

DEMOCRITUS' TROJAN ERA AND THE FOUNDATIONS OF EARLY GREEK CHRONOLOGY

Abstract

Democritus is cited for the statement that he published his *Diakosmos* 730 years after the fall of Troy. The year of publication was identified either by Democritus himself or by a later chronographer as the year of Athenian archon Ariston (421/0 BC). The Trojan era referred to by Democritus became authoritative. The Hellenistic chronographers, however, took the date of the *Diakosmos* as the year of Ariston, who was the archon in 454/3 BC. Thus the Trojan era was shifted by 33 years backwards (to 1184/3 instead of 1151/0 BC). It follows that a good number of dates known to us from the ancient chronographic vulgate differ by 33 years or so from the corresponding dates suggested by early Greek historians and chronographers. The reading "Ariston" was possibly a conscious choice rather than a simple mistake, since the chronology of Solon was pushed back by a third of a century already by the time of Aristotle, and that contributed to further chronographic misconceptions. The Trojan era of Democritus originated at the formative but not initial stage of Greek chronography. This era already reflects the tendency of Greek chronography to stretch out the historical past.

1

We shall begin by quoting at length the much debated passage of Diogenes Laertius (9. 41), devoted to the chronology of Democritus:

Γέγονε δὲ τοῖς χρόνοις, ὥς αὐτός φησιν ἐν τῷ Μικρῷ διακόσμῳ, νέος κατὰ πρεσβύτην Ἀναξαγόραν, ἔτεσιν αὐτοῦ νεώτερος τετραράκοντα. συντετάχθαι δὲ φησι τὸν Μικρὸν διάκοσμον ἔτεσιν ὕστερον τῆς Ἰλίου ἀλώσεως τριάκοντα καὶ ἑπτακοσίοις. γεγόνοι δ' ἂν, ὥς μὲν Ἀπολλόδωρος ἐν Χρονικοῖς, κατὰ τὴν ὀγδοηκοστὴν Ὀλυμπιάδα ὥς δὲ Θράσυλλος ἐν τῷ ἐπιγραφομένῳ Τὰ πρὸ τῆς ἀναγνώσεως τῶν Δημοκρίτου βιβλίων, κατὰ τὸ τρίτον ἔτος τῆς ἐβδόμης καὶ ἐβδομηκοστῆς Ὀλυμπιάδος, ἐνιαυτῷ, φησί, πρεσβύτερος ὢν Σωκράτους. εἶη ἂν οὖν κατ' Ἀρχέλαον τὸν Ἀναξαγόρου μαθητὴν καὶ τοὺς περὶ Οἰνοπίδην· καὶ γὰρ τούτου μέμνηται.

As regards chronology, he was, as he says himself in the *Lesser Diakosmos*, a young man when Anaxagoras was old, being forty years his

junior. He says that the *Lesser Diakosmos* was compiled 730 years after the capture of Troy. According to Apollodorus in his *Chronology* he would thus have been born in the 80th Olympiad, but according to Thrasyllus in his pamphlet entitled *Prolegomena to the Reading of the Works of Democritus*, in the third year of the 77th Olympiad, which makes him, adds Thrasyllus, one year older than Socrates. He would then be a contemporary of Archelaus, the pupil of Anaxagoras, and of the school of Oenopides; indeed he mentions Oenopides (R. D. Hicks' transl.).¹

The passage thus introduces two different points of view. The one is just given, the other is supported by abundant but indirect evidence (only part of which is reproduced in the quotation). Since Democritus gave the exact date for his treatise the disagreement between Apollodorus and Thrasyllus is striking. Modern scholars disagree too, and no immediate preference can be given to either version.

The third version appears in Diodorus. He makes Democritus die in Olympiad 90.1 = 404/3 BC at the age of ninety (14. 11. 5; T IV Luria),² which implies that Democritus was born in either 494/3 or 493/2 BC. According to Felix Jacoby, Diodorus' source knew that the *Lesser Diakosmos* had been composed "730 years after the fall of Troy". This number of years was subtracted from authoritative Eratosthenian era, resulting in 454/3 (1184/3 – 730) BC as the date for the *Lesser Diakosmos*. The composition of the *Lesser Diakosmos* was taken as Democritus' *akme* and hence, on the conventions of Greek chronography, his birth year was determined as 493/2 BC.³

Jacoby's interpretation is likely, but there is still something to call for our attention. On the version of Diodorus, Democritus' *akme* falls in the archonship of Ariston. On the version of Apollodorus, Democritus' *akme* falls in the archonship of Aristion. The two names are too similar to arise from a mere coincidence. It is natural to suppose that two divergent versions stem from the two different interpretations of the archon year corresponding to the Democritean "730 years after the fall of Troy".⁴

¹ Cf. D.L. 9. 34: Democritus "met Leucippus and, according to some, Anaxagoras, being forty years younger than the latter".

² Also Eusebius places Democritus' death in the 90th Olympiad.

³ Felix Jacoby, *Apollodors Chronik = Philologische Untersuchungen* 16 (Berlin 1902) 292 f.

⁴ The actual date of Democritus' birth need not concern us here. For the best discussion see Alexander Verlinsky, "The Date of Democritus' Birth in Apollodorus and Thrasyllus", in

Ἀριστίων is the *lectio difficilior* and therefore the more likely candidate for the original reference;⁵ we will find that other data point to Aristion's year (421/0) as well. In that case, the Democritean Trojan era is easily restored as $421/0 + 730 = 1151/0$, making 33 years difference with the Eratosthenian Trojan era. If, however, the *Diakosmos* was published in the year of Ariston, then the Democritean era was exactly the same as that adopted by Eratosthenes. We will shortly see that both conclusions are correct in their own way.

2

We need not decide here whether Democritus himself cited an archon year. But we may safely assume that his contemporary readers were able to relate his "730 years after the fall of Troy" to a certain point in time; otherwise his reference would have been valueless.

There were many dates for the Trojan war proposed in antiquity. Democritus' Trojan era is of special interest because it comes from the epoch of the formative stage in Greek chronographic tradition.

To be sure, the remarks found in Herodotus are incompatible with the Trojan era of Democritus. Hdt. 2. 100 ff. makes Proteus rule Egypt seven

MOYSEION. *Festschrift Alexander Zaicev* (St Petersburg 1997) 100–127 [in Russian]. Verlinsky argues that neither Apollodorus nor Thrasylus in fact knew that date, and this conclusion is most probably correct. He, further, convincingly rejects Jaap Mansfeld's proposal to get rid of Democritus' Trojan era by assuming a scribal error and a subsequent series of confusions – see Jaap Mansfeld, "Apollodorus on Democritus", in his *Studies in the Historiography of Greek Philosophy* (Assen 1990) 307–12; Verlinsky, 114. It is also the merit of Verlinsky to draw attention to the similarity of the archon names for 454/3 and 421/0 BC. He made, however, no use of his observation. Moreover, Verlinsky (116; 121) insists on taking the whole 80th Olympiad (460/59 – 457/6 BC) and not Ol. 80.1 (460/59) as the Apollodoran date for Democritus' birth. Hence he dates the *Lesser Diakosmos* to 421/0 – 418/7 BC. But here Verlinsky is mistaken. Ol. 80. 1 is confirmed not only by the related Apollodoran chronology of Anaxagoras (D.L. 2.7; cf. 9. 34; 41), but also by the standard synchronism of Democritus with Hippocrates; and Hippocrates is dated in his *Vita* to Ol. 80.1, as was pointed out already by Henry Fynes Clinton, *Fasti Hellenici* II (Oxford ³1841) on years 460, 435, 431, 357 BC.

⁵ The manuscripts of Diodorus (11. 86; 12. 75) give Ἀρίστων for archons of both 454/3 and 421/0 BC. The correct reading is given by Athenaeus (216 d; 218 d–e). The same person is called Ἀριστίων in *Ath. Pol.* 14 and Ἀρίστων in Plut. *Sol.* 30. Some scholars believe that Ἀριστίων, an Olympic victor mentioned by Pausanias (6. 13. 6), is the same person as Ἀρίστων of P.Oxy 222 – see Luigi Moretti, *Olympionikai, i vincitori negli antichi agoni olimpici* (Roma 1957), Accademia nazionale dei Lincei, Mem. Scienze morali, Ser. 8. Vol. 8. Fasc. 2, N 415.

generations before Psammetichus, which implies a date for the Trojan war in the 10th century BC.⁶ Hdt. 2. 145 assumes more than 800 years from his own day to the Trojan war. This direct statement suggests a date for the Trojan war in the middle of the 13th century BC. We are not informed about the Trojan era of Hellanicus. Nor does Thucydides say how many years elapsed from the Trojan war till his own day. He says, however, that the Dorians with the Heraclids conquered the Peloponnesus in the eightieth year after the capture of Troy (1. 12. 3). He also make the Melians say that their island was colonized by the Lacedaemonians 700 years ago (5. 112; cf. 5. 84 and also Hdt. 8. 48), that is, c. 1116 BC. Plut. *Mor.* 247 c–d connects the colonization of Melos with the war against the Helots. According to Ephorus (*apud* Strab. 8. 5. 4), this war was carried on in the reign of Agis son of Eurysthenes,⁷ that is, in the next generation after the Return and the third generation after the *Troika*.⁸ Thucydides' interval of 80 years between the *Troika* and the Return suggests that he followed a scheme which employed generations of 40 years. One may tentatively conclude that Thucydides' date for the Return was about $416 + 700 + 40 = 1156$ BC and that his date for the fall of Troy was c. 1236 BC. The correspondence, then, with Hdt. 2. 145 is either close or exact, and one naturally thinks about a common source used by both great historians.

The authors of the fourth century display a remarkable change of view. They seem to accept the chronology of Democritus.

Three passages in Isocrates allow us to see how the return of the Heraclids was dated in Athens about a generation after the publication of Thucydides' work. It was thought to have happened seven hundred years before the events of 371/0 and 370/69 BC, that is, the battle of Leuctra and the first invasion of Laconia by the army of Epaminondas (*Archid.* 12; *De pac.* 95; *Panath.* 204). Isocrates' date for the return of the Heraclids is thus either 1071/0 or 1070/69 BC. By adding 80 years (the interval separating the return of the Heraclids and the fall of Troy in both Thucydides and the later chronographic vulgate) to 1071 BC, one reaches 1151 BC. By subtracting 730 from 1151, one reaches the archon year of Aristion, 421/420 BC, which confirms our choice in favour of 421/0 BC as the date for the *Diakosmos*.⁹ A possible deviation of one year is of no significance in such a case.

⁶ Cf. the last section of this paper.

⁷ Another version of events is represented in Pausanias (3. 2).

⁸ Conon (*FGrH* 26 F 1. 36. 2) dates the colonisation of Melos in the third generation after the Return. I suspect the confusion of two chronographic epochs.

⁹ I omit *Lesser* since "it certainly was not Democritus who referred to his book as *Little* in order to distinguish it from Leucippus' *Great World-Order*" – Mansfeld, *Op. cit.* (n. 4), 312.

Ephorus apparently dates the return of the Heraclids precisely as his teacher, Isocrates, did. According to Clement (*Strom.* 1. 139), Ephorus made 735 years elapse between the return of the Heraclids and Alexander's crossing to Asia (335/4 BC). However, Diodorus (16. 76. 5), while apparently citing Ephorus, gives the length of time between the return of the Heraclids and the siege of Perinthus (340/39 BC) as "about 750 years". The majority of scholars prefer the testimony of Clement, which is probably correct. They emend accordingly the figure cited by Diodorus, which is probably misleading.

The passage of Clement is an important source for the ancient eras of both the *Troika* and the Return. It is worth citing at length.

Εἰσὶ δὲ οἱ ἀπὸ Κέκροπος μὲν ἐπὶ Ἀλέξανδρον τὸν Μακεδόνα συναγούσιν ἔτη χίλια ὀκτακόσια εἴκοσι ὀκτώ, ἀπὸ δὲ Δημοφῶντος χίλια διακόσια πεντήκοντα, καὶ ἀπὸ Τροίας ἀλώσεως ἐπὶ τὴν Ἡρακλειδῶν κάθοδον ἔτη ἑκατὸν εἴκοσι ἢ ἑκατὸν ὀγδοήκοντα. ἀπὸ τοῦτου ἐπὶ Εὐαίνετον ἄρχοντα, ἐφ' οὗ φασιν Ἀλέξανδρον εἰς τὴν Ἀσίαν διαβῆναι, ὥς μὲν Φανίας ἔτη ἑπτακόσια δεκαπέντε, ὥς δὲ Ἐφορος ἑπτακόσια τριάκοντα πέντε, ὥς δὲ Τίμαιος καὶ Κλείταρχος ὀκτακόσια εἴκοσι, ὥς δὲ Ἐρατοσθένης ἑπτακόσια ἑβδομήκοντα τέσσαρα, ὥς δὲ Δοῦρις ἀπὸ Τροίας ἀλώσεως ἐπὶ τὴν Ἀλεξάνδρου εἰς Ἀσίαν διάβασιν ἔτη χίλια. ἐντεῦθεν ἐπὶ Εὐαίνετον τὸν Ἀθηναῖον ἄρχοντα, ἐφ' οὗ θνήσκει Ἀλέξανδρος, ἔτη ια'.

The inaccuracy in Clement's passage can be seen from the fact that it subsequently places both Alexander's crossing and Alexander's death in the archonship of Euainetus. Now the archonship of Euainetus (335/4 BC) marks Alexander's crossing to Asia, and it was a chronographic epoch for those who, as Douris, assumed 1000 years between the *Troika* and its imitation by Alexander. Timaeus seems to have adhered to this scheme too (see below, section 4). As to Cleitarchus, he was a historian of Alexander. The association of the expedition of Alexander with the Trojan war was topical, but it is not easy too see any relation of Alexander's crossing to Asia to the return of the Heraclids. Clement apparently confused the Return and the *Troika*. If that was the case, the figure stated by Clement, 820 years between Alexander and the *Troika*, is easy to explain. Pausanias (1. 11. 1) cites a genealogy for both Pyrrhus and Alexander in which there are twenty generations between the *Troika* and Alexander. $20 \times 40 = 800$. Alexander was twenty years old at the beginning of his reign: hence 820. If Cleitarchus' starting point was indeed Alexander's crossing, then his date for the *Troika* was either 1155/4 or 1154/3 BC. We shall see (section 7) that 1154/3 BC is nothing but another version of the Democritean Trojan era.

To continue our survey of Clement's data, Ephorus ended his work with the siege of Perinthus. Alexander's crossing was not his chronographic epoch. Was it such for Phainias or Eratosthenes? The case of Eratosthenes is illuminating. Scholars unanimously delete τέσσαρα in order to reconcile Clement's assertion with the Eratosthenian Trojan era. This works arithmetically, but does not convince philologically. One is likely to lose τέσσαρα, but not to invent it. I suggest, therefore, that 774 years cited by Clement mark in fact another chronographic epoch related to Alexander. This epoch appears in St Jerome correctly under Ol. 112.3 = 330/29 BC: "Regnum Persarum destructum est. Alexander regnat Asiae anno regni sui VII". One can see that Clement, who was after all a Christian polemist and not a student of Greek chronography, unified and simplified different kinds of reference. One has, therefore, to bear in mind the possibility that also in the cases of Ephorus and Phainias Clement's source cited in fact some other chronographic epoch related to Alexander, that is, either the beginning of Alexander's reign (336/5 BC) or his birth (356/5 BC).¹⁰ For Ephorus, the latter harmonizes the testimonies of both Clement and Diodorus (356/5 + 735 is practically the same as 340/39 + "about 750"), but I do not think that this is a proper solution.

