order of magnitude.

The force larger than any earlier force by at least an order of magnitude is stopped by Sparta and Athens in battles greater than any earlier battle by at least an order of magnitude. At Salamis 380 ships vanquish 1 207. At Plataea 110 000 men vanquish 300 000.

With the Assyrian princes, and then the great kings, the advance is substantially extensive. The forces become larger, they are deployed further afield.

Beginning with Sparta and Athens the advance is substantially intensive.

Sparta discovers that determination will vanquish numbers. It develops the heavy infantry. Athens discovers the trireme. It develops the navy. Both Sparta and Athens develop the most formidable weapon, the citizen-soldier. The state of Sparta becomes an army. The state of Athens becomes a navy. Sparta and Athens also greatly advance generalship.

Epaminondas discovers tactics.

With Philip troops become a systematically built weapon. The weapon is deployed with greater flexibility and force than any earlier. Philip also greatly advances generalship.

The advance culminates in Alexander. He conquers the greatest empire in 4 years. He deploys armies across 4 900 km. He is the greatest advance in tactics. He is the greatest advance in generalship.

The greatest advance in the development of warfare is accompanied by the greatest expansion of the domain under the state.

The Assyrian princes break out of the valley of

the two rivers in the east, northwest, and southwest. After twenty-three-odd centuries of independent development of the state in the valley of the two rivers and the valley of the Nile, they unify the two valleys.

Not quite one and a half centuries later, by the end of the reign of Darius, the great kings have expanded their domain northeast to the Amu Darya, further east to the Indus. In the west, mainland Greece is firmly under the state. Further west, the rise of Carthage has begun. Syracuse has risen in Sicily.

One and a half-odd centuries later, by the end of the reign of Alexander, the Balkan peninsula north to the Danube, first brought under the state by Darius, has been brought more firmly under the state by Macedon. In the east, Alexander has reasserted the dominion of the state to the Indus. In the west, Carthage has brought under the state Sardinia and the Mediterranean littoral out to Gades, beyond the strait of Gibraltar. The rise of Rome has begun.

By 745, the beginning of the reign of Tiglath-pileser III, the state has developed for twenty-two and a half centuries. West to east, it has brought under itself the domain from the plain of the mouth of the Nile to the plain of the mouth of the two rivers, 20° of longitude, 1 900 km along the parallel.

By 323, the end of the reign of Alexander, the state had expanded the domain under itself, west to east, from the Atlantic to the Indus, 74° of longitude, 6 800 km along the parallel.

The increase is more than three times more in these four-odd centuries than in the previous twenty-two and a half.

By the end of the reign of Ashurbanipal, in 627, expansion has brought under the state some 10 million, not less than one tenth of humanity. Three-odd centuries later, by the end of the reign of Alexander, in 323, expansion has brought under the state some 40 million, not less than one quarter of humanity.

The greatest advance in the development of warfare and the greatest expansion of the domain under the state are accompanied by the greatest growth of the power which the state is.

Advance of warfare is power.

Expansion is power.

And the state of the Assyrian princes becomes an empire. It is the one state of all former states. It has brought under itself also countries which have never been under a state before. And it is for the first time a deliberately unifying power. It is making them all live in peace. It is making them all speak the same tongue. It is establishing one tongue as the tongue of all lands.

The state of the great kings is a very much greater empire. It has unified all powerful former states. It has unified also dozens of countries which have never been under a state before. It is more explicitly a deliberately unifying power. They no longer fight each other at all. All are at peace. And it is a very successful deliberately unifying power. As we now see the peoples ruled by the Persians all mixed together, Greek with Greek, Greek with barbarian, barbarian with Greek.

Sparta brings the cities it dominates into an alliance under itself. After it vanquishes Athens, it continues to wage war with the proclaimed end of liberating the Greek cities.

Athens becomes an empire. The schoolmistress of all Greece becomes the mistress of not less than one third of all Greece.

Carthage becomes an empire.

Rome, whose rise has just begun, has already also begun granting citizenship to the peoples it conquers.

And Alexander's is the greatest empire. Into the greatest empire built by his predecessors he unifies Athens and Sparta, too. He is himself more explicitly than any of his predecessors a deliberately unifying power. And he is, if briefly, the most successful deliberately unifying power. He marries Barsine, the daughter of Darius III. He marries 80 of his officers and 10 000 of his soldiers to Persian and Mede wives. He has 30 000 Persian boys brought up and trained in Macedonian ways. He enlists in his regiments Persians, Medes, Bactrians, Sogdians, Arachosians, Zarangians, Arians, Parthians under their own officers.

The princes have been developing the theory of the state implicitly since the first prince, for twenty-two and a half centuries by the time of Tiglath-pileser III, and developing it steadily more explicitly for sixteen centuries by the time

of Tiglath-pileser III.

And this is the formulation of the theory in the inscriptions of the 6 princes from Tiglath-pileser III to Ashurbanipal.

The prince is the lord of the earth. He destroys all foes. He brings under his sway the lands from the sea of the rising sun to the sea of the setting sun. From the horizon to the zenith he establishes the princship over them. He brings all lands under the single rule of Assyria. He brings them within the borders of Assyria. He imposes the princship on all lands. All lands submit to the princship. He makes all peoples live in peace. He counts them among the people of Assyria. He makes them all speak the same tongue. He establishes one tongue as the tongue of all lands. He is entrusted with the princship over the earth.

And the Assyrian princes have implemented the theory over not less than one tenth of humanity.

This is the formulation of the theory in the inscriptions of the great kings.

I am the great king, the king of all kinds of peoples of all kinds of origin. I am the lord of the earth. The peoples were in commotion, all peoples fighting each other. I brought an end to the fighting. They no longer fight each other at all. All are at peace.

In the historian, the great king formulates the end of the state on this theory as explicitly as it can be formulated.

If we conquer the Greeks, we will make the limits of Persia the same as the limits of heaven are for Zeus. I will march to the end of Europe, and when the sun looks down, it will see no country bordering on ours, because I will make them all one country. There will be no city or people left among men to fight against us.

The great kings have implemented the theory over not less than one fifth of humanity.

Alexander said, when we march to the ocean in the east, all Asia will be ours. When we next sail south from the Persian Gulf and come back through the strait of Gibraltar, all Africa will be ours. And the limits of our empire will then be the same as the limits Zeus set on the earth.

The inhabitants of this earth should not live divided into different states and different peoples, each with its own rules of justice. All men should

be one people and one state with a common life and common order, like a herd grazing together in a common field.

Alexander has implemented the theory over not less than one quarter of humanity. If very briefly.

The princes have been developing the theory implicitly for twenty-two and a half centuries by the time of Tiglath-pileser III, and developing it steadily more explicitly for sixteen centuries.

In the four centuries from Tiglath-pileser III to Alexander the princes develop the theory at its most explicit.

And the growth of the power which the state is in these centuries is indicated spectacularly by the successful implementation of the theory, and most of all by the success in achieving the end of the state on this theory.

We march to the ocean. All Asia is ours. We sail the ocean. All Africa is ours. The limits of our empire are the same as the limits Zeus set on the earth. The state is one. All peoples are one people. Grazing together in a common field.

