

Alexander Verlinsky

Institute for Linguistic Studies, St. Petersburg, Russian Academy of Sciences
verlinsky@mail.ru

**HERODOTUS 2.142–144: THE REVERSALS OF THE SUN,
THE CHRONOLOGY OF THE EGYPTIAN KINGS, AND
THE MEETING OF HECATAEUS WITH THE THEBAN PRIESTS**

*In memoriam Christopher Rowe (1944–2025)**

The paper discusses the puzzling chapters of Herodotus' Egyptian logos (2.142–144), which are the object of continuous discussions, and tries to show that misunderstanding them arose from lack of attention to the internal connection of ideas in this section. The paper starts with Herodotus' account (2.142) of the number of generations, from the first human pharaoh of Egypt, Min, up to Sethos (341 in total), reported to him by the Memphis priests — Herodotus calculates this as 11, 340 years — and of the priests' accompanying statement that, in the course of the life of these generations, there were no anthropomorphic god-kings in Egypt and that in spite of the four changes in the direction of the sun's daily rotation, in the course of these years, the natural environment of Egypt and humans' liability to diseases and death did not alter.

The paper defends the manuscript reading of Herodotus' text on the changes in the sun's daily movement (2.142.4) and attempts to shed light on the sources of this extraordinary idea (I). It is argued (II) that it has a Greek, not an Egyptian origin, and that together with the passage from Euripides' *Electra* (726–736), another instance of the same belief, it reflects astronomical and philosophical ideas from the 5th century BC, but not that of Oenopides, but as was supposed by some scholars for the *Electra* passage, but other ones which could develop his supposition about the change in the sun's annual movement.

The Memphis priests' further statement that there were no such anthropomorphic god-kings in Egypt also before and after this period of 11,

* The impulse for writing this article was a polemic with Christopher Rowe regarding the interpretation of the myth in Plato's *Statesman*. Our joint discussion article, during which we also discussed the idea of reversals in the movement of the sun in Herodotus and Euripides, was published shortly before Christopher's death (see Rowe, Verlinsky 2025: 46–49). In the present article, I develop the considerations expressed there, which Christopher approved despite our disagreements in understanding the myth in the *Statesman*. I regard the present article as a modest tribute to the memory of an outstanding scholar of Plato and Aristotle, with whom I had the good fortune to work.

340 years (2. 142.3), surprisingly escaped scholars' notice or was wrongly interpreted. Taken together with Herodotus' later statement that before this time Egypt was reigned by gods (2.144.2), the neglected sentence proves that according to the Memphis priests, these divine kings were not anthropomorphic, which amounts to the view that there were never anthropomorphic god-kings in Egypt, or, implicitly, that there were (and are) no anthropomorphic gods at all. The relation between the turns of the sun and the immutability of human nature in respect to diseases and death thus can be understood as an argument that, since human nature did not change in spite of cosmic changes as radical as one can imagine, there are no reasons to believe that human physiology could be ever compatible with divinity.

This remarkable statement sheds light on Hecataeus of Miletus' famous conversation with the Theban priests, who in response to his claim that in the 16th generation he stems from a god, showed him 345 statues of hereditary high priests of Amun-Ra, arguing that a human cannot descend from a god. The paper argues (III) that the purpose of this display was precisely to refute the idea itself of human descent from god, not to demonstrate to Hecataeus the duration of human history or to inform him about Egyptian chronology. At the same time, there is no reason to think that Hecataeus considered his claim refuted, and should have been ashamed, as according to some scholars who argued, for this reason, that the information about the meeting cannot stem from him. As for Herodotus, his mention that the Theban priests showed him as many statues as the Memphis priests said there were generations from Min to Sethos is precise and shows that Herodotus' interest was solely in the confirmation of the Memphis chronology (the time after Sethos was of no interest for him, because it was well documented). He reported Hecataeus' conversation with the priests because, unlike Hecataeus, he found convincing their proof that human beings cannot descend from gods. Herodotus' earlier citing of the reasoning of the Memphis priests on the cosmic changes of the sun and the immutability of human beings was probably, for him, an additional argument in favor of this: gods never could have a human nature, because it was liable to diseases and death; accordingly they could not have human physiology enabling them to produce human children, with which reasoning Herodotus was in all probability agreed.