What was Ephorus' method? A commonly accepted view is that of Ed. Meyer: "Von Pausanias † 469 v. Chr. bis auf Aristodemus und seine Brüder, die Führer der dorischen Wanderung, sind, beide eingeschlossen, im Heraklidenstammbaum 18 Generationen = 600 J. Es ist wohl zweifellos, dass Ephoros so gerechnet hat".¹¹

Ed. Meyer has in mind the genealogies of Spartan kings. His calculation is correct, but the particular assumptions that underlie it are very problematic. It remains unclear why the death of Pausanias should have been used by Ephorus as the starting point for his calculation. The event took place a good hundred years before his work, and Pausanias was not even a Spartan king. The assumption that Aristodemus was included in the calculation has very little support in ancient chronographic tradition; it was the reign of Eurysthenes and Procles that constituted the chronographic epoch.¹² I have to conclude that the interpretation suggested by Ed. Meyer is untenable.

¹⁰ Both epochs are attested in our sources. Eusebius had special entry for the birth of Alexander. The beginning of Alexander's reign as a chronographic epoch is implied in the *Suda* s. v. Ἀριστόξευος.

¹¹ Ed. Meyer, *Forschungen zur alten Geschichte* (Halle 1892) I, 178 f.

¹² It was so in Eratosthenes, Apollodorus and Eusebius. Ephorus certainly called Eurysthenes and Procles the founders of Sparta (Strab. 8. 5. 5; 8. 8. 5; 10. 4. 18; *FGrH* 70 F).

Scholars agree that the date for the Return attributed by Clement to Ephorus is practically the same as the date for the Return in Isocrates. The two must have a common foundation. Such is not, of course, the death of Pausanias but rather the death of Cleombrotus (380–371 BC), who fell at Leuctra. He was the 21st in the succession of the Agidae. Agesilaus (399–360 BC) was either the 19th or the 20th (with king Soos, who is sometimes included in the list) in the succession of the Eurypontidae. In either case it was natural to assume the length of 20 generations for the period of Spartan glory.¹³ According to Isocrates, the period covers 700 years. 700 divided by 20 makes 35, that is, a reasonable estimate of the length of a generation for chronographic purposes.

A date for the Return by 20 years earlier, in 1091 or 1090 BC, can be now explained as resulting from the use of 36-years' generations. A passage from Plutarch speaks in favour of such an approach. "Epaminondas entered Laconia with his allies... For a period of no less than six hundred years the Dorians had been living in Lacedaemon, and this was the first time in all that period that enemies had been seen in the country" (*Ages.* 31; Bernadotte Perrin's transl.). A minimal estimate cited by Plutarch, 600 years, apparently reflects the use of 30-years' generations. It is hardly a matter of coincidence that we have three different estimates of the interval between the return of the Heraclids and the collapse of Spartan glory (720, 700, 600 years) and all they can be neatly interpreted as the length of time covered by 20 generations.

I suppose, therefore, that the testimony of Diodorus reflects a genuine tradition, possibly that of a canon published to illustrate (and *de facto* replace?) the spacious work of Ephorus. It can be argued, perhaps, that it was Clement who depended on such a canon or a similar source. But it is of little significance for the present purpose whether Ephorus' date for the Return was 1091/0 (1090/89) or 1071/0 (1070/69) BC.¹⁴ It is also of little signi-

Some authors explicitly say that Aristodemus died before the Return (Paus. 3. 1. 6; Ps.-Apoll. *Bibl.* 3. 8. 2). Hdt. 6. 52, it is true, says that it was Aristodemus who brought the Spartans to the land where they now dwell, but he emphatically contrasts this view to the views commonly accepted among the Greeks.

¹³ Not 21. Agesilaus was the most important person in Greek politics of that time, and contemporary scholars would have taken into consideration first of all *his* predecessors.

¹⁴ Jacoby, who does not see the relation of Ephorus' chronographic scheme to the events of 371/0 and 370/69 BC, chooses 1069/8 BC. This is hardly appropriate, though it is interesting that Diodorus (15. 62 sqq.) dates the first invasion of Epaminondas to 369/8 BC. For the correct date (370/69 BC) see Karl Julius Beloch, *Griechische Geschichte* (Berlin; Leipzig 1923) III/2. 238.

ficance whether Ephorus adopted a 60-years interval between the *Troika* and the Return (such an interval is cited by Strabo 13. 1. 3 in a context which points to Ephorus) or retained the standard interval of 80 years.¹⁵ Was his date for the *Troika* 1131 (1130) or 1151 (1150) BC,¹⁶ one observes its deviation from the Trojan era of Herodotus (and Thucydides) and its essential agreement with the Trojan era of Democritus.¹⁷

According to the passage of Clement cited above, Phainias assumed 715 years between the return of the Heraclids and Alexander's crossing. We may suppose again that the original reference to Alexander pertained to either his birth (356/5) or the beginning of his reign (336/5). In view of what has been said in the preceding paragraphs, I find it very strange if Phainias' date for the Return differed from that in 1071/0 (1070/69) BC. On the most common assumption of an 80-years interval, his date for the *Troika* was then 1151/0 (1150/49) BC. I admit that a confusion of dates for Alexander's crossing and the beginning of his reign is, abstractly speaking, more likely than that which I suggest. If Phainias' date for the Return was indeed 1051 (1050) BC, it should be taken as that kind of scholarly refinement which is conspicuous already in Thucydides when he specifies that the Boeotians settled in Boeotia in the sixtieth year after the capture of Troy, while the Dorians occupied Peloponnesus in the eightieth (1. 12. 3).

One may think about a similar case of scholarly refinement when considering the Trojan era of Sosibius. This was equivalent to 1171/0 BC, that is, 20 years earlier than that of Democritus (*FGrH* 595 F 1).¹⁸ It probably

¹⁵ Note that $1071 (1070) + 80 = 1091 (1090) + 60$.

¹⁶ Not 1171 BC since this date is reserved for Sosibius. Nor was it c. 1136 BC (that is, $1069 + 66$ or 67) (*Apollodors Chronik*, 90, n. and *FGrH* 70 F 223 and on FF 173–75). Jacoby's effort to show that Ephorus counted three generations per century depends on never attested date for Lycurgus. An interval of 60 years between the Return and the *Troika* does not support Jacoby's (= standard) view too. Such an interval does not belong to the formula "three generations per century", but is compatible with 35-years generations ($60 + 10$ years of the war, divided by 2). Further, the equation "3 generations = 100 years" was apparently designed to calculate very long periods of time. This equation is most inconvenient for any number of generations which is not divisible by 3 and does not necessarily imply that one generation equals $33 \frac{1}{3}$ years or two generations equal either 66 or 67 years; such generations never appear even in Herodotus who explicitly cites the equation – see Fordyce Mitchel, "Herodotos' Use of Genealogical Chronology", *Phoenix* 10 (1956) 48–69, esp. 63 ff.; cf. Dion. Hal. *Ant. Rom.* 2. 59. 2.

¹⁷ The suggestion that Ephorus adopted the Trojan era of Democritus was once proposed by B. ten Brink, "Democriti de se ipso testimonia", *Philologus* 6 (1851) 589–92.

¹⁸ Cens. *DN* 21. 3, about the number of years elapsed between the fall of Troy and the first Olympiad: "Sosibius scripsit esse CCCXCV, Eratosthenes autem septem et quadrigentos,

stems from a date in 1091/0 BC for the Return. A date in 1171/0 BC seems to favour the conclusion that Ephorus' dates for the Return and the *Troika* were 1071/0, etc. and not 1070/69 BC, etc.

One can see that a good number of ancient authorities either accept the Democritean Trojan era (1151/0 BC, that is, 730 years before archon Aristion) or just slightly deviate from it. One concludes that the Trojan era of Democritus played a special role in the history of Greek chronography and was not just one of so many Trojan eras (as scholars have believed so far).

3

How did Democritus, or his source, arrive at a date for the *Troika* equivalent to our 1151 BC and why did this date become authoritative?

The Greeks employed two main tools to evaluate the length of their historical past. Both were based on counting generations. The earlier of the two used the recollections of Ionian noble families. Hecataeus could name his ancestors up to the sixteenth, who was a god (Hdt. 2. 143). Later on a more objective approach was developed, that is, the use of public records or official traditions, from which the lists of ruling persons or priests or Olympic victors were compiled. There was no unbroken official tradition, however, for such a remote past as the Trojan war. The best that the Greek chronographers were able to find were the traditions of the Spartan ruling houses. Both Spartan dynasties, the Agidae and the Eurypontidae, were believed to have been established by the Heraclids. There remained to count the Spartan kings and establish the length of the interval between the *Troika* and the Return. We are told that the Spartan king-lists provided the basis for Eratosthenian chronology of the early epoch of Greek history (Plut. *Lyc.* 1; *FGrH* 241 F 2). But already Herodotus cites the genealogies of Leonidas (7. 204) and Leotychides (8. 131), each of 21 names to Heracles inclusive.

Timaeus CCCCXVII, Aretes DXIII, et praterea multi diverse". Jacoby's later correction (1172/1 BC, "nicht 1171/0, wie ich *Ph. U.* 16 p. 89 n. 13 der vulgata nachgeschrieben habe" – on *FGrH* 595 F 1, n. 50) is by no means necessary. Jacoby proceeds (correctly) from 1184/3 BC as the Eratosthenian date and tries to make the whole passage self-consistent. But Censorinus combines different sources, and there were different ways in the antiquity to denote an interval between the *Troika* and the first Olympiad. Censorinus' source for the Sosibian era might easily have used the most natural definition of the interval in question, that is, the number of years between the fall of Troy and the first Olympiad, while his source for the Eratosthenian and other eras apparently defined the interval as the number of years between the fall of Troy and the year *preceding* the first Olympiad, for which see the section 8 of this paper.

One should not doubt that Democritus' Trojan era resulted from a genealogical scheme, but the exact method behind it is a matter of conjecture.

Whatever length of a generation (attested in the ancient chronographic tradition) one assigns to Hecataeus, one will easily find that the earliest possible date for the fall of Troy in Hecataeus cannot be earlier than the 11th century BC.¹⁹ Democritus did not follow the Hecataean tradition. It is reasonable to suppose, then, that the Trojan era of Democritus was based on counting Spartan kings.

Now 730 is an inconvenient number. It is not divisible either by 40 or 35 or 30. But if one recalls the famous formula cited by Herodotus (2. 143), that is, 3 generations cover 100 years, one may suppose that 730 is a rounded number for $733 \frac{1}{3}$ and that, accordingly, Democritus assumed 22 generations (3 per century) between the fall of Troy and publication of the *Diakosmos*.

The genealogies of Leonidas and Leotychides in Herodotus (7. 204; 8. 131) have 21 generations back to Heracles inclusive. Tlepolemus, a son of Heracles, fought at Troy. One has, then, to subtract one generation from 21, on the one hand, but to add two generations (for the period between Leonidas' death in 480 in the publication of the *Diakosmos* in 421 BC), on the other hand: $21 - 1 + 2 = 22$. Another Herodotus' remark agrees well with our calculation. He says that "in three generations, that is, in the time of Darius son of Hystaspes and Xerxes son of Darius and Artaxerxes son of Xerxes, more ills befell Hellas than in twenty generations before Darius" (6. 98; A. D. Godley's transl.). One thinks about 23 generations from Herodotus' time up to Heracles and about 22 generations up to the Trojan war. Herodotus and Democritus were roughly contemporaries. Everything points to the conclusion that Democritus' calculations were based on the same Spartan king lists as those cited by Herodotus.

One realizes now that the Democritean era was not arbitrary. It was built on the chronological conventions of his age, on those methods which were new and which won wide recognition in his own and subsequent times. It was suggested at the right moment. It was the epoch when Charon of Lampsacus composed the *Prytaneis of the Lacedaemonians*, Hellanicus of Mytilene worked on the list of priestesses of Hera at Argos, and Hippias of Elis compiled the list of the Olympic victors. Besides, the *Diakosmos* was published 10 years after the beginning of the Peloponnesian war and soon after the end of its first phase, which was thought at the time to be the end of the

¹⁹ See the last section of this paper.

war. Since the war between the Athenians and Lacedaemonians (later called Archidamian) lasted ten years (cf. Thuc. 5. 21), the comparison with the war at Troy almost suggested itself, and a reference to the *Troika* had the advantage of involving meaningful historical parallelism. It is not therefore surprising that the Trojan era of Democritus became authoritative.

4

Why, then, should Eratosthenes have deviated from an established tradition? One cannot think that Eratosthenes was in a position to know better than Democritus in which year Troy had been captured. It has been repeatedly asserted by ancients (Plut. *Lyc.* 1. 3; cf. Diod. 1. 5. 1) and moderns that Eratosthenes arrived at his date for the fall of Troy by working on the Spartan king list. This is a nonsense, I am afraid. Nobody knew in either the fifth or the third century BC the actual length of the reigns of earlier Spartan kings. Even the authentic succession, in the case of the Eurypontidae at least, was not preserved.²⁰ Greek chronographers arrived first at an evaluation of the length of time that had elapsed between the return of the Heraclids and this or that chronographic epoch. The only tool that they had at their disposal for doing this was counting generations. Only after that amount of time had been established, was this or that number of years assigned to each of the earlier Spartan kings and not the other way round.

So long as no plausible reason for Eratosthenes' departure from an authoritative tradition is indicated, it is reasonable to search for a particular explanation. The Trojan era of Eratosthenes differs from that of Democritus by 33 years. It is exactly the number of years separating the archonship of Aristion from the archonship of Ariston. The difference, then, is to be explained as simply due to two different readings of an archon's name. Eratosthenes did not mean to introduce a new Trojan era. We shall see that he

²⁰ There was no uniform tradition either about the return of the Heraclids or about the succession of earlier Spartan kings. It is surprising to learn, to begin with, that the founders of the Agidae and the Eurypontidae were not Agis and Eurypont, but Eurysthenes and Procles. The tradition of the Eurypontidae at least was not firmly established. Plut. *Lyc.* 1 and Paus. 3. 7. 1 place the king Soos, not mentioned by Herodotus, between Procles and Eurypont. On the other hand, while Herodotus names eight kings from Procles to Theopompus inclusive, there are only six in Eusebius' excerpt from Diodorus (105 f. Karst). Such a shorter chronology agrees well with three different assertions found in the chronographic tradition: 1) The first Olympiad took place in the tenth year of Theopompus (ibid.); 2) Lycurgus was the sixth after Procles (Strab. 10. 4. 18); 3) Lycurgus was active about the time of the first Olympiad (Aristotle in Plut. *Lyc.* 1).

meant rather to follow authoritative tradition. He read, however, Ariston instead of Aristion.

If the mistaken identification of the Athenian archon in whose year the *Diakosmos* had been published entered the Hellenistic chronographic vulgate, it is clear that the mistake originated with a work of a key figure in the Hellenistic chronographic tradition. One thinks about Eratosthenes, but his major predecessor, Timaeus of Tauromenium is, in fact, a more likely candidate.

Polybius characterizes Timaeus as an author "who compares the dates of the ephors with those of the kings of Lacedaemon from the earliest times, and the list of Athenian archons and priestesses of Hera at Argos with those of victors at Olympia" (12. 11. 11: W. R. Paton's transl.). Timaeus seems to have been the first to do such a work systematically and on a large scale. This means that *his* mistake was particularly likely to have affected the emerging synchronistic system. And that was indeed the case.