It is a natural process. Fundamentally, of learning.

This is indicated by the continuity in the advance of warfare.

From the Assyrian princes to the princes of the four kingdoms, Babylon, Media, Egypt, and Lydia, which destroy Assyria, then fight one another. From the princes of the four kingdoms to the great kings, who conquer the four kingdoms. From the great kings to Sparta and Athens, whose initial development of warfare is to one degree or another independent, but whose great advance and acceleration of warfare is a consequence of the campaigns of the great kings, and achieved in the course of more or less continuous wars with the great kings. From Sparta and Athens to Thebes, and the advance becomes now, irrespective of any and all of its deliberately practical ends, deliberately theoretical. Epaminondas is a great philosopher and general. And from the great philosopher and general Epaminondas to the great philosopher and general Philip, and from the great philosopher and general Philip to the greatest philosopher and general Alexander. – Continuity in the advance of warfare is also continuity in the growth of the power which the state is.

It is indicated by the continuity in the expansion of the domain under the state.

From the Assyrian princes, who unify the two valleys in each of which the state has developed independently for twenty-three-odd centuries, to the four kingdoms, which expand the domain under the state contiguously in the east and in the west. From the four kingdoms to the great kings, who expand the domain contiguously in the east. The Greek states are on the border of this domain in the west. The sea has also quit being a barrier. The colonization of the Mediterranean littoral has begun from the valley of the two rivers, and the Mediterranean littoral is contiguous with the valley of the Nile, too, and contiguous with the domain under the Greek states. There are Phoenician foundations in Greece. And the colonization of the Mediterranean littoral continues with the Greek cities. Carthage is a Phoenician foundation. Rome is on the borders of the domains both of the Greek cities and of Carthage. – And continuity in the expansion of the domain under the state is also continuity in the growth of the power which the state is.

It is indicated by the formulation of the theory of the state, one and the same theory developed steadily more explicitly, and the implementation of the theory, the one and the same theory implemented steadily more deliberately. – And continuity in the formulation of the theory and its implementation is also continuity in the growth of the power which the state is.

The state is a power contrary to our natural passions, keeping men in awe, reducing the wills of men unto one will.

And there is in these centuries a decisive advance in the development of the law. There is a decisive transformation of custom. And there is a decisive development in religion.

The form of government of the state is of three kinds, monarchy, aristocracy, and democracy.

In the twenty-three and a half centuries from the beginning of the state through Ashurbanipal the state is of one kind, monarchy.

And in the three-odd centuries from Ashurbanipal to Alexander monarchy continues to flourish. The four kingdoms, Babylon, Media, Egypt, and Lydia, are monarchies. Persia is a monarchy. Macedon is a monarchy.

But in Sparta, Athens, Carthage, Syracuse, Rome, the other kinds develop.

The state begins among the Greek cities as it has begun and developed everywhere, as a monarchy.

Yet some of the monarchies are not pure monarchies. In Sparta the king establishes a council. In Corinth the tyrant is a leader of the people. And in Athens a lawgiver frames the constitution of the state, the constitution is not a monarchy, and within a generation this first lawgiver is followed by another, who reframes the constitution, and not into a monarchy either.

The country is small, rugged, crowded. So the state begins here as everywhere with smiting.

But the country is also maritime. Colonization spreads its population over the entire Mediterranean littoral, in several hundred small cities. And this will encourage the new cities, founded by older cities, to begin with lawgivers. This in turn will encourage lawgiving in the older cities, and in all cities.

There are also Homer and Hesiod.

The state has developed for twenty-two and a half centuries by the time of Tiglath-pileser III.

There have been lawgivers among the princes, counting back to Urukagina, for sixteen and a half centuries. There have been lawgivers as great as Hammurabi, ten and a half centuries earlier.

And in the one century-odd from Tiglath-pileser III to Ashurbanipal the state is at its greatest, and enlightenment is at its brightest.

Writing is at its most massive. The inscriptions of Assyrian princes are more numerous than the inscriptions of any of their predecessors, by far. These princes are a great advance in the acquisition of knowledge. They are a decisive advance in the description of the surface of the earth. They are a decisive advance in history. They are a decisive advance in the observation of the heavenly bodies. They collect the first library, not less than 1 000 distinct compositions.

And in this century Greek writing begins, with Homer and Hesiod.

Greek writing does not begin gradually, it explodes.

Homer and Hesiod create for the Greeks their theogony. The gods are secondary to poetry, secondary to a warrior and a voyager, secondary

in wisdom.

Homer and Hesiod are a great advance in the acquisition of knowledge.

Homer and Hesiod precede the development of the state among the Greek cities.

Homer and Hesiod will have encouraged very powerfully lawgiving among the Greek cities.

And lawgiving begins among the Greek cities from the first, and begins in Athens with the framing of the constitution of the state.

So, here as everywhere, the state begins with smiting. Here, it begins also with lawgiving. The smiting intensifies. The lawgiving intensifies.

And in Sparta and in Athens the soldier becomes a citizen.

The soldier becomes a citizen, not the citizen a soldier. In Sparta, nineteen years incessantly fight the fathers of our fathers, then Theopompus establishes the ephorate. In Athens, Draco does not arm all men who have the franchise. He gives the franchise to all men who arm themselves.

In both Sparta and Athens smiting is first, constitutional development follows. In both Sparta and Athens more smiting follows, testing the constitution. In both Sparta and Athens, the constitution passes the test. It proves victorious. On the battlefield.

The outcome of the constitutional development is thus, in Sparta, an army. In Athens, a navy. In Sparta, a breed of Homeric heroes like Achilles. In Athens, a breed of Homeric heroes like Odysseus.

That this will be the outcome of the constitutional development of Sparta and Athens is not only consistent with the theory of the state developed by the princes. It has to be a consequence of the theory.

So, the constitution of Sparta is mixed, of elements of all three, monarchy, aristocracy, and democracy.

The constitution of Athens is pure democracy, the purest that has ever been.

In the west, the constitution of Carthage is also mixed, like the Spartan, of elements of monarchy, aristocracy, and democracy.

The constitution of Rome is also mixed, like the Spartan, and the Carthaginian, of elements of monarchy, aristocracy, and democracy, all three. And while in both the Spartan and the Carthagin-

ian constitutions the element of aristocracy predominates, in the Roman constitution the elements of all three are mixed perfectly, none predominates.

The decisive advance in the law in these centuries is thus, first and foremost, the development of all forms of constitutions. In Athens, it is also a most deliberate development. Draco frames the constitution, Solon reframes the constitution, Cleisthenes reframes the constitution, and the constitution is reframed in the following one century-odd, on Aristotle's count, six more times.

It is a decisive advance as well that the law becomes a routine of the state.

Lawgivers appear in all cities.

In Athens every leader of the people becomes a lawgiver.

In Rome the monarchical element, the consuls, proposes laws, the aristocratic element, the senate, deliberates on the laws, the democratic element, the popular assembly, approves or rejects the laws. The law has thus acquired the capability of change and of stability simultaneously. The state has developed a mechanism which is very likely, both, to produce laws continuously and to give the produced laws permanence.