Key words: Herodotus, Egyptian logos, Hecataeus of Miletus, Euripides *Electra*.

А. Л. Верлинский

Институт лингвистических исследований РАН, СПб., Россия
verlinsky@mail.ru

ГЕРОДОТ II, 142–144: ИЗМЕНЕНИЯ В НАПРАВЛЕНИИ ДВИЖЕНИЯ СОЛНЦА, ХРОНОЛОГИЯ ЕГИПЕТСКИХ ЦАРЕЙ И ВСТРЕЧА ГЕКАТЕЯ МИЛЕТСКОГО С ФИВАНСКИМИ ЖРЕЦАМИ

В статье рассматриваются главы «Египетского логоса» Геродота (II, 142–144), являющиеся предметом постоянных дискуссий, и предпринимается попытка показать, что их неправильное понимание возникло из-за недостаточного внимания к внутренней взаимосвязи идей в этом разделе. Статья начинается с анализа геродотовского пассажа (II, 142) о количестве поколений, от первого человеческого фараона Египта, Мина, до Сета (всего 341), о котором ему сообщили жрецы Мемфиса — Геродот подсчитал, что это 11 340 лет — и с сопровождающего его заявления жрецов о том, что в течение жизни этих поколений в Египте не было антропоморфных богов-царей и что, несмотря на четыре изменения направления суточного вращения солнца в течение этих лет, природная среда Египта и подверженность его жителей болезням и смерти не изменились.

Автор статьи защищает рукописное чтение текста Геродота об изменениях суточного движения Солнца (II, 142, 4) и предпринимает попытку пролить свет на источники этой необычной идеи (I). Утверждается (II), что она имеет греческое, а не египетское происхождение, и что вместе с отрывком из «Электры» Еврипида (726–736) является еще одним примером тех же взглядов и отражает астрономические и философские воззрения V века до н. э., но не идеи Энопида, как предполагали некоторые ученые в отношении отрывка из «Электры», а такие, которые могли развивать идею Энопида об изменении годового движения Солнца.

Дальнейшее утверждение жрецов из Мемфиса о том, что в Египте не было подобных антропоморфных царей-богов ни до, ни после этого периода в 11 340 лет (II, 142, 3), ускользнуло от внимания ученых или было неверно истолковано. Взятое вместе с более поздним утверждением Геродота о том, что до этого времени Египтом правили боги (II, 144, 2), это утверждение показывает: по мнению жрецов из Мемфиса, эти боги-цари не были антропоморфными, что равносильно мнению о том, что в Египте никогда не было антропоморфных царей-богов, или, косвенно, что антропоморфных богов вообще не было (и нет). Таким образом, связь между вращением солнца и неизменностью человеческой природы в отношении болезней и смерти может быть понята как аргумент в пользу того, что, поскольку человеческая природа не изменилась, несмотря на столь

радикальные космические изменения, какие только можно себе представить, нет оснований полагать, что человеческая физиология когда-либо могла быть совместима с божественностью.

Это утверждение проливает свет на знаменитую беседу Гекатея Милетского с фиванскими жрецами, которые в ответ на его утверждение о том, что в 16-м поколении он происходит от бога, показали ему 345 статуй потомственных верховных жрецов Амона-Ра, утверждая, что человек не может произойти от бога (II, 143, 4). В статье доказывается (III), что целью этой демонстрации было именно опровержение самой идеи происхождения человека от бога, а не демонстрация Гекатею продолжительности человеческой истории или информирование его об египетской хронологии. В то же время нет оснований полагать, что Гекатей счел свое утверждение опровергнутым и потому якобы не мог сообщать о подобной беседе, из-за чего многие ученые сомневаются в достоверности рассказа Геродота. Что касается Геродота, то его упоминание о том, что фиванские жрецы показали ему столько же статуй, сколько, по словам жрецов из Мемфиса, было поколений от Мина до Сета, является точным и показывает: Геродота интересовало исключительно подтверждение мемфисской хронологии, которое он и получил в Фивах (время после Сета его не интересовало, поскольку оно было хорошо документировано). Он также сообщил о беседе Гекатея со жрецами, потому что, в отличие от Гекатея, счел убедительным их доказательство того, что люди не могут произойти от богов. Более раннее упоминание у Геродота рассуждений мемфисских жрецов о космических изменениях солнца и неизменности человеческой природы, вероятно, служило для него дополнительным аргументом в пользу той же мысли: боги никогда не могли иметь несовершенную человеческую природу, ибо она всегда была подвержена болезням и смерти, а, значит, и человеческую физиологию, позволившую бы им рождать человеческих детей, с чем сам Геродот, по всей вероятности, был согласен.