Let us consider first the Trojan era of Timaeus. According to the passage of Clement cited above (section 2), Timaeus' date for the return of the Heraclids was 820 years before Alexander's crossing to Asia, that is, 1154/3 or, perhaps, 1155/4 BC. A scholium on Apoll. Rhod. 4. 1216 cites Timaeus for the statement that Chersicrates colonized Corcyra 600 years after the *Troika*. There was an influential tradition which presented the colonization of Corcyra by Chersicrates as a by-product of Archias' expedition to Sicily where he founded Syracuse (Strab. 6. 2. 4). The date for the foundation of Syracuse implied in Thuc. 6. 3–4 is 734 BC or so. Hence one recovers Timaeus' date of the *Troika* as 1334 BC. This conclusion was already suggested by Ed. Meyer²¹ (and even before him) and recently argued in more detail by David Asheri.²² To be sure, in order to agree this conclusion with Clement one has to attribute to Timaeus an interval of 180 (and not of 80) years between the *Troika* and the Return. But such an interval is mentioned in the same passage of Clement. The date itself, 1334 BC = 1000 years before Alexander's crossing, is also mentioned by Clement. He attributes it to Douris, while he cites Cleitarchus and Timaeus for the opinion according to which there were 820 years between the Return and Alexander's crossing. But it is clear that the figures belong to the same construction: $820 + 180 = 1000$. This is all the more so that an interval of 180 years between the *Troika* and the Return has no support in any Greek tradition.

²¹ Ed. Meyer, *Op. cit.* (n. 11) 1, 317 f.

²² David Asheri, "Il millenio di Troia", in *Saggi di letteratura e storiografia antiche*, Biblioteca di Athenaeum 2 (Como 1983) 53–98, esp. 56 ff.

Censorinus (*DN* 21. 3), however, says that Timaeus made the *Troika* precede the first Olympiad by 417 years.²³ This would mean that Timaeus' date was by 10 years earlier than the Eratosthenian. The assertion of Censorinus is incompatible with those of Clement and a scholiast on the *Argonautics*. Without giving any strong reason, Jacoby prefers the testimony of Censorinus.²⁴ It is difficult to understand, then, why the Eratosthenian date completely dominated the field, while the date suggested by his major predecessor was abandoned, if the two dates differed just by ten years. But the main flaw of Jacoby's solution is, of course, its arbitrariness.

One can never know exactly how Censorinus' mistake arisen. It is not, however, inexplicable. The Trojan era of Douris and Timaeus employed the parallelism between the Trojan war and the expedition of Alexander. Alexander's crossing to Asia, that is, the outbreak of the new great war in Asia, was naturally chosen as a point of reference. The parallelism suggests that the Trojan era in question also pointed to the *outbreak* rather than the end of the Trojan war.²⁵ In the course of transmission of relevant information through a series of chronographic summaries up to Censorinus, the focus of interest could have been shifted, and there could have emerged an impression that the Trojan era of Timaeus was just by ten years (occupied by the war) earlier than the standard era. Censorinus' mistake could also be due to the confusion with the Trojan era of Thrasyllus (see below).

Whatever the origin of Censorinus' mistake, the main conclusion seems hardly in doubt: Timaeus accepted that clearly artificial construction according to which the Trojan war had been fought 1000 years before Alexander's crossing to Asia.

We are in a position to say something more about Timaeus' chronography. He asserted that both Rome and Carthage were founded in the 38th year before the first Olympiad (Dion. Hal. *Ant. Rom.* 1. 74. 1; *FGrH* 655 F 60), that is, 814/3 BC. Two conclusions can be drawn from this fact. First, the Trojan era of Timaeus was 1334/3 rather than 1335/4 BC.²⁶ Second, Timaeus employed generations of 40 years ($1334 - 814 = 520 = 40 \times 13$). The latter conclusion is confirmed by the standard (though pre-Varronian) interval of 433 (or 432) years between the *Troika* and the foundation of

²³ Cited above, n. 17.

²⁴ *Das Marmor Parium*, hrsg. u. erklärt von Felix Jacoby (Berlin 1904) 147; 162.

²⁵ Asheri, 57 is not cautious enough when he concludes that "Timeo data la presa di Troia nel 1334 a. C." (italics are mine).

²⁶ As Asheri, 59.

Rome, which also implies 13 generations between the two events, on the formula “three generations per century”.²⁷

A very interesting picture seems to emerge now. 880 years separate the Trojan era of Timaeus (1334/3 BC) from the archonship of Ariston (454/3 BC). Timaeus reckoned with generations of 40 years. Hence he assumed 22 generations between the *Troika* and the archonship of Ariston. But we saw (section 3) that Democritus almost certainly assumed the same number of generations between the *Troika* and the publication of the *Diakosmos*. Timaeus still follows him in this respect, and we realize that by choosing the reading Ἀρίστων Timaeus found a way to build an authoritative statement of Democritus into a new attractive construction. For a Hellenistic scholar, with a particular affection to the Pythagoreans (well-attested in the fragments of Timaeus), such a combination of research and numerology was not unnatural. Besides, the preference given by him to the wrong reading was prepared in part by a number of chronographic misconceptions adopted by his predecessors (see below, section 9).

What was, then, the contribution of Eratosthenes?

His generation was not so strongly under the spell of Alexander's extraordinary achievement as to adopt scholarly groundless construction placing the *Troika* 1000 years before Alexander. Once fashionable scheme was abandoned in favour of a solid ancient tradition. Eratosthenes just restored the view of Democritus! However, he inherited from Timaeus the mistaken reading of an archon's name.

5

It is generally agreed that Eratosthenes influenced essentially the *Chronicle* of Apollodorus, and this, in turn, became a basic work for the subsequent chronographic tradition down to Eusebius, who is our main source for ancient chronology.²⁸ The question arises of how it could happen that Apollodorus adopted, on the one hand, the Eratosthenian Trojan era and yet, on the other hand, an *akme* for Democritus in the year of Aristion and not of Ariston. Neither is difficult to account for. Eratosthenes was probably not very careful to justify his choice of a Trojan era; he just picked

²⁷ Similarly Asheri, 58. The reason why an interval of 432 years is repeatedly cited instead of expected 433 years I will discuss elsewhere.

²⁸ See Jacoby, *Apollodors Chronik* (as in n. 3); Alden A. Mosshammer, *The Chronicle of Eusebius and Greek Chronographic Tradition* (Lewisburg; London 1979; hereafter cited as Mosshammer).

up the traditional view. Apollodorus, therefore, would have no reason to see that the Eratosthenian era was based on a mistaken reading. But he would not have followed slavishly the Eratosthenian date for Democritus, that is, the publication of the *Lesser Diakosmos* in 454/3 BC. Citations from Apollodorus in Diogenes Laertius show that he had the reputation of being an expert in the dates of the *physikoi*. Now it was almost universally believed in Apollodorus' day that Anaxagoras had been prosecuted in Athens a few years before the outbreak of the Peloponnesian war and that he had died about the beginning of it. It is characteristic that Democritus' own estimation of the difference in age between Anaxagoras and himself emerges in the discussion of Democritus' chronology in Diogenes Laertius. If Democritus was "a young man when Anaxagoras was old", and Democritus published his *Lesser Diakosmos* in 453 BC, and Anaxagoras was still alive c. 431 BC, then, Apollodorus should have concluded, Anaxagoras lived a good hundred years, which was certainly not the case. Such a train of thought was, in fact, ill-founded,²⁹ but it was enough to correct a date of Eratosthenes in the particular case of Democritus.³⁰

There remains the problem of "how Apollodorus could quote Democritus for a Trojan epoch other than his own".³¹ But the problem is not so difficult to deal with. What Diogenes Laertius quotes under the name of Apollodorus is usually not the original poem but a chronographic canon based on it. One may, therefore, suppose that the citation from Democritus in "Apollodorus" came in reality from another source. And even such an assumption is not necessary. Apollodorus could simply overlook the fact that the Trojan epochs of Democritus and Eratosthenes were different. Since he did not have at his disposal our BC years or Eusebius' Abraham years, it was by no means easy for him to perform calculation and notice that there were 763 and not 730 years between the archonship of Aristion and the accepted date for the capture of Troy.

²⁹ According to Apollodorus, Anaxagoras lived 72 years and died in Ol. 88.1 = 428/7 BC (D.L. 2. 7). Eusebius places the death of Anaxagoras in the late 460s (462/1: the Armenian version; 460/59: St Jerome). This implies Anaxagoras' birth c. 533 BC, that is, by 33 years earlier than in Apollodorus. But 33 years is also the difference between the two competing dates for the publication of the *Diakosmos*. One may conclude that the two competing chronologies of Anaxagoras depend on the two competing dates of the *Diakosmos*. Hence neither of the two chronologies of Anaxagoras is likely to be authentic. A preferable date for Anaxagoras' birth is c. 518 BC, and the prosecution of Anaxagoras (if real) was launched by the enemies of Themistocles and not of Pericles (see my forthcoming paper on the subject).

³⁰ Note also that while Eratosthenes identified Pythagoras, the philosopher, with the Olympic victor of 588 BC (FGrH 241 F 11), Apollodorus dates Pythagoras to c. 532 BC.

³¹ Mansfeld, *Op. cit.* (n. 4), 308.

Nor was it easier for Thrasyllus who made an analogous mistake. We know that Thrasyllus dated Democritus' birth by ten years earlier than Apollodorus. But we also know that his Trojan era was by ten years earlier than the standard (and the Apollodoran) too (Clem. *Strom.* 1. 136 f.; *FGrH* 253 F 1). Thrasyllus procedure is more or less clear. Following the Peripatetic tradition, he made Democritus an older contemporary of Socrates and moved his birth by ten years, to 470/69 BC. Following the chronographic convention about one's *akme* (to place one's major achievement in one's fortieth year), he moved the publication of the *Diakosmos* accordingly, to 431/0 BC. Following the authoritative statement of Democritus, he moved accordingly the Trojan era as well. How he could overlook the fact that he got thus 763 and not 730 years between the *Troika* and the publication of the *Diakosmos* I have just explained.³²

It is remarkable that Democritus' statement about the time of the *Troika* was still authoritative for Thrasyllus in the first century AD. The fact that Diogenes Laertius cites this statement suggests that it remained authoritative not only for Thrasyllus. One may think that it was Eratosthenes who introduced Democritus' statement to the late Hellenistic chronographers.³³

6

Are there traces of Democritus' Trojan era and the related chronological system in the ancient sources handed down to us? There are many such, as we shall shortly see. It is appropriate, however, to make first a few remarks about the Greek way of reckoning and also typical distortions of traditional Greek dates in the process of their transmission down to us.

³² Hermann Diels, "Chronographische Untersuchungen über Apollodors Chronika", *RhM* 31 (1876) 31 suggests a reverse procedure for Thrasyllus. He believes that Thrasyllus assumed first for no obvious reason ("am irgend welcher Marotte") 1194/3 BC as the date for the fall of Troy and then moved Democritus' epoch accordingly. No interpretation involving *Marotte* is to be recommended. Jacoby, on *FGrH* 253 F 1, practically admits his failure to grasp Thrasyllus' procedure.

³³ Although Thrasyllus published the *Prolegomena to the Reading of the Works of Democritus*, it is an open question whether or not the *Diakosmos* was available to him. His chronological manipulations and his systematic involvement of indirect evidence as to the time of Democritus suggest a negative answer. This is not as surprising as may seem. "In der Tat haben nach Theophrast offenbar nur einige Skeptiker, vielleicht Asklepiades von Bithynien, wahrscheinlich Plutarch Demokrit gelesen, Galen kaum mehr. Auch Epikureer lasen Demokrit nicht: die Bibliothek von Herculaneum hatte unter 1500 Volumina offenbar keine Rolle Demokrit" – Walter Burkert, "Diels' Vorsokratiker, Rückschau und Ausblick", in *Hermann Diels (1848–1922) et la science de l'antiquité* (Fondation Hardt; Vandoeuvres – Genève 1999) 169–206, esp. 193 f.

"When periods of time are reckoned in ordinal numbers, it is standard Greek practice to include both terminal years; with cardinal numbers it is usual to include the year in which a state of affairs began but not that in which it ended, but it is possible to include both terminal years".³⁴

It follows that the use of two different ways of reckoning may result in two different figures for the same date, the difference being one year. The reckoning made by Aristotle is instructive. *Ath. Pol.* 17. 1 asserts that Pisistratus lived 33 years after his first usurpation. According to *Ath. Pol.* 19. 6, his sons ruled 17 years. One would conclude that both father and sons ruled together 50 years, but the figure given by Aristotle is 49. Now *Pol.* 1315 b 31 confirms the figure for Pisistratus (33 years), but makes his sons remain in power for 18 years, defining the sum as 51 years. It was plausibly argued that these different figures resulted from different methods of reckoning.³⁵ It is possible that Aristotle was exceptionally bad in calculating the dates.³⁶ The basic fact, however, remains that we do not always know what kind of reckoning, whether with ordinal or with cardinal numbers, underlies figures given in our source.

Furthermore, in some cases there is no certainty that a given source was self-consistent in adopting this or that way of reckoning. There has been great debate among scholars concerning the initial year of the *Marmor Parium* since different dates would favour different answers. Some scholars have even assumed that the *Marmor Parium* switched from inclusive to exclusive reckoning.³⁷

The practical conclusion reached so far is that one has to be always prepared to consider the possibility that a transmitted date may be distorted by one year.

The majority of traditional dates for early Greek history that we possess come from the *Chronicles* of Eusebius, preserved in the Latin version by St Jerome and also in an Armenian version. The two main versions repeatedly display disagreement by one, two or several years, and the same is true of

³⁴ P. J. Rhodes, *A Commentary on the Aristotelian Athenaion Politeia* (Oxford 1981) 193; see also his "Pisistratid Chronology Again", *Phoenix* 30 (1976) 219–233, esp. 220 f.

³⁵ Franz Heidbüchel, "Die Chronologie der Peisistratiden in der Atthis", *Philologus* 101 (1957) 70–89, esp. 76–78.

³⁶ *Ath. Pol.* is notable for including miscalculations. The standard scholarly policy in dealing with it is to emend *hebdomo* to *hekto* (in 34. 1), *tetarto* to *trito* (in 22. 8), etc. – see, for instance, G. V. Sumner, "Notes on Chronological problems in the Aristotelian Ἀθηναίων πολιτεία", *CQ* 55 (1961) 31–54.

³⁷ See T. J. Cadoux, "The Athenian Archons from Kreon to Hypsichides", *JHS* 68 (1948) 70–119 (hereafter cited as Cadoux), esp. 83 ff; Heidbüchel, *Op. cit.* (n. 34), 77, Anm. 1.

different manuscripts of St Jerome. Scholars agree nowadays that the Latin version is better for chronological purposes; they also agree about the relative value of the different manuscripts of St Jerome, so one has to proceed from the text as printed by Rudolf Helm.³⁸ One cannot yet take for granted in any single case that the text printed by Helm transmits a traditional date exactly. The very difficulty of arranging material within a table consisting of many columns could easily result in various minor distortions, and other distortions might have already affected Eusebius' sources. I will give a few illustrations.

St Jerome has detailed data for Alexander's expedition. Up to the death of Darius III (330 BC) his dates are correct, but all subsequent dates for Alexander are too early by one or two years. The chronology of the Peloponnesian war in St Jerome shows even more variety. The plague in Athens and the death of Pericles are correctly dated, but the beginning of the war, the Sicilian expedition, Alcibiades' flight to Tissaphernes, the secession of Euboea all are dated by one year too early, and the peace of Nicias even by three. The date for the end of the war is not given. The tyranny of the Thirty is dated by one year too late.

To be sure, we still have some dates transmitted to us as explicit statements. However, the majority of them come from later sources (for example, Diogenes Laertius or the *Suda*); these sources depend already on various canons in which the material was organized in tabular form.