Moreover, the Twelve tables are the source of all public and private law. And in the Twelve tables there is no authority on which the laws rest other than themselves. There is no prince. There is no god. There is no lawgiver.

In the monarchies, the source of the law has remained the monarch, and the authority of the law is in its foundation the authority of the monarch.

In Athens, the leader of the people has become the source of the law, and the authority of the law is in its foundation the authority of the leader of the people.

In Rome, the consuls, the senate, and the popular assembly, jointly, become the source of the law, and the authority of the law is in its foundation the authority of the constitution of the state. A magistracy is also created, the praetor, specifically to administer the law.

The authority of the law is the law itself.

The state is a power. Contrary to our natural passions. Reducing the wills of men unto one

will.

The army, and that is, the capability of the state to raise and lead the army, shows the reduction of the wills of men unto one will spectacularly.

The empire, and that is, the capability of the state to unify states and countries into the empire, shows the reduction of the wills of men unto one will spectacularly.

The law, and that is, the capability of the state to frame and implement the constitution of the state, and to make the law its own authority, shows the reduction of the wills of men unto one will more spectacularly still.

The decisive transformation of custom has begun in the previous one century-odd, and in these three-odd centuries continues and accelerates.

Pax Assyrica has mixed for one century one tenth of humanity.

Pax Persica mixes for two centuries one fifth of humanity. Mixes all the tribes in the empire, forcing them all to see, even as they would all much rather not see, that they must practice the virtues which must be practiced with respect to the great tribe of the empire, the one fifth of humanity that it is, even as they would each much rather continue practicing the virtues with respect to its own petty tribe only, the insignificant fraction of humanity that it is.

Alexander enlarges the empire to one quarter of humanity, and undertakes the systematic mixing of that one quarter of humanity.

More decisive still, the members of some of the tribes become citizens.

Becoming a citizen need not be a virtue that must be practiced. The extension of the franchise, however, cannot not be a very firm ground on which all members of any tribe admitted to the franchise will be forced to see that they must practice the virtues which must be practiced with respect to all other members of any tribe admitted to the franchise.

Sparta does not extend the franchise. It yet does not just keep its producers producing. It makes them its auxiliaries.

Athens extends the franchise. And if the citizens are 30 000 at the time of the Persian war, and 100 000 at the time of the greatest war, only

two generations of empire building have extended the franchise radically.

Rome begins with victory, laws, and extension of the franchise.

And taking it for granted that practicing the virtues which must be practiced with respect to one's own petty tribe only, is one of the most powerful of our natural passions, the mixing of the petty tribes unto the one tribe of the empire, and the more so their mixing unto the one tribe of the citizenship, shows spectacularly that the power is contrary to our natural passions.

The decisive development of religion has also begun in the previous one century-odd, and in these three-odd centuries also continues, and culminates in the building of the first church.

The church is built by writing.

After two and a half millennia of building by smiting, building by writing.

29 writings are eventually collected in the Hebrew scriptures. 27 of the 29 are composed through the centuries at issue. The total for the chapters of the 27 writings is 904.

It is massive writing. Writing of comparable or greater quantity has been produced but four times, under the great state of Ur, then under the great state of Babylon, then under the great state of the new kingdom, then under the great state of Assyria.

More important still, the Hebrew writing is the first which continues to accumulate steadily for nearly four and a half centuries. States come, and go, the Hebrew writing continues to accumulate. Nearly four and a half centuries is much longer than Ur, much longer than Babylon, longer than the new kingdom, much longer than any of the four times when Assyria rises.

More important still, in one and all of the 27 writings the end is most explicitly political, it is pursued with relentless unity of purpose, continuously honed, and to perfection.

And the writings become effectual.

Hezekiah is the prince of Judah 726-697.

The state of Judah has been ruined by the Assyrian princes.

But the first 5 writings have accumulated.

The writings tell Hezekiah what to do, and he does it.

This first attempt to implement the writings is

to implement them in the state. The state is ruined, but not yet destroyed. It is an attempt to restore the state. To establish it on the commandments of the lord, and thus, according to his promise, reverse its fortunes.

And this first attempt is not successful. The prince keeps the commandments of the lord. But the people do not yet keep the commandments of the lord.

Josiah is the prince of Judah 640-09.

The state of Judah has continued to be ruined, after the Assyrian princes by the Egyptian and the Babylonian princes.

But the writings have continued to accumulate and are now 10.

The writings tell Josiah what to do, he does it, and Judaism is now successfully established.

This second attempt to implement the writings is also to implement them in the state. The state is still not altogether destroyed. It is also an attempt to restore the state. To establish it on the commandments of the lord, and thus reverse its fortunes.

And this second attempt is successful. The fortunes of the state are not reversed. The political end of the writings is nevertheless achieved. Now not only the prince keeps the commandments of the lord. Now the people also keep the commandments. He reads the entire book to them, and he makes a covenant before the lord that they will obey the lord and will keep his law.

The great assembly under Ezra is in 445/33.

The state of Judah has been destroyed, Jerusalem and the temple razed, the people taken in exile, then the exile has ended, exiles have returned to Jerusalem, the second temple has been built.

And the writings have continued to accumulate and are now 23.

Ezra is a priest expert in the commandments of the lord.

And not only Ezra has continued to keep the commandments of the lord, and not only also the 1 754 who accompany him. The people in Jerusalem also, at least in part, have continued to keep, at least in part, the commandments of the lord.

The state is destroyed in 587. The great assembly is in 445/33. The state is destroyed, but one and a half centuries after its destruction, the

population of the state, which under Josiah has made a covenant before the lord to obey the lord and keep his law, has continued, without the state, to obey the lord and keep his law. The population of the state has become the congregation, without a state now, of a church.

Ezra brings out the book of the law before the congregation, men, women, and all. He reads to them from the law. All the people hear the book of the law. And they swear and pledge in writing to follow the law of god given by him to Moses and given by Moses to them, and to observe faithfully all the commandments of the lord, his rules and his laws.

The writings have told them what to do, they have done it, and Judaism, the first church, is established unshakably.

It is very much like a state. It has its center, the temple. It has its administration, the priesthood. It even has its domain, Jerusalem and the surrounding country of Judah, tiny though this domain is and a part of the domain of another state. Most of all, it has its congregation.

It is a power contrary to our natural passions, keeping men in awe, reducing the wills of men unto one will.

It is the decisive development in religion.

It is still very small, however. It is a very small power within a very large power.

The church is built deep within the empire of the great kings. In the great assembly the congregation counts itself, with their slaves, singers, horses, mules, camels, and asses, 57 888. The congregation is, with or without the horses, mules, camels, and asses, not more than one four hundredth of the human population of the empire of the great kings.

Besides, there is very little religion in any of the states in these centuries.

The states, and the 40 million under them, are occupied otherwise.

They advance warfare, expand the domain under the state, build up the power which the state is, frame the constitution of the state, make laws, mix the peoples and extend the franchise.

And the great advance in the development of the state attests a proportionately great advance in the acquisition of knowledge.

The advance in the development of warfare

attests the solution of theoretical problems, irrespective of whether practical problems are thus solved as well.

The expansion of the domain under the state attests the solution of theoretical problems.