Ключевые слова: Геродот, Египетский логос, Гекатей Милетский, Еврипид, *Электра*.

In this article I am going to examine some difficulties related to chapters 142 to 144 of the second book of Herodotus, his Egyptian logos. These chapters often attract the attention of scholars due to their saturation with unusual subject matter: the Egyptians' conception of the gods, the use of generation counting to determine the length of historical epochs, the mention of changes in the direction of the sun's rotation allegedly known to the priests, and last but not least Herodotus' account of the conversation between his main predecessor Hecataeus of Miletus, and then Herodotus himself, and the Egyptian priests. This raises many questions: about both the

nature of the ideas reflected in this conversation and the reliability of Herodotus' report about Hecataeus and his own impressions. These chapters have often been considered a later insertion by Herodotus into an already finished text; some parts have even aroused suspicion that they are not by Herodotus; and at the very least, inconsistencies have been found in them. I will try to clarify some of these difficulties, draw attention to details that are rarely considered, and express some considerations regarding the relationship of Herodotus' account to what he gleaned from Hecataeus. I do not touch upon the reliability of Herodotus and Hecataeus' reports about their conversations with the Egyptian priests (it is more appropriate for Egyptologists to judge this), but I hope that my paper strengthens the case in favor of Herodotus' integrity as a reporter of what he has actually heard or thought he had heard. My interest in the chapters under discussion is nevertheless limited to reflection about certain ideas in these chapters, Greek ideas, as I argue.

I must say a few words about the place of the chapters under discussion in Herodotus' 2nd book. They adjoin the part of the narrative in which Herodotus, according to his own assertion, relies exclusively on local sources (99, 1), that is, to the strictly historical part, in contrast to the earlier part (from the beginning of the book to ch. 99), in which he describes the geography, nature, religion, and customs of Egypt and uses information obtained from local inhabitants in combination with his own observations and judgments. This historical section, from the 99th to the 141st chapter, ends with the reign of king Sethos, priest of Hephaestus, that is, the god Ptah, a fictional king whose prototype was possibly the Ethiopian king Shabataka (25th dynasty).¹ Herodotus, however, attributes the reign of Sethos to the time of the liberation of Egypt from the Ethiopians, that is, approximately to the time before the 60s of the 7th century BC. Probably following the version of his Egyptian sources, Herodotus turns the defeat of this king in the war with the Assyrian king Sennacherib into a victory for the Egyptians, thanks to the miraculous help of mice. Following the chapters that interest us (142–146), starting from ch. 147 and to the end of the 2nd book, Herodotus, as he says (2. 147. 1), relates what the Egyptians and his other sources agree about, that is, the history of Egypt of the time of the Saite dynasty, the last before the conquest of Egypt by the Persians. For this period he has at his disposal more reliable information deriving from the Egyptian Greeks (see 2. 154.

¹ Lloyd 1993: II, 13.

4), including the lengths of the reigns of the kings of this dynasty, which allows him to reconstruct the chronology of this period, counting backwards from Cambyses' conquest of Egypt.² This milestone, the reign of Sethos, starting from which Herodotus has more reliable chronological reference points at his disposal, will be significant for understanding the chapters under consideration.