The conversion of the dates expressed in one system into the dates expressed in another system is also a typical situation fraught with risk of distortions. It was in the third century BC when counting by Olympiads was introduced (by Timaeus of Tauromenium?) as a chronological frame for historical events. This system was subsequently largely adopted. If the *Chronicle* of Apollodorus, written in the middle of the second century BC, used the Athenian archon list as the reference frame, it is significant that an adaptation of this work, cited by Diogenes Laertius as "Apollodorus", expresses all dates in terms of Olympiads. Also Eusebius expressed the dates in terms of Olympiads as well as the regnal years of various kings. Fortunately, Athenian year began in summer, that is, at the season in which the Olympic games took place. However, the Roman year began at a different season. Therefore Olympian or archon dates converted into the dates *ab urbe condita* could happen to be misleading by one year. Another dif-

³⁸ Eusebius Werke 7. *Die Chronik des Hieronymus*. (Berlin 1984). For the Armenian version see Eusebius Werke 5. *Die Chronik aus dem armenischen übersetzt mit textkritischem Kommentar*, hrsg. von Josef Karst (Leipzig 1911).

ficulty arises from the conversion of the dates after the *Troika*. It is clear that the use of inclusive reckoning instead of exclusive or vice versa would yield two different Olympic years. And the distortion of the original date even by one year would result in every fourth case in distortion by one Olympiad.

7

Now we turn to the traces of Democritus' Trojan era and the related chronological system in the ancient sources.

There are some references to the Trojan era in the *Suda*. In the entry on Homer the *Suda* cites Porphyrius who uses the standard, Eratosthenian Trojan era; other references to the Trojan era in this entry are not unambiguous. If one assumes a slight miscalculation (Olympiad 59 instead of the correct 60), the same Trojan era is meant in the entry on Phocylides as well. An alternative interpretation is, however, available. It is stated in the *Suda*: Φωκυλίδης Μιλήσιος, σύγχρονος Θεόγνιδος· ἦν δὲ ἐκάτερος μετὰ χμζ' τῶν Τρωικῶν, ὀλυμπιάδι γεγονότες νθ'. Although Phocylides appears in Eusebius under Ol. 60,³⁹ Theognis is never dated to this Olympiad. Now ἦν in the *Suda* points to one's *akme* and not one's birth.⁴⁰ γεγονότες, then, is either *Parallelisierung des ἦν* (Rohde) or it means here *born*. If the latter is the case, the corresponding date for ἦν is Ol. 69.⁴¹ Since an undifferentiated reference to an Olympiad most frequently means a reference to the first year of that Olympiad, both Phocylides and Theognis were born, according to the *Suda*, in 544/3 and reached *akme* in 504/3 BC. Each of them reached *akme* 647 years after the *Troika*. Hence the date for the *Troika* is 1151/0 BC, that is, the Democritean date.

Sybilla is dated in the *Suda* "483 years after the capture of Troy". No testimony dates Sybilla to 1184/3 – 483 = 701/0 BC. St Jerome's date for Sybilla is 666/5 BC. This places the capture of Troy in 1049/8 BC, which is very close to the Democritean era, and "a two-year shift in the *Canons* of St Jerome is not uncommon".⁴²

³⁹ The context is somewhat surprising: "Simonides lyricus et Phocylides clari habentur et Xenophanes physicus scriptor tragoediarum" (103 b Helm); "Simonides der Liederdichter war gekannt; und Phokillides und Xenophanes der Physiker, Gesangesdichter, war gekannt" (189 Karst).

⁴⁰ See Erwin Rohde, "Τέγρονε in den Biographica des Suidas", in his *Kleine Schriften* (Tübingen; Leipzig 1901) I. 123, n. 6.

⁴¹ Like Pittacus in the *Suda* γέγονε in Ol. 32 and ἔγραψε νόμους in Ol. 42.

⁴² Mosshammer, 195.

The *Suda* dates Arctinus to the ninth Olympiad (744–1 BC), 410 years after the Trojan war. The numbers are not compatible with the Eratosthenian era. However, if the fourth year of the ninth Olympiad was meant in the *Suda*'s source, we arrive at the Trojan era cited by Democritus ($741/0 + 410 = 1151/0$). According to our hypothesis, the original ancient dates were lower by 33 years than those which became standard in the Hellenistic epoch. The standard date for Arctinus should accordingly have been $741/0 + 33 = 774/3$ BC. Indeed, St Jerome dates Arctinus' *akme* ("Arctinus Milesius versificator florentissimus habetur") in Olympiad 1.2 = 775/4 BC. As I explained above, the difference in one year may be neglected in such cases. Moreover, the date was obviously computed as 410 years after the Trojan era of Eratosthenes. My strong impression is that the ancients dealt with the dates of such a kind precisely as we would do: $1184/3 - 410 = 774/3$.⁴³ I assume accordingly that Eusebius entered Arctinus at 774/3 BC.

Again, the *Suda* dates Simonides of Amorgus 490 years after the fall of Troy. No corresponding reference to an Olympiad is given. Proceeding from the Eratosthenian era, one arrives at 694/3 BC. No source connects Simonides of Amorgus with such a date. Proceeding from the Democritean era, one arrives at 661/0 BC or the fourth year of the 29th Olympiad. The 29th Olympiad is exactly the date assigned for Simonides of Amorgus in St Jerome.

One may observe, further, that the date for Arctinus, 410 years after the *Troika*, is separated by exactly 80 years from the date of Simonides, 490 after the *Troika*, which implies the use of both the genealogical scheme and the 40-years' interval between two successive generations.⁴⁴ Since Democritus hardly thought in terms of generations of 40 years (section 3, see also the last section of this paper), it apparently was the work of a chronographer to combine the Trojan era of Democritus with a later convention as to the length of a generation.

Another qualification is also needed. Generally speaking, the *Suda*'s reference to the ninth Olympiad in the article for Arctinus should be taken

⁴³ In Clement' summary of the chronological system of Eratosthenes (*Strom.* 1. 138; *FGrH* 241 F 1a) the intervals are reckoned exclusively.

⁴⁴ 490 or 410 and not 480 or 400 years after the *Troika* may seem surprising. However, such a matter depends on where one draws a dividing line between two generations. The *Odyssey* would suggest to draw this line ten years after the capture of Troy. But it is not excluded that a chronographer chose the outbreak of the war as a reference point and added accordingly 10 years to the figures determined by counting generations and that was not properly understood by the users of his data.

as a reference to the first (744/3) rather than the last (741/0) year of the ninth Olympiad. St Jerome enters Simonides together with Archilochus also at the first year of the 29th Olympiad (764/3), and this is unlikely to be a misplacement. The fact is that the *Chronicle* of Nepos placed Archilochus (with whom Simonides is regularly synchronized⁴⁵) within the reign of Tullius Hostilius (Gell. 17. 21. 8), and St Jerome has a special entry devoted to this Roman king (*Tullus Hostilius post longam pacem bella reparavit*) precisely under Ol. 29.1 (664/3).⁴⁶ In both cases, thus, we have reasons to prefer a date in the first year of a corresponding Olympiad, and it is clear that the two dates, separated by 80 years, belong to the same construction. But then we arrive at a date for the *Troika* in 1154/3 and not 1151/0 BC. This calls for explanation.

It was argued above (section 3) that the Democritean 730 years between the *Troika* and the publication of the *Diakosmos* is a rounded number of years, computed for 22 generations on the formula "3 generations per century". If that conclusion is correct, a date for the *Troika* in 1154/3 BC can be simply explained as resulting from a more accurate use of the formula: 733 instead of 730 years, covered by 22 generations. It seems that the Democritean Trojan era provided the basis for two different canons. One placed the *Troika* in 1154/3 (as in the cases of Arctinus and Simonides), the other in 1151/0 BC (as in the cases of Sybilla and Theognis).

It is left to note that in the case of Simonides of Amorgus the use of the Democritean Trojan era was suggested in 1835 by F. Th. Welcker.⁴⁷ In his influential paper, Erwin Rohde "emended" inconvenient evidence and rejected Welcker's proposal for the alleged reason that the *Suda* always uses the Eratosthenian Trojan era.⁴⁸ The use of the Trojan era in the *Suda* was the subject of a learned paper by Georg Friedrich Unger.⁴⁹ Unger believes that in all discussed cases the *Suda* cites the Trojan era of Hesychius and that this era dates the *Troika* to 1154/3 BC. He does not connect this Trojan era with Diogenes' quotation of Democritus' statement. More importantly, he does not see the significance of that Trojan era which appears in the *Suda* for the study of the ancient chronography and chronology.

⁴⁵ See Mosshammer, 214 and n. 5; Felix Jacoby, "The Date of Archilochus", *CQ* 35 (1941) 97–109, esp. 99 and notes. The case of Archilochus is too complicated to be discussed here.

⁴⁶ Jacoby, "The Date", 99, while insisting on the accuracy of the date Ol. 29.1, strangely cites only general period of Tullus Hostilius, 672–640 BC.

⁴⁷ *RhM* 3 (1835) 356. For Welcker, the Democritean Trojan era is 1150 BC.

⁴⁸ *Op. cit.* (n. 39), esp. I. 149.

⁴⁹ "Die Troische Aera des Suidas", in *Abh. der philos.-philol. Classe der kgl. Bayerischen Akad. der Wiss.* 17 (1886) 513–605.

One may try to recover the traces of the chronological system in question even in those cases in which there is no reference to the *Troika*. The appearance of two competing dates that differ either by 33 / 30 years exactly or, as in the case of Arctinus, by 8 Olympiads, may serve as a plausible indicator.

Apollodorus dates Homer to 944/3 BC (*FGrH* 244 F 63). Nepos (apud Gell. 17. 21. 3), Cic, *De rep.* 2. 18, Solin. 40. 16 date Homer to 914/3 BC; Eusebius knows this date too.⁵⁰

Eusebius' date for Hesiod ("Hesiodus secundum quosdam clarus habetur") is Ol. 3.2 = 767/6 BC. Tzetz. *Chil.* 12. 196; 13. 648 places him in Ol. 11 = 736–3 BC.⁵¹

We learn that Hellanicus dated Terpander to the 26th Olympiad = 676–3 BC (*FGrH* 4 F 85 a). Eusebius' date is later by 8 Olympiads (Ol. 34.2 = 642/1 BC). The testimony on Hellanicus comes from Athenaeus who possibly used a canon in which the fifth-century date of Hellanicus was converted into the Eratosthenian system.

Eusebius' date for Anacreon is Ol. 61.1 = 536/5 BC (in the Armenian version: 535/4). The *Suda* under Anacreon dates him in Ol. 52 = 572–69 BC.⁵²

The standard ancient date for Polycrates was Ol. 62 = 532–29 BC, perhaps Ol. 62.1 (532/1). The *Suda*, however, makes Ibycus come to Samos "when its ruler was Polycrates, the father of the tyrant, in the time of Croesus, Olympiad 54 (564–1 BC)". According to Herodotus 3. 39, the name of Polycrates' father was Aeaces. It seems very likely that the older Polycrates emerged as a scholarly construction. An ancient scholar found two diverging chronological traditions. Trying to harmonize them, he assumed another ruler also named Polycrates.

One reads in the *Suda* that Aristetas was a contemporary of Croesus and Cyrus, flourishing in the fiftieth Olympiad (580–77 BC). The standard Hellenistic date for the war between Croesus and Cyrus was somewhere in the 58th Olympiad (548–5 BC). The most influential modern date is 547 BC. We have thus the difference either of 8 Olympiads or even exactly of 33 years, and it seems that the *Suda* preserved one and the same date calculated

⁵⁰ Cf. Jacoby on *FGrH* 244 F 63.

⁵¹ Cf. *Das Marmor Parium*, 157 f.

⁵² A correction for Ol. 62 was suggested by Mosshammer, 297. The *Suda*'s subsequent phrase is also remarkable: "some place him in the time of Cyrus and Cambyses in the 55th Olympiad". Ol. 55 (560–57 B.C.) fits with the beginning of Cyrus' reign, but has nothing to do with Cambyses. The subtraction of 33 years points, however, to the reign of Cambyses.

from two different Trojan eras. In this case, however, an alternative explanation is available. One of the manuscripts reads ὀγδόη. Rohde suggested that the original reading was νη' and that two manuscript traditions preserved two different halves of the whole.⁵³ Although it may be replied, of course, that ὀγδόη intruded in the text as a marginal gloss, made by one who knew that the war between Croesus and Cyrus was to be dated to the 58th and not the 50th Olympiad, the interpretation remains controversial.

Diogenes Laertius dates Anaximenes to the 63rd Olympiad. Both Eusebius and the *Suda* put him in the 55th Olympiad. We have again a difference of 8 Olympiads.

Pythagoras appears in Eusebius twice, under 530 and 497 BC, which gives a difference of exactly 33 years. To be sure, the two entries are differentiated, one as *clarus habetur* and the other as *moritur* respectively, but such a harmonization could easily be the work of Eusebius or his source.

8

Every hypothesis is to be checked against the consequences it entails. Both Timaeus and Eratosthenes knew Spartan king lists with figures assigned to the length of each reign. They also knew a list of the Olympic victors. Such a list was compiled by Hippias about the same time as Democritus published his *Diakosmos*. The chronographic shift we are talking about should apparently have caused confusion in using such standard chronographic tools as the Spartan king lists and the list of Olympic victors. How could, then, such a confusion have escaped attention of the ancient chronographers?

I will try to show that in the case of the Spartan king list the discrepancy was recognized too late and that in the other case the discrepancy was probably reduced either by multiplying the victories of some famous athletes or by assuming that their victories in different kinds of the foot-race took place in different Olympiads.

The Armenian version of Eusebius' *Chronicles* has a section "The kings of Lacedaemon from the books of Diodorus" (105 f. Karst). Here Apollodorus is cited for two standard intervals, that of 408 years between the *Troika* and the first Olympiad and that of 80 years between the *Troika* and the return of the Heraclids = the accession of the twins, Eurysthenes and

⁵³ *Op. cit.* (n. 39), I. 136, Anm. 2. J. D. P. Bolton, *Aristeas of Proconnesus* (Oxford 1962) 126 suggests, in spite of Croesus and Cyrus, a confusion of N and H, arriving thus at 748–5 BC.

Procles. One would assume, then, an interval of $408 - 80 = 328$ years between the Return and the first Olympiad. But if one looks at the list of the Agidae (the list of the Eurypontidae is corrupt), one discovers that it does not confirm the expectation. I quote the Armenian version in Karst's translation:

Und es wird insgesamt im ganzen von der Troer Einnahme bis zu der Heraklier Einfalle, Jahre 80.

Darnach Könige der Lakedämonier.

1. Eurystheus Jahre 42
2. Agis Jahre 1
3. Echestrates Jahre 35
4. Labotas Jahre 37
5. Dori<s>thos Jahre 29
6. Agesilaos Jahre 44
7. Archelaos Jahre 60
8. Teleklos Jahre 40
9. Alkamenes Jahre 37

In dessen 10. Jahre festgesetzt ward die erste Olompias.

Zusammen Jahre 325

If one subtracts the 27 last years of Alcamenes from the specified total, one will have 298 and not expected 328 years between the Return and the first Olympiad. Thirty years are missing. Moreover, the date for the Return thus obtained is 1074/3 BC. Hence the date for the fall of Troy is 1154/3 BC, which is the date of one of the canons based on the Democritean Trojan era (above, section 7).

Curiously, the list of the Agidae, but not in a tabular form, is cited in the excerpt a few lines above. Echestratus is given here 31, not 35 years. The total of the years covered by the nine Agidae is not stated, and it could be in that case 321, not 325. However, 325 is certainly part of tradition. It appears again in Eusebius (150 Karst); also John Malalas cites Iulius Africanus for that figure.⁵⁴ Such a total requires 35 and not 31 for Echestratus. Karst suggests a misreading: $\epsilon\nu$ instead of ϵ' . But it was observed that 31 of Echestratus agrees well with the list of the Eurypontidae as the latter can be plausibly restored.⁵⁵ It is possible, then, that Eusebius preserved in fact two different versions of the list, the one dating the Return to 1074/3, the other to 1070/69 BC. Both versions are connected with the Trojan era of Democritus and none with the Trojan era of Eratosthenes and Apollodorus.