The growth of the power which the state is attests the solution of theoretical problems.

The formulation of the theory of the state and its implementation attest the solution of theoretical problems.

The advance in the development of the law, including the framing of the constitution of the state, attests the solution of theoretical problems.

Propositions are won, very many propositions.

dlxi

And geography is a direct consequence of the advance in the development of the state.

Ur-Nanshe, prince of Lagash *c.* 2535, notes in his inscriptions 4 localities.

And all princes after him, with whom the state rises, and expands, note in their inscriptions steadily more localities, and the relations of the localities are steadily more explicit.

This reaches a peak with the Assyrian princes in the one century-odd from Tiglath-pileser III to Ashurbanipal. They note hundreds of localities. The spatial relations of the localities are steadily more explicit. And the princes are clear that they are pressing against the limits of the known earth. I brought under my feet lands that had never been conquered. I opened mountains that had never been traversed. I took the most distant paths, across impassable mountains, across endless sands. A land beyond the sea, a distant land of which my fathers had never heard.

And in the three-odd centuries from Ashurbanipal to Alexander the princes continue to lead the advance in the description of the surface of the earth.

Necho dispatches a fleet of Phoenicians to circumnavigate Africa. And the fleet of Phoenicians circumnavigates Africa.

Neither accompanied nor followed by conquest, it is the first voyage of exploration for the sake of exploration.

Then the great kings redefine radically the limits of knowledge of the surface of the earth.

Cyrus campaigns beyond the Amu Darya. This

is the first expedition extending vastly the limits of knowledge. Cambyses campaigns beyond the fifth cataract. This is the second expedition extending the limits of knowledge. As Herodotus describes it: the king led an expedition to the uttermost ends of the earth. Darius dispatches an expedition to open the Indus and the Indian Ocean, and campaigns beyond the Black Sea. These are the third and fourth expeditions extending vastly the limits of knowledge. The former is also the first expedition of exploration before conquest. As Herodotus describes it: most of Asia was discovered by Darius. Xerxes dispatches an expedition in the Atlantic.

From the northern shores of the Black Sea to the southern shores of the Red Sea and from the mouth of the Indus to the strait of Gibraltar the expeditions of the great kings have reached across 33° of latitude and 73° of longitude. They have increased the portion of the earth brought under exploration by an order of magnitude, some 10 times.

Much of this portion of the earth the great kings have also organized into a unity, and analyzed into its component parts. In the tax register of Darius 77 countries and peoples are arranged into 20 satrapies, the arrangement indicating orientation west to east, from the Ionians in Asia Minor and the city of Barca in Libya, in the west, to the Indians, in the east, across 4 900 km.

In the meantime philosophy has begun.

Thales said that the earth floats on water, like wood.

Anaximander said that it is at rest because of equilibrium, and shaped like a drum. And he drew the first map of the earth.

About the first map of the earth there is no more in the record than that, that it was the first map of the earth. There is substantially more about the second.

Hecataeus, not quite two generations later, drew the second map of the earth. And he wrote the first geographical treatise. With Hecataeus the description of the surface of the earth has unambiguously become systematic and deliberate. Geography has begun.

Fragments from the first geographical treatise attest 300-odd localities. They are distributed from Scythia in the north to Ethiopia in the south

and from the strait of Gibraltar in the west to the Indus in the east. The reach of the first geographical treatise coincides precisely with the reach of the expeditions of the great kings.

On the map of the earth peoples, countries, and cities from the Ionians in the west to Susa in the east were drawn. Distance and orientation are determined explicitly. And from the Ionians to Susa, the map of the earth describes the domain of the great kings.

In the same generation is the expedition of Scylax to open the Indus and the Indian Ocean for Darius.

In the next generation is the expedition of Sataspes, dispatched by Xerxes, in the Atlantic.

In the next generation is Herodotus.

He draws the map of the earth. A south-north line of reference runs from the Persian Gulf to the Black Sea. To the west, the Black Sea is 11 100 stades. The Bosphorus is 120 stades. The sea of Marmara is 1 400 stades. The Dardanelles are nearly 400 stades. To the north, the Black Sea is 3 300 stades. On its northern shore from the Danube to the sea of Azov is 20 days of walking. From the sea of Azov to the river Rioni is 30 days of walking. To the east, the Caspian is 15 days of rowing long and 8 days wide. To the west again, and to the south, from the Black Sea to the Mediterranean Asia Minor is 5 days of walking. From Sardis in Asia Minor to Susa near the Persian Gulf the royal road is 90 days of walking. From the Mediterranean to the Red Sea is 1 000 stades.

The Red Sea is 40 days of rowing long and $\frac{1}{2}$ day wide. Egypt is 3 600 stades along the coast and 7 920 stades along the Nile to Elephantine. The Nile is longer than 4 months by boat and on foot. 1 day of walking is 200 stades. 1 day of rowing is about 700 stades, 1 night of rowing about 600 stades.

The Mediterranean, the Atlantic, and the Indian Ocean are one and the same sea.

There are 83 rivers on the map.

All in all, there are 1 012 localities in the *Histories*, most of them put explicitly on the map, the rest implicitly.

Herodotus also determines the limits of knowledge explicitly, in the east, in the south, in the west, and in the north.

From the Atlantic in the west to the Indus in the east Herodotus reaches precisely as far as the expeditions of the great kings have reached. In the south he reaches a little further than the expedition of Cambyses, to the problem of the source of the Nile, and in the north a little further than the expedition of Darius, to the problem of the source of the Dnieper.

The causal connection of the expeditions of the great kings and the geography of the *Histories* can hardly have been indicated more clearly and distinctly.

The causal connection of the building of the greatest state by the great kings and the history of the *Histories* cannot have been indicated more clearly and distinctly either. The *Histories* is the history of the state of the great kings, and of all other states because it is the history of the state of the great kings.

The advance in geography and the advance in history of the *Histories* are also inseparable. Herodotus does to objects in space what he does to objects in time, he measures, calculates, and arranges them in their series and order. And the spatial series are the foundation of the temporal series, the temporal series are the foundation of the spatial series. As the descriptions of the expeditions of the great kings only most clearly and distinctly show.

The great kings are a principal and immediate cause of the beginning of geography and its great advance.

And there are in the *Histories* more numbers, more measurements, more calculations, more explicit arrangements in series, more inferences, more chains of inferences, many more, than in all the earlier philosophers combined.

Herodotus has brought the entire accumulated power of philosophy – of physics and mathematics – nearly five generations of it by this time, to bear on the investigation of the earth.

The position, order, and motion of the parts of the world is the system of the world. The multiplicity of all thinkable x , y , z , t systems of values is the world.

Counting only the localities in the *Histories*, Herodotus has described the position, order, and motion of 1 012 parts of the world. He has described 1 012 x , y , z , t systems of values.

With the *Histories*, and not before, the description of the world has decisively, unambiguously, begun.

The other principal and immediate cause of the beginning of geography and its great advance is philosophy, physics and mathematics.

As to the relation of the two causes, the great kings and philosophy, it has to be concluded that it is itself causal.

Geography is only a part of physics and mathematics. Not quite five generations into the development of philosophy, however, geography is a large part and the most advanced part of physics and mathematics.