1. Herodotus II. 142. 4 — a Text Problem

142. Ἐς μὲν τοσόνδε τοῦ λόγου Αἰγύπτιοι τε καὶ οἱ ἱερεῖς ἔλεγον, ἀποδεικνύντες ἀπὸ τοῦ πρώτου βασιλέως ἐς τοῦ Ἡφαίστου τὸν ἰερα τοῦτον τὸν τελευταῖον βασιλεῦσαντα μίαν τε καὶ τεσσεράκοντα καὶ τριηκοσίας ἀνθρώπων γενεὰς γενομένας καὶ ἐν ταύτῃσι ἀρχιερέας καὶ βασιλέας ἑκατέρους τοσούτους γενομένους. (2) Καίτοι τριηκόσiai μὲν ἀνδρῶν γενεαὶ δυνέεται μύρια ἕτεα· γενεαὶ γάρ τρεῖς ἀνδρῶν ἑκατὸν ἕτεά ἐστι· μῆς δὲ καὶ τεσσεράκοντα ἔτι τῶν ἐπιλοίπων γενέων, αἱ ἐπῆσαν τῇσι τριηκοσίῃσι, ἐστὶ τεσσεράκοντα καὶ τριηκόσια καὶ χίλια ἕτεα. (3) Οὕτως ἐν μυρίοις τε ἔτεσι καὶ χιλίοις καὶ πρὸς τριηκοσίοις τε καὶ τεσσεράκοντα ἔλεγον θεὸν ἀνθρωποειδέα οὐδένα γενέσθαι. Οὐ μὲν οὐδὲ πρότερον οὐδὲ ὕστερον ἐν τοῖσι ὑπολοίποισι Αἰγύπτου βασιλεῦσι γενομένοις ἔλεγον οὐδὲν τοιοῦτο. (4) Ἐν τοίνυν τούτῳ τῷ χρόνῳ τετράκις ἔλεγον ἐξ ἡθέων τὸν ἥλιον ἀνατεῖλαι· ἐνθα τε νῦν καταδύεται, ἐνθεῦτεν δις ἐπανατεῖλαι, καὶ ἐνθεν νῦν ἀνατέλλει, ἐνθαῦτα δις καταδύναι· καὶ οὐδὲν τῶν κατ' Αἴγυπτον ὑπὸ ταῦτα ἐτεροιωθῆναι, οὔτε τὰ ἐκ τῆς γῆς οὔτε τὰ ἐκ τοῦ ποταμοῦ σφὶ γινόμενα, οὔτε τὰ ἀμφὶ νόσους οὔτε τὰ κατὰ τοὺς θανάτους.

142. Thus far (i.e., what follows next) the Egyptians, including the priests, told me, explaining that from the first king to this priest of Hephaestus, who was the last to reign, there were 341 generations of men and in these generations an equal number of high priests and kings. (2) Three hundred generations of men correspond to ten thousand years: for three generations of men is one hundred years. And to the forty-one remaining generations, which were in addition to the three hundred, correspond 1,340 years. (3) Thus, they asserted that over the course of 11,340 years there was not a single god who had a human form. But neither before this nor after this among the other kings of Egypt was there, according to them, anything of the sort. (4) Now, they asserted that during this time the sun rose four times outside its usual places: it twice rose from where it now sets, and twice set from where it now rises. And nothing of what is in Egypt changed from this — neither what the earth produces for them, nor what the river does, nor what relates to diseases, nor what relates to deaths.

² Lloyd 1975: 189–191.

ἐξ ἡθέων] ἐξ <ἐναντίων> ἡθέων Schwenck³
 ἀνατεῖλαι] ἀναστῆναι Boeckh, Legrand 1944, Powell, Wilson 2015a
 δις (1) δις (2)] delevit Powell 1949

Contrary to the prevailing opinion in scholarship, I consider these chapters, despite the presence of minor digressions within them, not as an independent excursus and even less so as a later insertion by Herodotus into an already finished narrative,⁴ but as an organic continuation of the preceding part—that is, the one in which Herodotus relies exclusively on local Egyptian tradition. I will present arguments in defense of this unity later, but perhaps we possess an indication in favor of this from Herodotus himself, if the words Ἐς μὲν τοσόνδε τοῦ λόγου at the beginning of ch. 142 are understood not as the conclusion of the previous section (as they are usually understood⁵), but, what is more natural from the standpoint of Greek (Ἐς τοσόνδε usually looks forward, not backward), as pointing to its continuation and completion: “Thus far (i.e., up to what will be further communicated, i.e., in chs. 142–146, including the content of these chapters) the Egyptians, including the priests, communicated to me when they explained to me that from the first king etc.” See also the sentence at 147.1 which finishes this section: “This tell the Egyptians themselves” (i.e., there are no foreign,

³ Schwenck 1846: 162.