⁵⁴ See Heinrich Gelzer, *Sextus Julius Africanus und die byzantinische Chronographie* (Leipzig 1880) I, 142.

⁵⁵ W. G. Forrest, "Two Chronographic Notes", *CQ* 19 (1969) I, 95–110, esp. 107 f.

Whatever version Diodorus might have chosen, he was not aware of his departure from Eratosthenes and Apollodorus. He states elsewhere (1. 5. 1) that he followed Apollodorus "in setting the interval from the *Troika* to the return of the Heraclids as 80 years, from then to the first Olympiad 328 years, reckoning the dates by the reigns of the kings of Lacedaemon". Diodorus believes that he proceeds from the Trojan era adopted by Apollodorus and Eratosthenes, but we saw that the figures cited from Diodorus by Eusebius point to the Trojan era of Democritus.

It is not very surprising, in fact, that Diodorus and his authority overlooked the discrepancy. They did not have a chronographic tool as convenient as our BC years. Nor did they arrange different chronographic schemes and traditions in a comprehensive synchronistic form, such as developed later on by Eusebius. Characteristically, Eusebius was probably aware of the discrepancy in question. He dates the first Olympiad in the last (37th) and not in the tenth year of Alcamenes. Since this was not sufficient to bridge the gap, Eusebius deviated from the Eratosthenian and Apollodoran interval between the fall of Troy and the first Olympiad (407 or 408 years) and used an interval of 405 (= 80 + 325) years.

Modern scholars did not overlook the difficulty arising from the Spartan king list in Diodorus. Some of them seem to have believed that an emendation is safer than an explanation.⁵⁶ Alden Mosshammer suggested that an ancient chronographer reduced the number of regnal years allotted to the various kings.⁵⁷ G. L. Huxley was properly critical to his predecessors, but his own proposal was also unfortunate. According to Huxley, Apollodorus, like Diodorus after him, allowed an interval of a whole generation between the return of the Heraclids in the time of Aristodemus and the accession of Eurysthenes and Procles.⁵⁸ Such a guess plainly contradicts the text of Eusebius.⁵⁹

Now the Corinthian list in Eusebius' excerpt from Diodorus presents an analogous case. We are told that 447 years elapsed between the return of the Heraclids and the accession to power of Cypselus (104 Karst). The king list

⁵⁶ For the criticism see Forrest, *Op. cit.*, 108 f.

⁵⁷ Mosshammer, 186.

⁵⁸ G. L. Huxley, "Problems in the *Chronography* of Eusebius", *Proceedings of the Royal Irish Academy*, Section C, 82 (1982) 7, 183-196, esp. 188.

⁵⁹ "Von der Troer Zerstörung bis zur ersten Olympiade sind, wie Apollodoros der Athener sagt, 8 Jahre über vierhundert. Von denselben achtzig bis zum Heraklideneinfall; und die übrigen haben eingenommen die Könige der Lakedämonier, Prokles, Eurystheus und deren Abkömmlinge... Eurystheus begann die regierung im achtzigsten Jahre von den troischen Dingen" (105 Karst).

cited in Eusebius does not include 90 annual Prytaneis. There remain, thus, 357 years. The total number of years in the Corinthian king list is, however, either 327 (104 Karst) or 323 (150 Karst), that is either by 30 or by 34 less than one would expect.⁶⁰ The oscillation of 4 years, met again, is remarkable. There were, it seems, two versions of both Spartan and Corinthian king lists, one placing the Return in 1074, the other in 1070 BC.⁶¹

Combining the Apollodoran (= Eratosthenian) epoch for the Return (1104/3 BC) and the duration of the Corinthian monarchy (447 years), one derives a date of 657/6 BC for the first year of Cypselus. It can be said that Eusebius confirms such a computation (St Jerome has Cypselus under 660/59, the Armenian version under 658/7 BC). Yet many centuries elapsed between Diodorus and Eusebius. If one takes into account the obvious parallelism of Diodorus' Spartan and Corinthian lists and accordingly proceeds from 1074/3 or 1070/69 BC for the Return, one derives a date of 627/6 or 623/2 BC for the first year of Cypselus, thus recovering the pre-Eratosthenian tradition.

Another approach to the problem was adopted by Jacoby. The Corinthian list gives just one year to the last king, Automenes. Jacoby grants him another 29.⁶² However, "in Pausanias (2. 4. 4) Telestes is the last king, Automenes, therefore, the first annual *prytanis*; his one year of rule must then be part of the story, not the result of textual corruption".⁶³ Another important evidence is preserved in a scholium on Pind. *Ol.* 13. 17. Here Didymus is cited for the assertion according to which the first Corinthian king came to the throne thirty years after the Return. $1104/3 - 30 = 1074/3$ BC. This confirms my suggestion about the implied date of the Return in the Corinthian list of Diodorus and shows that the problem (real, not alleged textual one) was recognized in antiquity and a solution was ventured.

There was a century-long debate about Diodorus' source. Since Diodorus both at 1. 5. 1 and in Eusebius' excerpt claims to follow Apollodorus,

⁶⁰ The figure 323 is explicitly attested in "Königsreihen" (150 Karst). The figure 327 follows from the data of Eusebius' narrative (104 Karst). The table which follows the narrative makes the total either 325 (on the emended text) or 323, and even, perhaps, 321.

⁶¹ One would expect an oscillation of 3 years, corresponding to two versions of the Democritean Trojan era (1154/3 and 1151/0 BC – above, section 7). One may suppose that two versions of the king list were computed in two different ways. The starting point for one was the fall of Troy, 1154/3, minus 80 years. The starting point for other was either the first invasion of Peloponnesus by the army of Epaminondas, 370/69 or the battle of Leuctra, 371/0 (with the use of inclusive reckoning), cf. above, section 2.

⁶² On *FGrH* 244 F 331–32; see also on F 62.

⁶³ Forrest, *Op. cit.*, 109, n. 2.

the majority of scholars accepted his claim. And since his figures do not fit with the Apollodoran system, they admitted various manipulations with figures in order to agree Diodorus with Apollodorus. Other scholars concluded that Diodorus used in fact a pre-Eratosthenian tradition. Such a conclusion makes Diodorus to tell us lie, and even if we accept a compromise suggested by Forrest, that is, Diodorus took a 'system' from one source (Apollodorus) and his 'facts' from another, there remains a question of why Diodorus needed another source for his 'facts'.

It seems to me that scholars dealt with a wrong alternative. Diodorus both followed the emerging chronographic vulgate and depended on an earlier tradition. This tradition was built into the system of Eratosthenes and Apollodorus, though they were not aware of the emerging discrepancy. No ancient author maintains that Eratosthenes discovered the authentic Spartan king list. He had it ready-made at his disposal. A man who constructed it (I mean the detailed list with notes of the length of each reign) did so with a chronographic purpose in mind. It is difficult to comprehend the mental constitution of a person constructing a fictional list. But it is easier to see why his work was accepted rather than ridiculed. It did an important service. It bridged the gap between the time of the Return and the time of regular festivals and annual officers, which is clearly stated in Eusebius' excerpt from Diodorus.⁶⁴ Eratosthenes realized that, of course, too. So he referred to the Spartan king list as a basis for a sound chronology of the remote past. However, nothing compelled him to perform a new computation, for he did not mean to introduce new dates for the Return and the *Troika*; he just read 'Ariston' instead of 'Aristion'. It was this mistaken reading that caused the discrepancy in question. The Hellenistic chronographers did not have at their disposal an arithmetical procedure as convenient as subtracting 298 from 1104 to see that it did not make 776. Therefore the discrepancy remained overlooked for a long time. When it was finally recognized, several solutions were proposed, as those attested for Didymus or found in Eusebius.

To sum up, both Spartan and Corinthian king lists confirm rather than undermine my hypothesis.

We turn now to the use of Olympiads in the ancient chronography. A curious discrepancy is found in Eusebius. "The Armenian version sets the

⁶⁴ "Wir werden aber, da es sich so getroffen hat, daß von den troischen Dingen bis zur ersten Olympiade die Zeit schwer zu ermitteln ist, weil noch nicht, weder in Athen noch in einer andern Stadt, zu jenen Zeiten jährliche Fürsten vorhanden waren, zum Beispiel die Lakedämonierkönige in Anwendung bringen" (105 Karst).

first Olympiad number against Abraham 1240, while in St Jerome's version the first year of the first Olympiad is Abraham 1241".⁶⁵ Furthermore, there were two main competing traditions in antiquity about the length of the interval between the *Troika* and the first Olympiad. Some authors give 407 years, the other authors give 408 years.⁶⁶ A Clement's citation of Eratosthenes (*Strom.* 1. 138) seems to suggest a compromise: we are told that there were 407 years between the fall of Troy and the year preceding (προηγούμενον ἔτος) the first Olympiad. A parallel passage from Porphyry (89 Karst) does not, however, contain such a qualification, and references to a προηγούμενον ἔτος are usual only for the Greek historiography but not for the Greek chronography. One may suppose, therefore, the following.

An interval of 407 years between the *Troika* and the first Olympiad was originally introduced with reference to the Trojan era of Democritus. Eratosthenes (or already Timaeus before him) adopted this interval, as he adopted the interval between the fall of Troy and the publication of the *Lesser Diakosmos*. The date for the first Olympiad, however, was shifted backwards together with the shift of the date for the fall of Troy. A Hellenistic scholar made careful calculation and observed that the first Olympiad fell now in a non-Olympic year ($1184/3 - 407 = 777/6$ BC). Then two different corrections were introduced. Some specified that the terminal year was προηγούμενον. Others gave 408 years instead of 407. It is even possible that two different types of the chronological tables were current in the post-Eratosthenian chronography. I mean the canons in which Ol. 1.1 corresponded *de facto* to 777/6 BC, on the one hand, and the canons in which Ol. 1.1 corresponded to 776/5 BC, on the other hand. In the latter case, the difference between the "Democritean" and the "Eratosthenian" dates must have been 32 and not 33 years.

If the original chronographic date for the first Olympiad corresponded to 744/3 BC, what did, then, happen to the list of the Olympic victors in *stadion*? For this list, as it is handed down to us (90 ff. Karst), implies 776/5 BC for the first Olympiad.

On what we know, Timaeus was the first to produce a systematic synchronism of the Olympic victors with the Athenian archons. The original list of the Olympic victors was, however, compiled by Hippias. He hardly had a chronographic purpose in mind. To be sure, a list of the Olympic victors could elucidate through this or that synchronism some chronological

⁶⁵ Mosshammer, 79.

⁶⁶ Examples and discussion see in *Apollodors Chronik*, 75 ff.

issues, but such cases were exceptional. The purpose of Hippias' work can be realized from his choice of an Olympic discipline. The victory in *stadion* was not the most prestigious in his time. When Thucydides marks this or that Olympiad by naming an Olympic victor, he names a victor in *pankration* (3. 8 with N 322 Moretti; 5. 49). On the other side, Greek myths and epics suggested that the foot-race was the oldest kind of athletic competition. Hence the particular selection of the victors in *stadion* might have seem an adequate tool for determining of how deep in the past went the institution of the Olympic games.

If Hippias' work pertained to the realm of cultural history rather than chronography, it was natural to relate the time of establishing the Olympic games with the time of the Trojan war and to formulate how many years elapsed since the *Troika* till the first Olympiad, but there was no obvious reason to relate the list of the Olympic victors with that of the Spartan kings or the Athenian archons. Moreover, the list of the Athenian archons was too short to date the first Olympiad, and it is difficult to believe that a Spartan king list with notes of the length of each reign was already composed by the time of Hippias' work or that Hippias would have accepted such an obvious fiction and would have dated the first Olympiad to a certain year of a certain Spartan king. On the other hand, it would have been very strange to formulate an interval between two events of the remote past, the Trojan war and the institution of the Olympic games, and leave unspecified the distance in time between the present and the first Olympiad. Democritus' double reference, to the publication of the *Diakosmos* in the year in which a great war between the Athenians and the Lacedaemonians came to an end and to the *Troika* in the past, could have fit such a task. By using the list of the Olympic victors, it was established that the first Olympiad had been celebrated 323 years before the publication of the *Diakosmos* (or the archonship of Aristion, or the end of the Archidamian war), on the one hand, and 407 years after the fall of Troy, on the other hand.

Timaeus knew both intervals. He realized that the date for the *Troika* had a very insecure foundation, but the list of the Olympic victors was not to be ignored. So he abandoned the interval between the *Troika* and the first Olympiad, but retained that between the first Olympiad and the archonship of Aristion. He read, however, "Ariston". Some reasons for that were suggested above (section 4), other will be adduced below (section 9).

323 years before Ariston make the first Olympiad take place in 777/6 BC. As we saw, a part of the ancient chronographic tradition seems indeed to have proceeded from this date. However, Timaeus, who was the first to involve the list of Olympic victors in a large scale synchronism, could

hardly overlook the fact that the first Olympiad fell in a non-Olympic year. He was, of course, aware of the ambiguities of Greek way of reckoning, and a correction of one year, 776/5 instead of 777/6, might have seem to him quite a legitimate operation. (It is of little consequence for the present argument if that operation was made by a later chronographer.) With more confidence one can say that Timaeus must have discovered that on his date for the first Olympiad 8 victors in *stadion* were missing. The difficulty was not so great as to sacrifice the attractive construction of 1000 years between the *Troika* and Alexander, adopted by Timaeus (above, section 4). This man was both critical and arrogant. He had experience of finding new documents,⁶⁷ and he knew well that his predecessors had made mistakes.⁶⁸ Why should he have believed that the list of Hippias was unimpeachable? Plutarch (*Num.* 1) preserved an echo of (Timaeus'?) criticism of Hippias' work: ἀπ' οὐδενὸς ὀρμώμενον ἀναγκαίου πρὸς πίστιν.

I suppose that the original list, compiled by Hippias, was extended not by introducing new names but rather by multiplying the victories of Spartan and also Crotonian victors. According to the list, the Spartans Chionis and Olyntheus were victors of Ol. 29, 30, 31 and Ol. 38, 40 respectively. The Crotonians Hippostratus, Isomachus and Tisicrates all won twice (Ol. 54–55, 68–69, 71–72 respectively); Astylus won three times (Ol. 73–75).

Timaeus' sympathy to the Crotonians is easily explained by his sympathy to the Pythagoreans. It is possible, however, that some of the mentioned athletes gained indeed victory in Olympia more than once, but that were the victories in the different contests (*stadion*, *diaulos*, the race in armour, etc.) rather than victories in two or three consecutive Olympiads. Hippias' method was, I am afraid, somewhat similar. There were various records in Olympia attesting to the glory of the victors in the foot-race. The kind of foot-race was frequently left in such records unspecified. A number of such cases were interpreted as pointing to a victory in *stadion*. 744/3 BC is hardly the real date of the first Olympiad. But it probably is the original date of the Greek chronographic tradition.⁶⁹

⁶⁷ He "discovered the inscriptions at the back of the buildings and lists of proxeni on the jambs of temples" (Polyb. 12. 11. 2).

⁶⁸ He "convicts cities of inaccuracy in records, there being a difference of three months", etc. (Polyb. 12. 11. 1 et al.).