A principal and immediate cause of a part, and of a large and the most advanced part, has to be a cause as well of the whole. The great kings are a principal and immediate cause of the advance of philosophy, of physics and mathematics.

The empire of the great kings first manifested clearly and distinctly how large the earth is. It also first manifested clearly and distinctly how large humanity is.

Parmenides discovered that the earth is a sphere. Parmenides is a younger contemporary of Xerxes, the fourth great king, when the greatest empire has been built into its most spectacular. Parmenides is also one generation before Herodotus and the *Histories*.

Two generations after Herodotus, with Eudoxus, mathematical method begins leading the way.

Eudoxus measures the circumference of the earth. The circumference of the earth is 400 000 stades. He also first measures orientation.

Ephorus makes the first attempt to assess the size of the known earth.

Aristotle assesses it. The known earth is in the climatic zone where we meet with no excessive heat or cold, 70 000 stades in length and 40 000 stades in breadth.

Dicaearchus measures the distance from the strait of Gibraltar to the Peloponnese. And he greatly improves on the measurement of the circumference of the earth. The circumference of the earth is 300 000 stades.

Expeditions continue.

Pytheas reaches Britain, measures it, and reaches further north to the Shetland Islands.

Hanno reaches down the Atlantic coast of Africa to cape Vert.

Megasthenes measures India, reaching to the delta of the Ganges.

By the end of the reign of Alexander, the state has brought under itself the domain west to east from the Atlantic to the Indus and north to south from the northern shores of the Black Sea to the southern shores of the Red Sea. The domain is not quite rectangular. It is broader in the middle, along the north-south line from the Black Sea to the Red Sea. East of this line it narrows toward the Indus. West of this line, it narrows toward the strait of Gibraltar.

And the known earth coincides substantially with the domain which the state has brought under itself. The known earth reaches further in the east to the mouth of the Ganges. It reaches along the Atlantic coast considerably further both north and south of the strait of Gibraltar. Africa has also been circumnavigated. The problems of the sources of the Nile and the of Dnieper have also been formulated. Nevertheless, it is the domain which the state has brought under itself, precisely, that is mapped the best. Outside of this domain all knowledge is tentative, and increasingly tentative. From this domain outward knowledge fades, along the coasts more gradually, on land very rapidly, and very rapidly in all directions, to disappear into unfathomable lakes, ants larger than foxes, griffins guarding gold, one-eyed and goat-footed men.

The development of geography is an advance in the acquisition of knowledge in its entirety. Propositions are won, many propositions, the propositions are brought in connection with one another in chains of inferences, many chains of inferences, the chains are steadily longer, with steadily fewer and smaller gaps.

dlxii

History is also a direct consequence of the advance in the development of the state.

The greatest advance in history is Herodotus. His predecessors are of three kinds.

One. Homer wrote the stories of heroes and gods. Hesiod wrote theogony. Pherecydes wrote theogony. Hecataeus wrote stories of heroes and genealogies. More writers wrote more stories of

heroes and genealogies.

From all this Herodotus is a radical departure. Of these predecessors of his – of Homer, Hesiod, and Hecataeus, in particular – he continues the labors of description of the surface of the earth.

Two. The great kings built the greatest state.

And the *Histories* is the history of the building of the greatest state by the great kings, and the history of all other states because it is the history of the building of the greatest state by the great kings.

Herodotus is an effect of the labors of the great kings.

In this way his labors are a continuation also of the labors of the Assyrian princes earlier. Before him, the advance in history culminates in the Assyrian princes. As before the great kings, the advance in the development of the state culminates in them. The labors of the great kings continue the labors of the Assyrian princes of building the greatest state. And so the labors of the historian continue their labors of describing the past.

Three. Philosophy had developed for not quite five generations, physics and mathematics, not yet politics and ethics.

And Herodotus brings the entire accumulated power of physics and mathematics to bear on the investigation of the past.

Herodotus is an effect of physics and mathematics as well.

All of the following begins with him.

In order to research the great and magnificent deeds of Greeks and barbarians, he researches the deeds of the great kings. And he writes the history of the state of the great kings. He writes the histories of three of the great states which the great kings conquer, and promises to write the history of the fourth. He writes the histories of the two great states which stop the great kings. Everywhere reaching further than these states, in time as well as in space, as far as the limits of knowledge, and writes all the histories that there are to write.

Spatially, the *Histories* is the history of all states at the time of writing from the Atlantic to the Indus.

Temporally – except for the single error of postponing the writing of the history of the states

in the valley of the two rivers – it is the history of all states within this domain, from the Atlantic to the Indus, back to the beginning of the state.

Herodotus has described the system of the states. He has described 804 Greeks and barbarians in relation to the system, arranging these 804 objects in their temporal series and order.

And he has integrated the map of the earth and the history of the states into one another. The 1 012 objects arranged in space are correlated with the 804 objects arranged in time, and the 804 objects arranged in time are correlated with the 1 012 objects arranged in space. It is a unitary series of 1 816 objects in space and time.

1 816 parts of the world. 1 816 x, y, z, t systems of values.

He has established that the fundamental objects are the states. And the most fundamental are the great states. The states once great now small and the states now great once small.

The first objects which the acquisition of knowledge has begun reducing to their order in space, beginning with the princes of Lagash, twenty and a half centuries before Herodotus, are the localities on the surface of the earth. With the *Histories* these objects become a system of objects in space.

The first objects which the acquisition of knowledge has begun reducing to their order in time, beginning with the Sumerian prince list, sixteen centuries before Herodotus, are the princes. These objects become a system of objects in time with the *Histories* as well.

The states, and first and foremost the great states, with Herodotus, in the *Histories*, are the first objects which the acquisition of knowledge has reduced to their order in time and space, both, explicitly. These are large objects, large temporally and spatially, objects not given to the senses at all. Persia, once small now great, was, one half century before the time of writing, 78 years in duration and from Libya to India in extent at its greatest. Lydia, once great now small, was, one century-odd before the time of writing, 170 years in duration and from the Aegean to the Kizil-irmak in extent at its greatest. Egypt, also once great now small, was, not quite one century before the time of writing, 11 486 years in duration and extending in the valley of the Nile 7 920

stades from the sea to Elephantine. The states are the first objects, of any objects, which the acquisition of knowledge has reduced to their order in time and space, both, and: by reasoning from what is seen to what is unknown.

Further, there are before Herodotus all the stories told among the Greeks and barbarians, including the greatest stories, Homer's.

Herodotus lists the sources of the stories.

He examines the sources against one another.

He assesses the authenticity of the stories committed to writing.

He asks, did it happen, or did it not happen? and answers the question.

He shows that the stories of Homer are part true, part not true.

He asks, is it a god, or not? He asks this question everywhere, in order to answer it examines the sources, examines temples and shrines, examines the princes, and answers it, and again, and again.

And writes the history of the gods. The gods began among the Egyptians. The Phoenicians learned about the gods from the Egyptians. The Greeks learned about the gods from the Phoenicians.

He dates the gods, dates temples and shrines, dates Homer and Hesiod. And shows that Homer and Hesiod created for the Greeks their theogony.