⁴ Enoch Powell tried to prove that chs. 142–146 are a later insertion into the Egyptian logos, made after the logos was already finished (Powell 1935: 78–79). The basis for this is mainly formal: ταῦτα 147, 1 “has no antecedent in our present texts”, by virtue of which Powell concludes that ταῦτα refers to the section 99–141. This reasoning is not convincing: ταῦτα refers to everything that was said prior to 147.1, starting from ch. 99: the information gleaned from the Egyptians about their remote history, obtained primarily from the priests. But this also includes the information reported in chapters 142–146 (about the chronology of Egyptian history, about the reversals of the sun and the absence of changes in the nature of Egypt and the people inhabiting it, and about the generations of Theban high priests and the dynasties of pharaohs), as opposed to the combined use of Egyptian and Greek sources, as well as direct impressions of the geography and customs of the Egyptians prior to ch. 99 and the more modern history starting from 147.1.

⁵ Powell 1949: “Thus far the Egyptians and their priests told the story”; Fritz 1967: 1, 182: “Soweit, sagt Herodot, stamme seine Information von den Ägyptern und den Priestern.”

especially no Greek informants for this period). If this understanding is correct, then this entire section, ch. 142–146, is a single line of reasoning concluding the historical section that began in ch. 99, despite the digressions characteristic of Herodotus within these chapters.

Thus, according to the accounts of the Egyptians, over the course of the 11,340 years⁶ which elapsed from Min (Menes), the first human king of Egypt, to Sethos, the sun rose four times not in its customary place: (1) twice it rose where it now sets, and (2) twice it set where it now rises. Formally, this implies four changes, but the impression is created that (1) and (2) describe one and the same situation: the sun rose in the west and set in the east. However, if this is so, it is unclear why Herodotus did not express himself precisely in this way and did not say “the sun rose four times in the west and set in the east”, but instead describes two symmetrical situations, each of which occurred twice, as something distinct. It is also not entirely clear why he speaks specifically of four sunrises in an unusual place. August Boeckh already attempted to cope with the second difficulty, proposing to emend ἀνατεῖλαι to ἀναστῆναι, meaning that the sun departed four times from its habitual places: twice it began to rise in the west and set in the east, and twice it returned to its original and current position⁷. However, this emendation does not clarify the second difficulty — why Herodotus further describes two situations, at first glance relating to one and the same anomaly — the rising of the sun in the west and the setting in the east — as two anomalies, each of which occurred twice. Despite this obvious difficulty, Boeckh's emendation is accepted by many scholars, including the editors of Herodotus (Legrand 1944; Wilson 2015a)⁸.

⁶ In reality, as often happens, Herodotus made an error in calculation: 341 generations at a rate of 3 generations per 100 years should yield not 11,340, but 11,366 and 1/3 years, see Fritz 1967: 2, 108 note 65.

⁷ Böckh 1845: 35–39. On the emendation of the text see p. 39. Boeckh, like some scholars after him, saw in Herodotus' unusual idea the influence of Egyptian astronomy, namely the Sothic (Sirius) cycle of 1460 years, which was used to bring the Egyptian civil year of 365 days into alignment with the interval of 365.25 days between two summer solstices, which in Egypt fall on the morning rising of Sirius (July 19).

⁸ See Wilson 2015 b: 41: “ἀνατεῖλαι followed by ἐπανατεῖλαι is suspicious, especially when combined with its difficult use in place of ἔξω, which was plausibly proposed by Scaliger. The eccentric rising is not to be specified

Schwenck proposed to emend ἐξ ἡθέων to ἐξ ἐναντίων ἡθέων, meaning that the sun rose four times from opposite places, that is, the sun changed the place of sunrise four times to the opposite: it rose in the west, then returned to the usual place in the east, again rose in the west and then again returned to sunrise in the east⁹. Intuitively, this is what the reader usually wants to find in this place: that the sun twice changed its usual places of sunrise and sunset to the opposite and each time then returned to the usual sunrise and sunset¹⁰. However, this understanding, like Boeckh's, does not correspond to the four cases that Herodotus describes in pairs: he has all four cases anomalous: the sun rose twice in the west and set twice in the east.