⁶⁹ In general the tradition of the Olympic victors is remarkably uniform. There is, however, one important exception. According to Hippys of Rhegion (*FGrH* 554 F 3), it was Arytamas of Sparta and not Phrynon of Athens (as in the standard list) who won in *stadion* in the 36th Olympiad (636 BC). One has either to assume an irrecoverable confusion or to accept the conclusion of Moretti, *Olympionikai*, 66 that "Hippys usa liste non solo diverse, ma anteriori a quelle divenute poi canoniche".

One important conclusion now suggests itself. It is very likely, or even certain, that many ancient dates as handed down to us differ by 33 or 32 or 30 years from the original dates as established by Greek scholarship in the fifth-fourth centuries.

I consciously refrain from going into detail on these matters. The experts in related fields will do this job better. But I cannot pass in silence over the most thrilling case. The *Suda* gives two different dates for Solon's legislation, Ol. 47 = 592–88 and Ol. 56 = 556–2 BC. The difference exceeds 33 by several years, but is still very close to it. I will argue that: 1) Ol. 56 corresponds to the original date for the legislation of Solon (which is not necessarily the authentic date); 2) the standard date, 594 BC, is to be abandoned; 3) the mistake of Aristotle and subsequent chronographers in dating Solon hardly resulted from the confusion of Aristion and Ariston, but rather paved the way to such a confusion.

It is clear for everybody familiar with the subject that the standard chronology of Solon and Pisistratus presents many difficulties. If it stands, despite the voices of the dissenters, up to the present day, this is due to the authority of Aristotle as well as particular features of related sections of the *Athēnaion Politeia*. The fact is that Aristotle shows there a conspicuous interest in chronology and his account provides many chronological indications. There is something strange, however, in the distribution of such indications.

While describing civil disorder after Solon's legislation (*Ath. Pol.* 13–14), Aristotle is very specific about chronology:

"In the fifth year after Solon's archonship because of party strife they did not appoint an archon, and again in the fifth year after that they enacted a suspension of the archonship for the same cause. After this at the same interval of time Damasias was elected archon, and held the post for two years and two months, until he was driven out of the office by force. Then because of the civil strife they decided to elect ten archons, five from the nobles, three from the farmers and two from the artisans, and these held office for the year after Damasias".

Aristotle then characterizes three parties engaged in the civil strife and explains how the leader of one of them, Pisistratus, became tyrant. This happened, Aristotle specifies, in the archonship of Comeas, in the thirty-second year after the enactment of Solon's laws.

One feels a strange contrast between a series of short intervals specifying the course of events ("fifth", "fifth", "two years and two

months", "one year"), on the one hand, and the sudden appearance of a relatively long interval ("thirty-second year"), on the other hand.

One has a similar feeling on reading Plutarch's biography of Solon. The legislator leaves Athens for ten years (*Sol.* 25). But what did he do during the subsequent twenty years, if Pisistratus came to power more than thirty years after Solon's legislation and Solon was still alive (*Sol.* 30; 32)?

During his journey Solon met Amasis, whose reign began c. 570 BC, and Croesus, whose reign began c. 561 BC.

Plato presents Critias as telling the story of Atlantis, which his grandfather had heard from Solon (*Tim.* 20 e – 21 b). Critias was born c. 460 BC at earliest.⁷⁰ Hence Solon was still alive, according to Plato, c. 530 BC. This is incompatible with a date for Solon's legislation in 594 BC, but agrees well with the tradition connecting Solon with Thespis (*Plut. Sol.* 29).

According to Heraclides Ponticus (*Plut., Sol.* 32), Solon lived many years under the tyranny of Pisistratus. Isocrates (*Panath.* 148) seems to treat Solon and Pisistratus as contemporaries. Aristotle himself accepts Pisistratus' role in the war against Megara, which must be the war for Salamis, and Plutarch (*Sol.* 8) explicitly presents them both fighting together.

According to a law of Solon, the victor in the Isthmian games was to be paid a hundred drachmas; at least Plutarch says so (*Sol.* 23). But we learn from Eusebius that the Isthmian games were established only c. 581 BC.

One may find ways to deal with all these inconvenient points – dismissing the meeting with Croesus as fictional, assuming that the dating of Solon's visit to Egypt in the reign of Amasis is mistaken or that there were many wars against Megara, invoking the literary conventions of Plato's dialogues, etc. The simple truth, however, remains: *all* sources earlier than Aristotle (Herodotus, Plato and Heraclides) suggest chronology incompatible with the standard one.

There is very little new in my criticism of the standard chronology of Solon.⁷¹ But the issue can now be seen in a new perspective. The mistake of Aristotle and the subsequent Greek chronographic tradition can now be treated as a particular case of a general tendency.

The original date for the legislation of Solon may be tentatively inferred in two mutually corroborating ways.

⁷⁰ He fell in the battle against rebelling democrats in 403 BC. His father was a member of the Four Hundred in 411 BC.

⁷¹ See Molly Miller, "The Accepted Date for Solon: Precise, But Wrong?", *Arethusa* 2 (1969) 1, 62–87; Detlev Fehling, *Die sieben Weisen und die frühgriechische Chronologie* (Bern 1985) 109 ff.

Herodotus plainly asserts (5. 65. 3) that the Pisistratids ruled over Athens for 36 years. *Ath. Pol.* 17. 1 and 19. 6 confirms this figure, and one may doubt that figures for the length of Pisistratus' exiles were part of the genuine tradition. The year of Hippias' expulsion is pretty safe: 511/0 BC.⁷² The tyranny of Pisistratus began, therefore, either in 547/6 or 546/5. Now both Aristotle and Plutarch mention the oath given by the Athenians to Solon to preserve his laws intact during 10 years. One may guess that the original tradition assumed just 10 years between the legislation of Solon and Pisistratus' coming to power. One arrives thus at either 557/6 or 556/5 BC as the original date for Solon's legislation.

There was a strong tradition that Epimenides purified Athens just before Solon's legislation.⁷³ It is said, however, in the *Laws* (642 d), that Epimenides came to Athens 10 years before the *Persika*. Chronology was originally the work of the Greeks of the Asia Minor. So, whatever Plato had in mind, the *Persika* began for his source neither in 480 nor in 490, but in 547 or, perhaps, in 546 BC. We arrive again at the date c. 556 BC, which is the date attested in the *Suda*.

To be sure, an interval of ten years found in a Greek tradition does not generate much confidence. One may be rather certain that the date corresponding to 556 BC was in fact a constructed one. But the standard date was constructed too, and the evidence preserved in the earlier sources unambiguously suggests that the earlier construction, 556 BC, is closer to the truth.⁷⁴

⁷² P. J. Rhodes, *A Commentary on the Aristotelian Athenaion Politeia* (Oxford 1981) 195.

⁷³ See Cadoux, 96.

⁷⁴ Scholars frequently cite the two passages in Herodotus to support the standard chronology for Pisistratus, according to which he came to power in 562 BC. The one synchronises the preparations of Croesus for the war against Cyrus with Pisistratus' third accession to power. One should not attach too much weight to this synchronism. Being a brilliant writer and not being a modern scholar, Herodotus proceeds first of all from the logic of narrative. Inventing the embassies sent by Croesus to Athens and Sparta, he finds an elegant way to introduce both protagonists of his book and present the state of affairs by them at the period of time, taken broadly, when the Persian expansion reached the region of Greek settlements. The other passage implies that Pisistratus came to power some time before the end of the reign of Croesus, for Croesus provided help to Miltiades who is said to have willingly left Athens for a possession in Thrace since Athens were ruled by Pisistratus (6. 34 ff.). But one should take into account the situation of 490s when the other Miltiades, the future victor at Marathon, came to Athens; one should imagine that he, as a former tyrant in Thrace, was blamed by his enemies for his political background. It was right time, then, to maintain that the tyranny in Thrace originated with the unwillingness of the elder Miltiades to live under the rule of Pisistratus. The son of younger Miltiades was Cimon; so it is not surprising if Herodotus represents here the view of his family and its political friends. In any case none of

One has to explain, then, the emergence of the standard date for Solon's legislation. The date firmly established in late antiquity corresponds to 594/3 BC. The numbers in the *Athenaion Politeia* point to 592/1, and there is no good reason to correct them in order to bring Aristotle in agreement with the later vulgate.⁷⁵

The most common view is that the date for the legislation of Solon was easily calculable on the basis of the Athenian archon list. But which date? The very existence of three different dates, Ol. 46 (Diogenes Laertius and Eusebius), Ol. 47 (Aristotle and the *Suda*), Ol. 56 (again the *Suda*), undermines the assumption that the authentic list of Athenian archons went back to the earlier half of the sixth century. To overcome the difficulty, scholars correct the numbers in the *Athenaion Politeia* and ignore both dates given in the *Suda* – the procedure is not to be recommended. No sober-minded scholar, I assume, would believe that the whole archon list as it was established in the Hellenistic chronography is authentic. A part of that list was certainly constructed. Various considerations corroborate the conclusion that no authentic archon list for the time of Solon was available. For if it was, why did Herodotus overlook it? why did Plato and Heraclides ignore the consequences of dating Solon's legislation to either 594 or 592 BC? The tradition of preserving lists of eponyms must have come to the Greek world from the Near East.⁷⁶ The Athenians were certainly not better situated for such cultural borrowings in the sixth century than were the Milesians, but the Milesians were able to trace their eponyms only as far back as 525 BC. One may also adduce the difficulties arising over the year of Damasias, who is supposed to have remained in office for two years and two months, and also over the two years without archons (it is probable that two years were inserted into the chronographic system despite the absence of corresponding archon names). Furthermore, we have two conflicting accounts as to who was archon in the year after Solon. According to Philostratus (*VS* 1. 16. 2), it was Dropides, but a scholiast on Aristoph. *Pac.* 347 maintains that it was Phormion.⁷⁷

the two passages can justify such an early date for Solon's legislation as 594 BC.

⁷⁵ Cf. Fehling, *Op. cit.*, 116, Anm. 267: "Es ist immer gefährlich, ältere Stellen nach einer jüngeren Vulgata zu korrigieren".

⁷⁶ The earliest known list of such a kind is of Assyrian provenance – see A. Ungnad, "Eponymen", in *Reallexikon der Assyriologie*, 2. 412 ff.; excerpts in English translation: James B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton 21955) 274 ff.

⁷⁷ Cf. Cadoux, 99.

One may even doubt that the authentic list of Athenian archons went back to the earlier decades of the fifth century. It is remarkable that we have contradictory accounts for the archonships of both Themistocles and Aristides. According to Dion. Hal., *Rom. ant.* 6. 34. 1, Themistocles was archon in Ol. 71. 4 = 493/2 BC. According to a scholium on Thuc. 1. 93. 3, πρὸ τῶν Μηδικῶν ἤρξε Θεμιστοκλῆς ἐνιαυτὸν ἕνα. The standard scholarly view is well-known. But the date of Dionysius is difficult to reconcile with both Herodotus and Thucydides. Herodotus' Themistocles was in 480 BC ἀνὴρ ἐς πρῶτους νεωστὶ παριῶν (7. 143. 1). Thuc. 1. 93 connects the fortification of Piraeus with the archonship of Themistocles. He cites the threat of the Persian invasion as the main reason for the construction. He also specifies that "the wall was completed only about half of the height Themistocles originally intended". If the construction began in 493 BC, it is very difficult to explain why the fortification was not properly finished by 480 BC. But if Themistocles was archon in 481/0 BC, then lack of time is a plausible explanation.⁷⁸ Moreover, the fortification of Piraeus was clearly part of Themistocles' naval program, but there is no evidence to place this program in the 490s.⁷⁹

Plutarch saw Aristides' name on the archon list next after that of Phainippus (*Arist.* 5. 10). Phainippus was archon at the time of the battle of Marathon (490/89 BC). Also the *Marmor Parium* dates the archonship of Aristides in 490/89 or 489/8 BC, since we are told that Aristides was archon 226 years before Diognetus.⁸⁰ However, Plutarch cites Demetrius of Phaleron's statement that Aristides was archon after the battle of Plataea (*Arist.* 1. 8; 5. 9; *FGrH* 288 F 44). The quotation comes from Demetrius' *Socrates* rather than his ἀρχόντων ἀναγραφὴ. It is conceivable, in principle, that Demetrius misunderstood a reference to some ἀρχή of Aristides other than that of the eponymous archon (cf. Thuc. 5. 18. 5: ἐπ' Ἀριστείδου). Yet it is very strange if a disciple of Aristotle and the author (perhaps, the future author) of ἀρχόντων ἀναγραφὴ did not consult the archon list before making his statement.

⁷⁸ Cf. W. H. Plommer, "The Tyranny of the Archon List", *CR* N.S. 19 (1969) 126–129, esp. 129: "Did Themistocles really wait fourteen years, through the Persian wars, to complete the work?"

⁷⁹ It is also worth noting that the standard ancient chronology has three interrelated dates for Themistocles: the archonship in 493/2, the flight to Persia in 471/0 and the death in 468/7 BC – see Alden A. Mosshammer, "Themistocles' Archonship in the Chronographic Tradition", *Hermes* 103 (1975) 222–34. The last two parts of this system are false inasmuch they are incompatible with Thucydides' explicit assertion (1. 137. 3) that Themistocles arrived in Persia after the accession of Artaxerxes (465/4 BC). Mosshammer, *Op. cit.*, argues that already Thucydides was aware of those mistakes in chronology and that the mistakes were due to Hellanicus. But he still accepts (in that paper) the reliability of the archon list and therefore supports an idea according to which Thuc. 1. 93. 3 is not a reference to the eponymous archonship of Themistocles but to some other magistracy. I do not find that the text of Thucydides favours this idea.

⁸⁰ Cf. Cadoux, 117.

One may suppose that these contradicting dates emerged in both cases as different interpretations of original chronological records. It was reported that Themistocles was archon just before the Μηδικά. Some took the Μηδικά as a reference to the expedition of Xerxes, others took it as a reference to the expedition of Mardonius. We saw that the first interpretation is preferable, and the standard use of Μηδικά confirms it. It was also reported that Aristides was archon after a great victory over the Persians. Some took that to be the battle of Plataea, others took it as the battle of Marathon. Plutarch has Aristides playing an outstanding role in both battles. Herodotus names Aristides as the head of Athenian troops at the battle of Plataea (9. 28), but he does not mention him while describing the battle of Marathon. Furthermore, Aristides emerges as the most important Athenian politician precisely in the year after the battle of Plataea. Thus, not only are the discrepancies in the archon list pertaining to earlier decades of the fifth century real, but also unorthodox versions seem to be closer to the truth. If indeed they are such, it follows that *Ath. pol.* 22. 5 is wrong to date the first appointments of archons by lot in 487/6 BC.⁸¹ One may suspect again the misinterpretation of a reference to the Μηδικά and accordingly suggest 477/6 BC as the correct date.⁸²

If the part of the Athenian archon list which pertained to the earlier half of the sixth century was constructed, how, then, was the legislation of Solon dated? Those ancient scholars who felt it imperative to locate Solon's legislation in time had no easy task; or rather they made their task difficult since they renounced the obvious possibility of synchronizing Solon with Croesus. They apparently chose to synchronize Solon with Thales for the reason that both belonged to the group of the Seven Sages.

The significance of Thales for chronographic purposes was due to the fact that he was the only one among the Sages who could have been related to the succession of the Near Eastern kings; and for those kings absolute dates were believed to have been available. Herodotus says that

⁸¹ Plommer. "The tyranny of the Archon List", 129 points out that it is strange to find among the archons appointed by the lot Calliades, Adimantus and Xanthippus, who were, according to the standard list, archons for 480/79, 477/6 and 479/8 BC respectively. The case of Adimantus presents, perhaps, an additional difficulty. We are told that Themistocles was choregus when Adimantus was archon (Plut. *Them.* 5). It is somewhat surprising if Themistocles served as choregus after and not before the events of 480 BC (as it actually presented in Plutarch's narrative). The archonship of Adimantus is of special interest since the date of Simonides depends on it. The poet says in an epigram (if authentic) that he was in the age of eighty when Adimantus was archon in Athens (fr. 28 Page).