With Herodotus the striving for truth has forced us to the reference and the true decisively, unambiguously, very far.

Many propositions are won, they are brought in connection with one another in many chains of inferences, and Herodotus is clear that the propositions have to be brought in connection with one another in chains of inferences, and he is clear that the gaps in the chains of inferences have to be eliminated.

With Herodotus, with the *Histories*, history is an advance in the acquisition of knowledge in its entirety.

His younger contemporary Hippias compiles the list of victors at the Olympic games. The series of olympiads will become the foundation of chronology.

In the next generation is Thucydides.

With Thucydides the advance continues.

He proves that the greatest war is the greatest

war.

He finds the cause of the war.

He fixes chronology precisely.

And the *History* abounds in measurements. The belligerents in every action are numbered. The dates of the foundations of the cities in the west are established. Power is measured.

Proof, the cause, chronology, and measurement are advances.

With Thucydides, with the *History*, however, history is not an advance in the acquisition of knowledge in its entirety.

The *History* rests on the presumption of decisive importance of eyewitnessing.

Its scope is restricted severely in time and in space.

It is the history also of the present.

On any one of these three presumptions singly, eyewitnessing, restriction of scope, the present, the *Histories* of Herodotus cannot be attempted. Never mind achieved. Never mind on all three jointly.

The *History* also abounds in rhetoric and fiction.

Not just the stories which the historian examines, not any longer, pose the question, did it happen, or did it not happen? The history written by the historian now itself also poses the question, did it happen, or did it not happen?

None of these developments is, or can be, an advance in the acquisition of knowledge.

Eyewitnessing is not propositions. Not without reasoning from what is seen to what is unknown. Eyewitnessing by itself is a barrier before reasoning from what is seen to what is unknown.

Restriction of scope is a barrier to generality, including, most particularly, to proof and the search for causes.

The present, more even than the future, is the refuge of all vested interests, and thus a most formidable barrier before the search for truth.

And rhetoric and fiction, did it happen, or did it not happen? It did not happen, and it did not happen deliberately.

And none of these developments will go away. History will continue to be a search for truth. But against all these developments now, too.

Ctesias writes a book of strange princes and stranger beasts. Did it happen? It did not happen.

With Philistus local history comes into its own, restricted now to one locality, now to another, *ad hoc* and at will.

Lavishing praise and lavishing abuse, also *ad hoc* and at will, also comes into its own.

Xenophon writes the *Greek history*, continuing Thucydides. It is general and, implicitly if not explicitly, analytic, and with the *Greek history* history is a search for truth.

Xenophon writes also his own war, the first *in extenso* corroboration of Thucydides's proposition: men are liable to think that the war which they fight is the greatest of all wars.

Xenophon writes also the treatises with which history becomes a vehicle of virtues and education.

Ephorus writes the *Histories*. It is general, grounded in geography, the history of all Greeks and barbarians, and with the *Histories* history is a search for truth.

Next is Aristotle, and Aristotle is a very great advance.

Aristotle writes *The constitution of Athens*.

Herodotus has analyzed the past into the states, once great now small and now great once small. History is the investigation of the development of the states.

Thucydides has analyzed the past into the greatest war, and hence into wars. History is the investigation of the development of the states, and the wars.

Aristotle has analyzed the past into a constitution, and hence into constitutions. History is the investigation of the development of the states, the wars, and the constitutions.

More important still, Aristotle reviews his predecessors systematically not less than 16 times. He has convoked formally the council of our predecessors so that we can adopt the sound in what they have said and avoid the erroneous.

He has collected the materials of the history of the acquisition of knowledge, and established its most important facts.

With Theopompus writing ever more about ever less begins.

The searching of souls as they are searched in Hades also begins.

With the writing of the deeds of Alexander history becomes an industry.

There are also Aristotle's students.

Aristoxenus writes on our predecessors.

Dicaearchus writes on our predecessors.

And Theophrastus writes the history of physics.

And Eudemus writes the history of mathematics.

And these are a very great advance in the acquisition of knowledge.

The acquisition of knowledge is the winning of propositions, bringing them in connection with one another in chains of inferences, extending the chains, and narrowing the gaps in the chains.

The more the acquisition of knowledge advances, the more the further advance will depend on the earlier. Winning more propositions – on the propositions won earlier. Bringing them in connection with other propositions – on the connections established earlier. Extending the chains – on the earlier chains. And narrowing the gaps – on the earlier narrowings of the gaps.

The history of the acquisition of knowledge has to make this explicit. It has to win propositions about the propositions that have been won, and connect in chains of inferences the chains of inferences in which the propositions have been connected.

The history of the acquisition of knowledge is acquisition of knowledge at its pristine.

So history is the investigation of the development of the states, the wars, and the constitutions. It is the investigation also of the acquisition of knowledge.

In the three-odd centuries from Ashurbanipal to Alexander, then, the development of history is a very great advance in the acquisition of knowledge.

But it is not an advance in its entirety. The presumption of decisive importance of eyewitnessing, the restriction of scope, writing about the present, rhetoric and fiction, local history, praise and abuse, writing one's own war, making history a vehicle of virtues and education, writing ever more about ever less, searching souls as they are searched in Hades, making history an industry, are not advances.

And it should not be too difficult to assign a cause to these developments.

Philosophy is theoretical and practical. Theo-

retical philosophy is the search for truth. Practical philosophy is a search for action. Theoretical philosophy is physics and mathematics. Practical philosophy is politics and ethics.

With the first philosopher theoretical philosophy begins, physics and mathematics.

It was a great step in science when men became convinced that they must begin by asking not whether a thing is good or bad, noxious or beneficial, but of what kind it is, and how much there is of it.

Throughout these centuries theoretical philosophy advances very greatly.

And from Herodotus's *Histories* through Theophrastus's and Eudemus's histories of physics and mathematics the very great advance of history is substantially and essentially part of the advance of theoretical philosophy, of physics and mathematics.

It is a singular feat of analysis of Theophrastus's and Eudemus's, too, that they wrote the histories of physics and mathematics, and not of politics and ethics.

Practical philosophy begins four to five generations into the development of philosophy. The philosophers make the first attempts to speak about the state four generations into the development of philosophy. At the same time they begin teaching. They began teaching rhetoric. And ethics begins five generations into the development of philosophy.

Socrates said: earth and air and other such things are not the true causes of things; the true cause of things is what is for the best.

Not of what kind it is, and how much there is of it. Good or bad, noxious or beneficial.

Socrates undertook also to teach you, all of you.

The cause is the organism. Reasserting itself against the acquisition of knowledge.

And of all those developments in history which are not an advance the cause is the same, the organism. Reasserting itself against the acquisition of knowledge. History is not of what kind it is, and how much there is of it. History is good or bad, noxious or beneficial.

Of most of those developments – the presumption of decisive importance of eyewitnessing, the restriction of scope, writing about the present,

rhetoric and fiction, local history, praise and abuse, writing one's own war, making history a vehicle of virtues and education, searching souls as they are searched in Hades – it is the cause as directly, clearly and distinctly, as it is of ethics. Of the rest it is the cause, if not so directly, yet clearly and distinctly, too. Writing ever more about ever less begins as the complement of the searching of souls as they are searched in Hades. History becomes an industry not with the great deeds of Alexander and not with his real deeds, it becomes an industry with his petty deeds and with his fictional deeds.