Stein, unlike most commentators on the passage, proposed that ἐξ ἡθέων should be understood not as “outside the usual places”, but “from the usual places”, “von ihrem Standorte aus”, and considers two possible interpretations: Either for 11,340 years the sun had four different places of rising, each for a long time, or that during this time it rose only four times in its usual place, and the rest of the time did not rise there. Further words of Herodotus, according to Stein, show that he intended the first sense: that the sun rose four times in an unusual place. Stein thus arrives in a different way at the traditional understanding of the meaning of Herodotus' words¹¹. His suggestion of the meaning of ἐξ ἡθέων is difficult to accept: Even if Herodotus meant that unusual places of rising persisted for a long time, the understanding of ἐξ ἡθέων as “(from unusual) but (for a long time) familiar places” implies a brachylogy whose immediate meaning contradicts what Herodotus meant to say. The predominant understanding of ἐξ ἡθέων as “out of the ordinary places” is therefore obviously still correct. With regard to the main difficulty of our text, Stein further interprets the words “where it now sets...” as the interchange of long periods of sunrise in the west and sunset in the east with long periods of normal sunrises and sunsets,¹²

here but in the next sentence. Boeckh's ἀναστῆναι ‘migrated from’ is perfect and was adopted by Legrand”.

⁹ Schwenck 1846: 162.

¹⁰ In their commentary on this passage, How and Wells (How, Wells 1936), paraphrase the text exactly this way — the sun during two periods rose in the east and during two rose in the west—not noticing that this does not correspond to the exact meaning of Herodotus' statement.

¹¹ Stein 1902: 164.

¹² “Hiernach ging also die Sonne in der Zeit von Min bis Sethosos (die 11340 J. beruhen allein auf H.'s Berechnung) zweimal im Osten und

contradicting the text, in which all four cases described are anomalous.

This difficulty was noticed by W. A. Heidel, but his suggestion boils down again to the fact that Herodotus wrote carelessly and actually meant to say that the sun rose twice normally, in the east, and twice in the west¹³. This, however, would mean that Herodotus could not express the quite simple idea that a sunrise in the west had the consequence of its setting in the east. Heidel was reasonably objected to by Dmitry Panchenko: “However, it is not necessary to ascribe to Herodotus a misunderstanding of elementary things! Obviously, what is meant is that of the four anomalies, two were ‘fixed’ at the sunrise point and two at the sunset point”¹⁴. I am not quite sure what is meant by “fixed” in the east and in the west in this context, but if Panchenko means that both situations, each of which happened twice, were anomalous and at the same time anomalous in different ways, then this is the solution that I am going to defend.

The same difficulty prompted Enoch Powell in his famous translation of Herodotus¹⁵ to radically alter the handwritten text: “Now in all this time they said that the sun had removed from his proper course four times; and had risen where he now setteth, and set where he now rises; but nothing in Egypt was altered thereby, neither as touching the river nor as touching the fruits of the earth,

zweimal im Westen auf, d.h.im 1. Viertel jenes Zeitraums ging sie täglich im O. auf und im W.unter, im 2. ging sie im W. auf und im O. unter, im 3. Viertel war ihre Richtung wieder wie im 1. und im 4. wie im 2. Viertel: sie hatte im 1. und 3. Viertel ihre ἡθρα im Osten, im 2. und 4. im Westen. Am Schlusse jenes Zeitraumes, nach König Sethosos, nahm dann ihre tagliche Bewegung wieder die Richtung an, die sie in seinem Anfange gehabt hatte, von O, nach W., in welcher sie bis in die Zeiten H.'s verharrete”.