⁸² In words of Mosshammer, 95 "until recently, the Athenian archon list has been relatively sacrosanct". Mosshammer, 327, n. 13 is right to criticise once fashionable but hardly tenable theories of Wilamowitz and Jacoby. Three fragments of the list of the Athenian archons, inscribed about 425 BC (Donald W. Bradeen, "The Fifth-Century Archon List", *Hesperia* 32 [1963] 2, 187-208) do not affect the issue in question.

Thales predicted the solar eclipse that interrupted the battle between the armies of Cyaxares and Alyattes (1. 74). Herodotus goes on to say that the Medes and the Lydians, impressed by the eclipse, turned their minds to making peace, which followed quickly and included the marriage of Astyages, son of Cyaxares, to Aryenis, the daughter of Alyattes. This latter detail may suggest that it was no longer Cyaxares but already Astyages who was the Median king when peace was made or at least that Astyages was at least about to replace his father. That alone would predispose scholars to date the battle and Thales' prediction at the very end of Cyaxares' reign. Moreover, such a dating was the only way in which to reduce the gap in time between the most famous achievement of Thales and the time of Croesus, with whom a strong tradition connected the Sages.

Now we have only to ask in which year Herodotus places the end of Cyaxares' reign. The standard answer is 594 BC, precisely the standard date for the legislation of Solon. 592 BC could be obtained in a similar way. One should only take into account the variations arising from different modes of reckoning or slightly different estimates of a king's reign (29 vs. 30 or even 31 for Cyrus; 7 vs. 8 for Cambyses). I suppose, then, that either of these two dates or both originally indicated the date of Thales' eclipse.

The date for the last year of Cyaxares in Herodotus is obtained by adding the regnal years of Cyrus and Astyages.⁸³ But it was discovered later on that Cyrus had reigned in Persia for about ten years before he dethroned Astyages.⁸⁴ One interested in establishing the last year of Cyaxares had, therefore, to subtract those ten or so years from the sum of the regnal years of Cyrus and Astyages. The standard ancient date for Thales' eclipse (586/5 according to the best mss. of St Jerome or rather 585/4 BC according to the explicit statement of Pliny) was apparently established in that way.⁸⁵ However, it was too late to correct the date for Solon's legislation, if the authoritative archon list was by that time already constructed.

⁸³ "Herodotus reports the 35 years of Astyages (1. 130) as being separate and distinct from the 29 years (1. 214) of Cyrus" – Mosshammer, 263 and n. 14.

⁸⁴ Mosshammer, 271 suggests that it was due to the work of Berossus.

⁸⁵ The historicity of Thales' prediction is strongly confirmed in my paper in the *Journal for the History of Astronomy* 25 (1994) 275–88. However, both the experience of the recent solar eclipse in Europe and the present study make me revise some of my conclusions. I argued that Thales predicted the eclipse of 21 Sep 582 BC because that year appears in a fragment of Demetrius, interpreted in the light of the Athenian archon list, and because I was able to suggest a plausible method for predicting a solar eclipse for 582, but had no idea of how was possible to make a prediction for 585 BC. Now I know how this was possible.

The suggested explanation of the standard date of Solon's legislation is, of course, conjectural. "We can never know exactly what combination of what kinds of evidence produced lists like that of the Athenian archons or the Olympic victors".⁸⁶ Whatever the method that placed Solon's legislation in the 590s, the mistake may well have brought about further chronological misconceptions. It was believed that the war between Mitylene and Athens, in which Pittacus killed the Athenian Phrynon, had occurred earlier than Solon published his laws.⁸⁷ To date Solon by several decades too early could mean dating Pittacus accordingly. The dates of Alcaeus and Sappho depended, in turn, on Pittacus. In such a case, the reading "Ariston" instead of "Aristion" was well prepared by numerous mistakes in dating.⁸⁸

One discerns at the core of all such mistakes an incorrect synchronism between the Attic history and that of the Greeks of Asia Minor. Hellanicus of Lesbos, the author of the *Atthis*, is a likely candidate for originating the misleading synchronism. Thucydides (1. 97) testifies to his inaccuracy in chronological matters, even for recent events. Herodotus used the works of Hellanicus, and one finds already in Herodotus a plausible case of misleading chronological revision.

Herodotus tells us an amusing story about how a Greek sage made Croesus realize the absurdity of one of his military plans.

Croesus planned to build ships and attack the islanders; but when his preparations for shipbuilding were ready, either Bias of Priene or Pittacus of Mytilene (the story is told of both) came to Sardis, and having been asked by Croesus for news about Hellas, put an end to the shipbuilding by giving the following answer: "King, the islanders are buying ten thousand horse, with intent to march against you to Sardis" (1. 27; A. D. Godley's transl.).

⁸⁶ Mosshammer, 96. The idea that Solon was dated after Thales' eclipse was suggested by Detlev Fehling, *Op. cit.*, 109 ff. However, Fehling provides no explanation for the concrete dates (594 BC, etc.).

⁸⁷ It is worth noting that Phrynon presents the most suspicious case in the list of the Olympic victors in *stadion* – see N 58 Moretti.

⁸⁸ Karl Julius Beloch was a prominent critic of the standard chronology of the sixth century – see his *Griechische Geschichte*, 1. 2 (Berlin; Leipzig ²1926). His criticism was not, however, systematic enough. Detlev Fehling made some important steps further. But Fehling sees the Greeks as fabricating the past rather than studying it, and such an attitude is hardly appropriate to provide an adequate explanation of how chronological misconceptions entered the Greek chronographic tradition. For the recent study of the sixth-century chronology see Viktor Parker, "Zur griechischen und vorderasiatischen Chronologie", *Historia* 42 (1993) 4, 385–417; Idem, *Untersuchungen zum Lelantischen Krieg und verwandten Problemen der frühgriechischen Geschichte* (Stuttgart 1997 = *Historia. Einzelschriften*, H. 109) 59 ff.

Pittacus of Mytilene was an islander and Bias of Priene was not. It is, therefore, clear to whom the story was originally connected. But if Pittacus was earlier than Solon, he did not fit into the story for chronological reasons. As to Bias, a tradition presented him giving a counsel to the Ionians after their defeat by the Persians (Hdt. 1. 170). He did fit.⁸⁹

10

It has long been recognized that our early Greek dates are "too early". A. R. Burn saw the reason for that in an unrealistic estimate of the length of a generation as 40 years.⁹⁰ Indeed, a canon based on Democritus' Trojan era apparently employed a generation of 40 years (see above, section 7). Ed. Meyer suggested once that it was Hecataeus who introduced a generation of 40 years. If that was the case, a misleading assumption was built into the Greek chronography from the outset. Ed. Meyer's idea about the length of a generation in Hecataeus, quite cautiously expressed by him, dominated the field throughout the twentieth century. The idea was probably wrong. More importantly, scholars overlooked, until recently, the fact that Hecataeus' view about the time of the Trojan war was very different from that of Hellenistic chronographic vulgate. Walter Burkert argued a few years ago that Hecataeus' date of the Trojan war fell in reality in the tenth century.⁹¹ Following Burkert, I will try to present the case in somewhat more detail and with some modifications. The emphasis will be made on the fact of the fifth century's radical departure from the Hecataean view, marked already by the Trojan era of Democritus.

First, we come back to the work of Ed. Meyer.⁹² He shows that Herodotus' assertion according to which Heracles lived 900 years before his own time (2. 145) is consistent with the Spartan king lists cited by Herodotus (7. 204; 8. 131), if one estimates one generation at 40 years. Since Herodotus himself says that three generations equal 100 years, Ed. Meyer assumes that such was Herodotus' own idea and that he used it consistently. The

⁸⁹ I deliberately avoid the discussion of Lydian chronology, but it is appropriate to note that the date for the death of Gyges as inferred from Herodotus is by a third of a century earlier than that suggested by the Assyrian sources.

⁹⁰ A. R. Burn, "Dates in Early Greek History", *JHS* 55 (1935) 130–46.

⁹¹ Walter Burkert, "Lydia Between East and West or How to Date the Trojan War: A Study in Herodotus", in *The Ages of Homer. A Tribute to Emily Townsend Vermeule*, ed. by Jane B. Carter and Sarah P. Morris (Austin 1995) 139–48 (hereafter cited as Burkert). I am grateful to Deborah Boedeker for drawing my attention to this most important paper.

⁹² Ed. Meyer, *Op. cit.* (n. 19), 1, 153–188.

inference is that Herodotus copied the date of Heracles from an earlier authority, most likely from Hecataeus.

It was an achievement of Ed. Meyer to indicate the use of a generation of 40 years in the fifth-century chronography, but his reference to Hecataeus was unfortunate. Hecataeus, as Herodotus (2. 143) tells us, claimed that his sixteenth forefather was a god (ἀναδῆσαντι τὴν πατρίην ἐξ ἑκκαίδεκατον θεόν).⁹³ Hence the divine ancestor of Hecataeus lived $16 \times 40 = 640$ years before Hecataeus (at the most). This is incompatible with a date for Heracles 900 years before Herodotus' time since Hecataeus was earlier than Herodotus about a century (at the most) and not about 260 years. Moreover, the divine ancestor of Hecataeus was probably thought of to have been one generation earlier than Heracles, and Hecataeus hardly reckoned with generations of 40 years.

We have no direct testimony as to the length of a generation in Hecataeus. But the most natural conclusion suggests itself. The famous formula equating three generations to 100 years originated most likely with Hecataeus' description of Egypt. First, Herodotus cites it in the context in which he depends on Hecataeus (2. 142 f.). Second, while explaining how the priests, in a conversation with Hecataeus, determined the length of the Egyptian historical past by counting the statues of *Piromis*, Herodotus says that there were 345 statues of *Piromis* shown to Hecataeus (*ibid.*). 345 (cited by Hecataeus) is a number divisible by 3, whereas Herodotus employs the formula to estimate the length of time covered by 341 generations, which results in clumsy arithmetic.⁹⁴

We are in a position now to determine the Hecataean date of the Trojan war. It is natural to assume that "the Milesian was thinking in terms of Milesian Neileids".⁹⁵ Both Nestor, a grandson of Poseidon, and his sons fought at Troy. Nestor is portrayed in the *Iliad* as a man who is much older than the rest. Therefore Hecataeus' ancestor fighting at Troy was the thirteenth rather than the fourteenth in the series. Hence Hecataeus and his

⁹³ ἀναδῆσαντι τὴν πατρίην seems to imply that Hecataeus himself is not included in the count.

⁹⁴ 345 generations make, on the formula, 11,500 years. The figure cited by Herodotus is 11,340 years for 341 generations. The difference is thus 160 years and 4 generations, which suggested that Herodotus subtracted 4×40 from the figure that he found in his source. His date for Heracles, just a few lines below, implies indeed the use of generations of 40 years. According to Mosshammer, 109, Herodotus' procedure was different, that is, he added 8 generations of 30 years each to 11,100 years (333 generations). I do not find this suggestion very plausible.

⁹⁵ Burkert, 143 f.

ancestor fighting at Troy were 13 generations apart or, which is the same, Hecataeus was born 12 generations after the *Troika*. On the formula used by Hecataeus in his description of Egypt, he was born, then, 400 years after the Trojan war.⁹⁶ The date of Hecataeus is not easy to determine with precision. He was a respectful person at the time of the Ionian revolt (490s). The number of statues shown to Hecataeus in Thebes suggests that Amasis was still alive when Hecataeus visited Egypt.⁹⁷ That they were shown to Hecataeus in Thebes points to a similar conclusion, for we are told that many temples in Thebes were mutilated by Cambyses (Strab. 17. 1. 46). One may assume, therefore, that Hecataeus traveled to Egypt a short time before the Persian invasion (c. 525 BC), being at that time a relatively young man.⁹⁸ Then his date for the *Troika* approximately falls in 950s BC.

One arrives at a similar conclusion in another way as well. Egyptian history begins in Herodotus with king Min. Then follow 330 kings of whom, save of Moeris, nothing memorable is recorded (2. 99 f.); then Sesostris (2. 102 ff.), Pheron (2. 111) and Proteus (2. 112). Proteus is 334th, and he is the host of Helen during the Trojan war (2. 113 ff.). Since Amasis is 346th, the Trojan war occurred 12 generations before Amasis (c. 570–526 BC). This is, of course, incompatible with the explicit assertion of Herodotus (2. 145) that the Trojan war took place more than 800 years before his time, but perfectly agrees with Hecataeus' genealogy. Hecataeus must have considered himself to be one generation younger than Amasis, and Amasis was an old man at the time of Hecataeus' travel to Egypt. Counting 12 generations backwards, one should proceed from the middle rather than the end of Amasis' long reign. Thus one arrives again at the middle of the tenth century for the *Troika*.

One can now see the Democritean Trojan era in a new perspective. It appears as an essential departure from Hecataeus' view. Hecataeus assumed about 430 years between his own time and the Trojan war. Democritus cites 730 instead of expected 530 or so years between the Trojan war and the publication of the *Diakosmos*. The Greek historical past was stretched out by two centuries. Why was the Hecataean date changed so drastically? Whether one accepts or denies the reality of the Trojan war, one cannot assume that some Greek records illuminating the date of the Trojan war

⁹⁶ It is conceivable that Hecataeus used the equation "3 generations = 100 years" only to calculate very long periods of time and that for shorter periods he used a generation of 30 or 35 years. The corresponding corrections are easy to make.

⁹⁷ Amasis is even 346th and not 345th Egyptian king in Herodotus.

⁹⁸ Jacoby, "Hekataios", in *RE* 7 (1912) 2667 ff., esp. 2670 f. believes for no convincing reason that the travels of Hecataeus began only after c. 516 BC.

emerged in the fifth century. Nor should one cite a close agreement of the archaeologists with the Eratosthenian Trojan era. Since the chronological precision is still beyond our reach for the Bronze Age, one should only hope that such an agreement is coincidental and not predetermined in fact by the authority of the ancient chronographic tradition.

It was repeatedly observed that Herodotus' date of Heracles ("900 years before my time", 2. 145) is incompatible with his date of Proteus as derived from the count of generations, on the one hand, but agrees well with his chronology of Asian kingdoms, on the other hand. We are told that the Heraclids had been ruling the Lydians for 22 generations (son succeeding father) and for 505 years. They were descended from Alcaeus, son of Heracles; Agron, son of Ninus, son of Belus, son of Alcaeus, was the first Heraclid king of Sardis (1. 7). Then 5 Mermnads, from Gyges to Croesus, ruled for another 170 years (1. 14; 16; 25; 86). If one wishes to determine the date of Heracles proceeding from these indications, one arrives at the result which is practically identical with Herodotean "900 years before my time". Herodotus also says that the Assyrians ruled over Upper Asia for 520 years (1. 95). Then they were replaced by the Medes. These were the masters of Upper Asia either 156 years, 28 of which such were, however, the Scythians (1. 130; 1. 106),⁹⁹ or 150 years, which is the sum of the regnal periods attributed to the four Median kings (1. 102; 106; 130). Whatever details, it is evident that we are dealing with a comprehensive chronographic construction.