A cause is an object followed by another, and where all the objects similar to the first are followed by objects similar to the second; or, in other words, where, if the first object had not been, the second never had existed.

If the organism had not been, those developments never had existed.

In the three-odd centuries from Ashurbanipal to Alexander, also, the relation of the past steered by him is completed.

This has also begun in the previous one century-odd.

The Yahwistic document relates the tribulations of Abraham, Isaac, Jacob, and Joseph, then those also of Moses, earlier those also of the first man, and those also of the man who survived the flood. The succession of the patriarchs is traced from Abraham, begetting by begetting, back to the first man. And the record of the tribulations of Abraham, Isaac, Jacob, and Joseph, and then also of Moses, is steered by him in detail and systematically.

With the first prophetic books the past becomes his plan. First, Assyria is the rod of his anger, second, a king will be born and great will be again the domain of the throne of David.

There is no inkling of time reckoning. There is no succession from Joseph to Moses, no succession from Moses to David, no succession from David to the rod of his anger.

And in these three-odd centuries, now, *Deuteronomy*, *Joshua*, *Judges*, *Samuel*, *Kings*, and the Priestly code supply these, and more.

Deuteronomy relates more systematically the event of the Mosaic lawgiving. It also adds, just before the event of the lawgiving, the event of the

beginning of the conquest of the promised land.

Joshua, Judges, Samuel, Kings begins where *Deuteronomy* ends. And it relates events from the Mosaic lawgiving through the fall of Judah.

It relates the conquest of the promised land by Joshua in great detail and very systematically. Then the tribulations of the succession of judges from Joshua to David in less detail but very systematically as well. Then the glory days of David and Solomon again in great detail and very systematically. And then the tribulations of the succession of kings of Israel and Judah again in less detail but very systematically as well.

There is no gap between Moses and David any longer. No gap between David and the rod of his anger either. The succession from Moses to David is established judge by judge, the succession from David to the rod of his anger prince by prince.

There is time reckoning now as well. All events from Moses to the rod of his anger are numbered.

The Priestly code ends where *Deuteronomy* begins. It relates events from the creation of the world through the Mosaic lawgiving, incorporating the Yahwistic document into itself.

It relates the creation of the world in more detail and more systematically. The events after creation through Joseph it lets the document tell. It does not relate events from Joseph to Moses either. The following event of the exodus, however, preceding immediately the event of the lawgiving, it relates in the greatest detail and most systematically.

It also supplies all events with a superabundance of numbers. Time reckoning now begins with the 1st day.

Deuteronomy relates events – on the time reckoning of *Joshua, Judges, Samuel, Kings* – eight and a half centuries before the time of writing. *Joshua, Judges, Samuel, Kings* relates events – on its own time reckoning – beginning nine centuries before the time of writing. The Priestly code relates events – on its own time reckoning, as it extends that of *Joshua, Judges, Samuel, Kings* – beginning three and a half millennia before the time of writing and ending one millennium before the time of writing.

Everywhere sources are nothing but them-

selves.

If history is a search for truth, this past steered by him is not history.

This past steered by him is not a search for truth. It is the means of building the first church.

To this end, these historians have not just annihilated the remotest inkling of truth. In these historians, from one to the next, fabrication is steadily more decisive steadily more deliberate.

And the last of them, *Chronicles, Ezra, Nehemiah*, rounding off the relation of the past steered by him, does take the ultimate step.

It relates the contemporary event of the great assembly under Ezra. The source is again nothing but itself. This historian, however, appreciates the importance of official documents. And fabricates not fewer than four of them.

This past steered by him, impossible as it is, and impossible as it should be, becomes possible, first, by relentless writing. This is unprecedented. Second, by restricting explicitly, and severely, those to whom the writing is addressed. This is also unprecedented. Third, by isolating, also explicitly, also severely, the writing and those to whom it is addressed, both, from everything without. And this is also unprecedented.

In these centuries the church remains very small. Confined to its congregation, the past steered by him remains unaware of history and uninformed by history. History remains unaware of the past steered by him and uninformed by the past steered by him. Some centuries on, this will change.

Nor is it an accident that those developments in history, which are not an advance in the acquisition of knowledge – the presumption of decisive importance of eyewitnessing, the restriction of scope, writing about the present, rhetoric and fiction, local history, praise and abuse, writing one's own war, making history a vehicle of virtues and education, writing ever more about ever less, searching souls as they are searched in Hades, making history an industry – those developments are, one and all, detectable in the past steered by him.

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In these three-odd centuries politics – political philosophy – also begins.

And very little of the development of politics is an advance in the acquisition of knowledge.

Politics begins four-odd generations into the development of philosophy with Protagoras.

Protagoras tells a story.

At first there were no cities, men did not have the art of government or the art of war which is a part of the art of government. So Zeus ordered Hermes to give men shame and justice, and to distribute them so that all have a share. For a city can never come to be if only a few have shame and justice.

Protagoras has discovered that the state poses the fundamental problem of its beginning. How and why the state comes to be out of the not state.

The problem is formulated, to the degree to which it is formulated, with a story. So it is also solved. The state comes to be out of Zeus. And it begins with shame and justice.

Hippodamus builds the best state in speech.

Hippodamus has discovered that the state poses the problem of building it better than it is. And he has undertaken to solve the problem conclusively, by building the best state, in speech.

Antiphon says that the law is by convention, not by nature.

Thrasymachus says that the rulers make the laws, make them useful to themselves, and proclaim what they have made just.

He also distinguishes monarchy, aristocracy, and democracy. In the previous generation Herodotus has first noted the three forms of government.

Lycophron says that the law is only a convention, men's promise to one another to be just, and has no power to make the citizens good or just.

Another writer builds the best state in speech.

Critias says that at first men lived like beasts, next laws were established so that justice may rule mankind, and the laws held men back from doing evil in the open, but not from doing it in secret, so a wise man discovered the fear of gods, to frighten evildoers even in their thoughts.

Xenophon writes the *Cavalry commander*, the first treatise concerned with the art of war.

And two generations after it has begun, politics comes into its own with Plato.

Before Plato, then, the beginnings of politics

are small.

The philosophers have discovered the fundamental problem of the beginning of the state. But they have not formulated the problem very explicitly. They have begun also the attempts to solve the problem. But not very explicitly either.

They have begun identifying the elements of the state. The art of government with its part the art of war. The law. The fear of gods. They have begun identifying the relations of the elements. The rulers make the laws. The forms of government are monarchy, aristocracy, and democracy. The laws are first, then the fear of gods. But it is all still a few disjointed propositions. Neither are the propositions many, nor have the philosophers begun the attempts to connect the propositions in longer chains of inferences. Nor do the labors of the philosophers indicate that they are building on one another too much.

The dominating concern is justice. It is explicitly the central concern of not fewer than four of these philosophers.

The philosophers have also not only discovered that the state poses the problem of building it better than it is. They have undertaken to solve this problem conclusively, by building the best state, in speech. And already the best state is not one, but two. Two best states.