¹³ Heidel 1933: 195; Heidel 1935: 88 (follows the manuscript text, without Boeckh’s emendation): “The priests reported that in the course of 341 generations the sun four times rose contrary to its wont, rising twice where it now sets, twice setting where it now rises. One need not be very acute to perceive that we have here another instance of carelessness or want of understanding on the part of our author, because he contradicts himself. It is easy to say “by these words Herodotus means: the sun rose four times away from his previous quarter; i.e., had changed his place of rising four times, rising in the east for two periods and in the west for two”; but, granting that this may have been what he intended, one cannot choose but wonder how Herodotus could so blunder in his statement of it.”

¹⁴ Panchenko 1990: 70 note 2.

¹⁵ Powell 1949: I, 177.

nor concerning sicknesses or deaths.” Powell thus accepts Boeckh's correction (the sun has left its proper course four times, rather than rising four times in an unusual place), but he also removes both *δίς*, leaving the simple statement that the sun rose where it now sets and set where it now rises¹⁶. With this understanding, Powell could have rejected Boeckh's correction as well, but *ἐξ ἡθέων τὸν ἥλιον ἀνατεῖλαι*, likely in the meaning of "stood outside the usual places" seemed unacceptable to him in one way or another. There is no denying that there is more logic in such a text (it roughly corresponds to the meaning that scholars usually want to find here). But an aorist without a quantitative adverb or some clarifying word or phrase is ill-suited to express iteration¹⁷. Furthermore, it is difficult to explain how such a simple text could have been distorted (both are more likely to prompt, not the elimination of *δίς*, but the correction to *τετράκις*: the sun rose four times where it usually sets and set four times where it usually rises). I believe, however, that the handwritten text of this place can be satisfactorily understood and does not need to be corrected. Moreover, when saving the text of manuscripts, we receive an indication of how the sun, according to Herodotus, returned to its normal course.

In fact, the reference to the four anomalous sunrises may well correspond to the two twice-occurring anomalies that Herodotus describes. Herodotus could understand (1) and (2) as two different variants of the movement of the sun, rising all four times in an unusual place, that is, in the west. (1) The sun rose twice in the west and moved to the east, but then during the day changed its course to the opposite and set in the same place where it rose, that is, in the west (the sun reversed its movement during the day, during its visible movement). (2) The sun rose twice in the west and set in the east, that is, having risen in the west, it moved east all day and set in the east (this suggests that the sun changed its usual course at night, during its invisible movement over the opposite part of the earth).

This understanding is consistent with what Herodotus says about four anomalous sunrises, but not about four anomalous sunsets. Option (1), that is, a change in the direction of movement during the visible movement of the sun, corresponds to the myth about Atreus

¹⁶ Powell considered this passage up to the end of ch. 142 a later addition, like the entire ch. 143, with the latter possibly not belonging to Herodotus at all (Powell 1949). See earlier Powell 1935: 78–80.

¹⁷ See Kühner — Gerth I, 162 note 4.

and Thyestes, in which the sun turns back during its daytime movement through the sky, albeit after a normal sunrise.

With this understanding of the text, of course, some roughness remains: the statement (1) “the sun rose in the west” should be understood as a brachylogy: Only the sunrise, but not the sunset, was anomalous. However, the contrast with the second sentence — the sun not only rose, but also set in an unusual place — apparently allows us to consider such a brachylogy tolerable, remaining within the limits of the understandable.

An even number of these anomalous sunrises make us think that their description contains an indication of the sun's return to its original direction of motion, which corresponds to the modern one. Apparently (1) implies this return: The sun, having risen in the west, set again in the west, that is, it continued to move, as usual, hiding from observers, from west to east and rose in the morning, as usual, in the east. Thus, Herodotus has in mind an anomalous cycle consisting of two phases, which has occurred twice during the history of Egypt:

1. once (2) the sun, having risen in the west, moved during the day to the east and, having set in the east, passed invisibly from east to west and rose in the west;

2. then (1) the sun, rising in the west, moved part of the day to the east, but changed course and moved to the west, where it set, returning to its usual course.