How was the basic date, that of Heracles, determined? According to Ed. Meyer, it was determined by counting generations of Spartan kings. But in such a case, one generation must have been estimated at 40 years. Burkert objected that "to make one generation forty years is empirical nonsense". And if the interval of forty years entered Greek chronography, "this must have been due to the conflict between different traditions: generations had to be stretched artificially in order to meet some other date".¹⁰⁰ Burkert argues that this "other date" pertained to the views about the duration of the Near Eastern dynasties. "This, not calculations about Spartan kings with impossible forty-years generations, gave rise to the presupposition of a very early date for Heracles, and for *Troika* in consequence".¹⁰¹

Burkert's assertion about empirical nonsense is an overstatement. If that was usual for Greek aristocrats to get married in one's fortieth year, then the

⁹⁹ For the interpretation see Robert Drews, "The Fall of Astyages and Herodotus' Chronology of the Eastern Kingdoms", *Historia* 18 (1969) 1, 1–11, esp. 7 ff.

¹⁰⁰ Burkert, 144.

¹⁰¹ Burkert, 145.

use of 40-years generations was reasonable. We are not informed enough on the point and one may doubt that common practice was such, but it is characteristic that Plato (*Tim.* 21 a) does play the game with generations of 40 years. Burkert's idea is nevertheless attractive. The involvement of ruling dynasties into chronographic considerations should have shown to everyone concerned with the subject that 40 years could not be an adequate estimate for an average length of one's reign. Besides, there was originally no basis for generations of 40 years in scholarly tradition, if I am justified to conclude that the equation "3 generations per century" was introduced by Hecataeus. Furthermore, our interpretation of how Democritus arrived at his date for the *Troika* (section 3) suggests the use of the Spartan king list in combination with the equation "3 generations per century". Burkert is right, then, to assert that the use of 40-years generations in connection with Spartan kings requires a special explanation. He is also right to emphasize the importance of Greek views about the duration of the Near Eastern dynasties. However, his particular explanation of what actually happened calls for improvement.

Burkert ascribes the crucial role to a genuine Lydian tradition. In his view, the Assyrian pedigree of Lydian kings ("Agron, son of Ninus, son of Belus") was constructed in the time of Gyges when Lydia needed a military support from Assyria. Similarly, the Lydian kings became Heraclids when Croesus sought relations with Greece and made pact with Sparta.

I admit that it is difficult to find a better explanation for the Assyrian ancestry of Lydian kings than that proposed by Burkert.¹⁰² But I cannot imagine Croesus faking his lineage in order to get a batch of Spartan soldiers. Lydia was by far more powerful than Sparta, Croesus military campaign against Cyrus was planned as offensive rather than defensive, his ancestry was well known to many of the Greeks, and in any case he was a descendant of Gyges who, Herodotus says, murdered the last of Lydian Heraclids. Furthermore, on Burkert's hypothesis, Hecataeus should have known the Lydian king list containing 27 names from Croesus up to Argon, a great grandson of Heracles; he should have drawn the corresponding conclusions as to the time of Heracles and the Trojan war, which he did not.

Burkert was impressed by the combination of two figures: 22 generations of Lydian Heraclids and 505 years that they had been ruling over Lydia. Since one generation would in this case amount to c. 22.95 years, one must

¹⁰² Cf., however, Hdt. 6. 54: "Thus I traced their lineage (*sc.* the leaders of the Dorians at the time of the Return) according to the Greek story; but the Persian story is that Perseus himself was an Assyrian, and became a Greek, which his forbears had not been" (A. D. Godley's transl.). Note that the following paragraph contains a hint to Hellenicus.

conclude, Burkert says, that "Herodotus, or his source, is not using a simple count of generations here, but a king-list with variable length of reigns, which Herodotus did not copy in this case".¹⁰³ Burkert did not take into account the fact that the total duration of Lydian kingship covers 675 (505 + 170) years and 27 (22 + 5) generations. The one generation would, then, amount to exactly 25 years, and two ancient authors testify that such a length of a generation was among the conventional ones.¹⁰⁴ Hence we are still dealing here with a construction and not with an authentic king list.¹⁰⁵

Then there remain 520 years of the Assyrian empire. Suppose it is a piece of a genuine Near Eastern tradition. What date for the *Troika* would have been deduced from that by the Greeks? St Jerome gives two different dates for the fall of Nineveh, 622 (*Cyaxares adversum Assyrios dimicans Ninum capit*) and 608 BC (*Cyaxares Medus subvertit Ninum*); the dates suggested by the assyriologists are 626, 612 and 609 BC for the beginning of the war, the fall of Nineveh and the final defeat of the Assyrian army respectively. The Assyrians are not mentioned in the *Iliad*. It was apparently concluded that the Assyrian empire had not yet been founded at the time of the *Troika*. It was probably thought to have been founded by either Belus, who appears in the Herodotean genealogy of the Lydian kings as a grandson of Heracles, or by Ninus, son of Belus, that is, about one or two generations after the Trojan war. If the former was the case, the calculation leads to a date for the Trojan war which is very close to the Democritean or even exactly corresponds to it: $608 + 520 + 33 = 1161$ (the Trojan war began, according to Democritus, rather in 1160 BC, but I have to repeat that the difference of one year proves nothing). Thus a curious fact seems to emerge now. If the Trojan era of Democritus was based on counting generations of Spartan kings, one observes a close correspondence between Spartan and Assyrian chronologies. One of the two must have been derivative.

It is not easy to assume that a fifth-century scholar would have dared to insert (or omit) a number of names in the Spartan king list in order to meet a date deduced from a Near Eastern tradition. On the other hand, the duration of the Assyrian supremacy is expressed by a number (520) divisible by forty, which is suspicious. Moreover, the figure cited by Herodotus is not confirmed by Greek or cuneiform sources. I suppose therefore that 520 years of the Assyrian empire reflect Greek reckoning with 40-years generations rather than a genuine Near Eastern tradition. I also suppose that the

¹⁰³ Burkert, 142.

¹⁰⁴ Hesychius s. v. γενεά; Cens., DN 17. 2.

¹⁰⁵ It is also worth noting that Eusebius could name only nine Lydian kings.

original statement (the Assyrian rule lasted for 13 generations) was introduced by Hecataeus and that for him the Assyrian supremacy ended with the fall of Babylon rather than Nineveh. The Assyrians and the Babylonians were initially much the same for the Greeks (it is still so in *Hdt.* 1. 178 and 184). The destruction of Nineveh by the Medes does not seem to have much impressed the Greeks. But the capture of Babylon (539 BC) by the army of Cyrus took place about the time when another Persian army conquered the Ionian cities. Now 13 generations of the Assyrian kings, plus Alcaeus, father of Belus, plus Heracles, father of Alcaeus, constitute 15 generations, which corresponds to 15 non-divine ancestors of Hecataeus as well as 15 historical (including some quasi-historical) Egyptian kings.¹⁰⁶

Thus it was hardly a genuine Near Eastern tradition about the duration of the Assyrian empire that stretched the historical past out. This rather happened because of the recognition of the genealogies of Spartan kings.

There followed, however, further stretching the historical past out, at which the ideas about the chronology of eastern kingdoms seem to have played an important role. The end of Assyrian supremacy is associated in Herodotus with the fall of Nineveh and not of Babylon. Moreover, although it was commonly known that Assyrian power was destroyed only by Cyaxares, the third of the four Median kings, there appeared a chronological scheme based on the addition of the total duration of Median dynasty to that of Assyrian kingdom: $520 + 156$ (or 150).¹⁰⁷ Thus the fall of Nineveh was shifted backwards, and the foundation of the Assyrian empire was shifted accordingly. On the assumption, so natural to us, that the end of the Assyrian empire is marked by the fall of Nineveh, this means, say, $612 + 520 + 156 = 1288$ BC. However, I suspect that the originator of the scheme had in mind the fall of Babylon; hence, $539 + 156 + 520 = 1215$ BC.

Details remain obscure, but one may conjecture that generations of 40 years entered Greek chronography in connection with such constructions. The recent reigns of Archidamus (469–27) and Artaxerxes (464–23) could have been cited as a justification. To be sure, the addition of all the years covered by the Median dynasty to those of the Assyrian kings was simply

¹⁰⁶ There are four groups of Egyptian kings in historical narrative of Herodotus: 1) Min, the first king of Egypt (2. 99); 2) 330 kings "of whom nothing memorable is told" (2. 100 f.); 3) 10 ancient historical kings, beginning with Sesostris (2. 102–142); 4) 5 recent historical kings, ending with Amasis.

¹⁰⁷ The reason remains obscure. It is striking that Herodotus, on the one hand, follows this scheme (1. 130, note also 1. 95 f. and the correspondence of that scheme with the date for Heracles), but, on the other hand, he is aware that Nineveh was captured by Cyaxares (1. 102; 106).

misleading. The mistake was avoided by those who, like Ephorus (above, section 2), came back to the Trojan era of Democritus. 40-years generations were retained for the chronography of cultural history, which could be justified by usual difference in age between a *sophos* and his disciples.

One can possibly discern the traces of the transition from "3 generations = 100 years" formula to 40-years generations in chronological remarks of Thucydides. He says that Aminocles, a Corinthian shipwright, built four ships for the Samians nearly three hundred years before the end of the Peloponnesian war¹⁰⁸ and that the sea-fight between the Corinthians and Corcyraeans (the earliest known in history) took place about two hundred and sixty years ago, dating from the same time (1. 13. 3–4). The two events are separated by 40 years or one generation. Neither figure, however, is divisible by 40. According to Mosshammer, 115, "the intervals Thucydides uses in the "Archeology" (1. 1–23) – sixty years from Troy to the Boetian migration, twenty years more to the return of the Heraclids, 300 years from Aminocles to the "end of this war", 260 years since the naval battle between Corinth and Corcyra, 400 years of Spartan constitutional stability – can be interpreted as calculations based on generations and half-generations of 40 years each". But I cannot imagine Thucydides' source stating that Aminocles built the ships seven and a half generations ago or that the naval battle between Corinth and Corcyra took place six and a half generations ago. I assume, therefore, that Thucydides' source cited in fact seven and six generations, respectively. Further, I suppose that its reference point was the archonship of Aristion, separated from the end of the war by seventeen, that is, nearly twenty years. The archonship of Aristion was the reference point of Democritus, and there are many reasons to conclude that he used the formula "3 generations per century". For him, then, the sea-fight was c. 621, not c. 664 BC, as for Thucydides who favoured new conventions. "Four hundred years or a little more" of Spartan constitutional stability (Thuc. 1. 18. 1) provides a check for this way of reasoning. On the formula "3 generations per century", ten generations back from the archonship of Aristion means that the Spartan constitution was established c. 754 BC. Such a date is indeed attested in our sources. It is the traditional date for the establishment of the Spartan ephorate, which was, according to Hdt. 1. 65, a constituent of the reforms of Lycurgus (see further Mosshammer, 187 ff.). The date of Lycurgus cited by Socrates in the *Ps.-Plat. Min.* 318 c ("three hundred years ago, or but a little more") seems also to have been calculated on the formula "3 generations per century" and not on the 40-years generations, as in Thucydides.

It is left to say that Hecataean view about the length of the Greek historical past, based on recollections of Ionian noble families, could be safer than inferences from the Laconian or Mesopotamian data, and that the essential change of view, marked by the introduction of the Democritean

¹⁰⁸ Actually "this war", but I confidently follow the view of Ed. Meyer and other scholars, according to which Thucydides means the whole twenty-seven years war.

Trojan era, could be a development in the wrong direction. The date of Homer is possibly good to illustrate that.

Herodotus say that "the time of Hesiod and Homer was not more than four hundred years before my own" (2. 53). This means a date for Homer, say, in the 820s BC. According to Apollodorus (*FGrH* 244 F 63), Homer's *akme* falls in 944/3 BC. But what are the implications of these two dates?

If one takes into account Ed. Meyer's conclusion that Herodotus' date for Heracles was reckoned with 40-years generations and if one accepts my suggestion that the formula "3 generations per century" originated with Hecataeus and not Herodotus, one will naturally assume that the four hundred years cited by Herodotus represent an equivalent to ten generations and that Herodotus is just translating into new conventions an earlier estimate. On earlier conventions, the same date for Homer would fall in the 750s or so.

Apollodorus makes 240 years elapse between the fall of Troy and the time of Homer. Thus Homer lived six generations after the Trojan war. Since Greek intellectual life was both highly innovative and highly traditional, it would be no miracle if Apollodorus preserved, in a way, that date of Homer which had been suggested at the very beginning of historical studies, probably by Hecataeus. As we saw, a likely estimate of Hecataeus' date for the Trojan war points to the 950s BC. The distance of six generations between the Trojan war and the time of Homer points, on the formula "3 generations per century", to the 750s; this is practically the date at which we arrived in the previous paragraph.

The discussed above (section 7) dates for Arctinus in the eighth century (and similar dates) are apparently remains of that earlier system. However, the dates for Arctinus were calculated with generations of 40 years. So even the lower of the two, 744–1 BC, must be reduced, which makes a date at the end of the eighth century at earliest. I will not discuss here the actual dates of the *Iliad* and the *Odyssey*, and the other epics, but it is clear that the earlier system is in a better agreement with the modern views than the Hellenistic chronographic vulgate.

The realization of what happened to Trojan eras can also clarify an old debate about the time of the Phoenician colonization and of the foundation of Gades in particular. According to Strabo (1. 3. 2), the Phoenicians founded cities both beyond the Pillars of Heracles and in the central parts of the Lybian sea-board "short time after the Trojan war". According to Velleius Paterculus (1. 2), Gades was founded about the time of the return of the Heraclids, that is, about eighty years after the Trojan war (Velleius explicitly accepts the standard interval). Many scholars claimed that the ancient tradition points to

c. 1100 BC as the date for the foundation of Gades. It is easy to see now that such claims were ill-founded. Moreover, one should recall that it was Hecataeus from whom the Greeks originally learned about the population and cities of the far west. But for Hecataeus the Trojan war took place c. 950 BC.

Thus the departure from Hecataeus' estimate and the introduction of the Democritean Trojan era triggered various chronographic confusions. In general, that does not strongly affect our chronological views, since modern historians will certainly seek more solid foundations for the chronology of the Greek Dark Age than the opinions of Hecataeus or Democritus. The subsequent shift of the Democritean Trojan era just by 30 years or so presents, however, a very different case. All standard chronology of the seventh and sixth centuries must be examined anew.

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Согласно собственному утверждению Демокрита, его “Мирострой” был написан 730 лет спустя после взятия Трои. “Мирострой” был датирован (возможно, самим Демокритом) по афинскому архонту Аристиону (421/0 г. до н. э.), а троянская эра Демокрита, соответствующая 1151/0 г. до н. э., получила широко признание. Ее вытеснение троянской эрой Эратосфена (1184/3 г. до н. э.), ставшей стандартной троянской эрой античной хронографической традиции, произошло в известной мере случайно. Эратосфен скорее стремился опереться на Демокрита, нежели полемизировать с ним, но он исходил из ошибочного чтения имени архонта – Аристон. Тот был архонтом на 33 года раньше, чем Аристион, и взятие Трои отодвинулось вглубь соответственно. Вместе с этой датой отодвинулись вглубь и все даты, выраженные как “столько-то лет после взятия Трои”. Таким образом, мы должны считаться с возможностью того, что многие даты для VIII–VI вв. до н. э., дошедшие до нас через посредство Евсевия и других поздних авторов, на 33 года (или около того) древнее дат, изначально предложенных греческими историками и хронографами. Вместе с тем само появление троянской эры Демокрита знаменует собой существенное удревнение исторического прошлого греков. В рамках более ранней хронографической системы (восходящей, судя по всему, к Гекатею) Троянская война приходилась на середину десятого, а не двенадцатого века до н. э. Есть веские основания полагать, что ряд положений ранней системы (например, отнесение Гомера к шестому поколению после Троянской войны) был унаследован, но при отсчете от новой троянской эры их хронологический смысл существенно изменился.