What the philosophers have not discovered is that there is the state, in fact, the real state. This is at the time, too, when the state, the real state, is at its greatest. The great kings have built the greatest empire. Sparta has built the dominant land power. Athens has built the first maritime empire. It has built also democracy. In all that the philosophers have said about the state there is no hint of any particular state. What the relation of all that the philosophers have said about the state to the real state is, if there is such a relation, is entirely implicit.

And so politics comes into its own with Plato as ethics.

Plato writes the *Republic*.

He asks explicitly, what is justice? and answers the question.

And he builds the best state. It is the third best state.

The central concerns of the treatise are four. Who should rule. Who should do what. Who

should own what. And education.

There is no hint of any particular state. But what the relation of what the philosopher says about the state to the real state is is explicit. You will not find a state as great as ours among the states of either the Greeks or the barbarians.

Plato writes also the *Laws*, to rebuild the best state. The best state being the best, everything is the same.

Aeneas Tacticus writes *On the defense of fortified positions*, the second treatise concerned with the art of war.

Aristotle writes the *Politics*.

It divides sharply into two parts.

In books II-VIII Aristotle investigates the best state, then builds it. It is the fourth best state. The central concerns are who should rule, who should do what, who should own what, and education.

With book I, however, at long last, two and a half centuries into the development of philosophy, one century-odd into the development of politics, the investigation of the state begins.

It is not burdened with the particulars. But it is not burdened with the best state either. It is burdened substantially less with virtues and vices. It is not burdened with justice, in particular, at all. And it is not burdened with education at all.

Aristotle thus discovered the three fundamental problems which the state poses. One, to explain the state is to begin with the not state, or what is the same, to begin with what is first by nature. Two, it is to end with the state, and that is, the real state, not the best. Three, it is to show how and why the state comes out of the not state, it is to bridge the abyss between what is first by nature and the state.

He did not solve any of the three problems well.

But these cannot not be the fundamental problems which the state poses.

One, because everything is by nature. Two, because, as the propensity to investigate a fictional state in place of the real shows, what the state is is very difficult. And if one and two, three.

Aristotle is clear also that all three are problems of development.

There is this other result, too.

Politics is the master art, for even when the

end is the same for man and for the state, that of the state is greater and more complete.

Politics is not a part of ethics. Ethics is a part of politics.

The beginning is the most difficult.

And why the beginning of politics, if politics is to be part of the acquisition of knowledge, has been especially difficult, should not be especially difficult to explain.

With Socrates: earth and air and other such things are not the true causes of things, the true cause of things is what is for the best.

With Plato: knowledge and truth are good, but the good is higher, and if we do not know this, even the most perfect knowledge of anything else is of no use to us.

So you will not find a state as great as ours among the states of either the Greeks or the barbarians.

Nor need you exert yourself to examine the states of either the Greeks or the barbarians.

The cause is the same.

dlxiv

And to collect explicitly the steps of advance in the acquisition of knowledge indicated by the development of the state, inclusive of the law, of religion, and of custom, and the development of history, inclusive of geography, and of political philosophy, in the three-odd centuries from Ashurbanipal to Alexander, the steps are these.

Deuteronomy, with which the law seeks and achieves obedience, the Hebrew writings become effectual, and the first church begins.

Draco, who frames the constitution of Athens, giving the franchise to all men who arm themselves.

Necho, who dispatches a fleet of Phoenicians to circumnavigate Africa.

The fleet of Phoenicians, who circumnavigate Africa.

Solon, who reframes the constitution of Athens, extending the franchise, seating all men in the popular assembly.

Anaximander, who draws the first map of the earth.

Joshua, Judges, Samuel, Kings, with which the relation of the past steered by him becomes the ground of obedience to the law, and the first

church is established more firmly.

Cyrus, who conquers Media, Lydia, and Babylon, builds the greatest empire, campaigns across 3 100 km, and reaches the Amu Darya.

Pisistratus, with whom democracy is established firmly in Athens, and expansion in the Aegean begins.

Anaxandridas and Ariston, with whom Sparta becomes the dominant power in the Peloponnese.

Cambyes, who conquers Egypt, expands the greatest empire, and leads an expedition beyond the fifth cataract.

Mago, with whom the rise of Carthage begins.

Polycrates, who builds a navy of 100 fifty-oared ships, and first tries to master the sea.

Darius, who expands the greatest empire, campaigns across 4 400 km, organizes the peoples of the empire into 20 satrapies, opens the country north of the Black Sea, and dispatches an expedition to open the Indus and the Indian Ocean.

Hecataeus, who describes 300-odd localities, and draws the second map of the earth, determining distance and orientation.

Cleomenes, with whom Sparta becomes the dominant power among the Greek states.

Cleisthenes, who reframes the constitution of Athens, extending the franchise, making residence alone the qualification for citizenship.

Miltiades, who wins at Marathon with the first anticipation of tactics.

The Priestly code, with which the law is brought under a priesthood, and the first church is established yet more firmly.

Xerxes, who leads 1 700 000 men and 1 207 ships, consolidates the greatest empire, and dispatches an expedition in the Atlantic.

Themistocles, who leads 380 ships at Salamis, and wins with the first anticipation of tactics at sea.

Pausanias, who leads 110 000 at Plataea, and wins the fairest victory.

Pericles, under whom Athens dominates 200 cities, and becomes the schoolmistress of all Greece.

The Twelve tables, which are the source of all public and private law.

Artaxerxes, under whom *pax Persica* flourishes.

Herodotus, who writes the *Histories*.

Ezra, who convokes the great assembly, completing the building of the first church.

Hippias who compiles the list of victors at the Olympic games.

Lysander, who completes the victory of Sparta in the greatest war.

Thucydides, who writes the *History*.

Camillus, with whom the rise of Rome begins.

Epaminondas, who discovers tactics.

Eudoxus, who measures the radius of the earth, and measures orientation.

Xenophon, who writes the first treatise on the art of war.

Licinius Stolo and Sextius Lateranus, who pass the laws removing all legal disabilities on any citizens, and creating the magistracy of a praetor to supervise the implementation of the law.

Philip, with whom troops become a systematically built weapon, who advances tactics, and conquers the Balkan peninsula.

Alexander, who advances tactics greatly, conquers the greatest empire in 4 years, expands the greatest empire, and begins the deliberate and systematic mixing of its peoples.

Aristotle, who measures the known earth, writes *The constitution of Athens*, convokes the council of our predecessors, and with whom the investigation of the state begins.

Pytheas, who opens the Atlantic coast north to Britain.

Dicaearchus, who measures the Mediterranean, and improves on the measurement of the radius of the earth.

Theophrastus, who writes the history of physics.

Eudemus, who writes the history of mathematics.

To continue also the tabulation of the distribution of the steps, continuing to count centuries with respect to the year of birth assigned to the first prince, 3040, the distribution is,

740- 641	8,
640- 541	15,
540- 441	13,
440- 341	12.

4 of the 8 steps in the first line have been collected earlier, from the one century-odd from

2014 The method of history does not differ from the method of physics at all
Tiglath-pileser III to Ashurbanipal.

**The not quite three and a half centuries
from Alexander to Augustus**