Herodotus further reports that, according to the Egyptian priests, these fourfold changes in the direction of the sun's movement did not have any consequences for the natural conditions in Egypt and “as far as diseases and deaths are concerned”. Scholars, in my opinion, do not correctly understand the meaning of this statement. So, Heidel believed that Herodotus, when talking about the turns of the sun, means, like Plato in the *Timaeus* and *Critias*, the theory of natural disasters. In the *Timaeus* and *Critias*, the catastrophes should explain why the historical memory of Greeks is so short, that they remember only one flood and this in the distorted form of the myth about Deucalion (*Tim.* 22 a), and that no memory of Atlantis and the ideal Athens of the past was preserved among the contemporary Athenians. According to the story the Egyptian priests told Solon, there are types of catastrophes that periodically destroy civilizations over the whole earth: The first type is conflagrations that arise when the planets deviate from their usual course around the earth. The conflagrations destroy the inhabitants of high and dry regions and spare those who live close to seas and rivers. On the contrary,

periodically occurring floods that also embrace the totality of the earth destroy cities on the shores of rivers with their civilized population and spare herdsmen and shepherds in mountains, who each time lose their cultural achievements and with them also the memory of their past (*Tim.* 22 d–e). In intervals between these disasters, every time “civilizations attain literacy and other things, which towns need”, until the next catastrophe comes and leaves again only illiterate and uneducated survivors. Only Egypt, due to its marvelous climatic position and the Nile, escaped these destructive forces, water and fire, and thus preserved records of the remote past and memory of previous catastrophes in other parts of the world (*Tim.* 23 a; *Crit.* 109 d–110 e)¹⁸.

I do not think that Herodotus has in view something like Plato’s theory of periodic floods and conflagrations. It is quite possible that Plato, creating his theory of periodic catastrophes in the *Timaeus* and *Critias*, was influenced not only by mythological stories about the floods, but also by the teachings of Heraclitus and Philolaus¹⁹ and was also inspired by Herodotus’ remark about the immutability of nature in Egypt, despite the colossal cosmic changes. However, let us not lose sight of the fundamental difference between the Platonic doctrine of periodic floods and fires in the inhabited world and the passage of Herodotus in question. Herodotus himself makes no hint of the periodic death of civilizations elsewhere, nor of an

¹⁸ Heidel 1933: 193–196; Heidel’s proposal is further developed by Dmitry Panchenko (Panchenko 1990: 67–70). Panchenko also notes the similarity of Herodotus’ idea of the four reversals of the sun to the Greek myth of Atreus and Thyestes, which Plato used for his doctrine of the changes in the rotation of the cosmos (p. 68 note), which is in fact closer to Herodotus’ reversals than the story of Atlantis. Although I do not agree with the proposal that Herodotus has in mind a theory of catastrophes, anticipating the Platonic doctrine, I would like to note that Panchenko’s book remains, in my view, the most insightful investigation of the sources and overall meaning of Plato’s story about Atlantis.

¹⁹ It is quite possible that even the early mythological stories of the Greeks about the flood presupposed its encompassing the entire earth; Heraclitus held a doctrine of periodic floods and conflagrations on the scale of the whole cosmos (it remains controversial whether he believed that the world is completely destroyed by fire and then reborn, or if the conflagration is only partial); for Philolaus (44 A 18 DK) a doctrine is attested concerning destructions on earth under the influence of solar fire and celestial moisture, however the scales of the supposed catastrophes and their causes are unclear, see the analysis of the testimony: Huffman 1993: 261–266.

attempt to explain by such a theory the relative youth of Greek civilization in comparison with Egypt. He does not refer to catastrophe theory, in particular, where he clearly has in mind the later nature of Greek culture, but argues only that the Greeks borrowed beliefs about some gods and their names from Egypt either directly or through their predecessors, the Pelasgians (2. 42–44; 50; 52–53). In general, we do not have reliable evidence to show that anyone before Plato linked the doctrine of periodic catastrophes with the question of the duration of the existence of the human race and the comparative duration of individual civilizations. In any case, Herodotus nowhere mentions such catastrophes, and in the place we are discussing, he is not interested in the physical destruction of people and cultural achievements, but in the impact of cosmic changes on the natural environment and through it on human nature, diseases, and mortality²⁰.

It is more difficult to decide whether Herodotus means that changes in the daily motion of the sun, which did not affect the nature of Egypt and the people living in it, affected the nature of other parts of the inhabited world. This cannot be categorically ruled out, since the most important parallel to this reasoning of Herodotus, the passage from Euripides' *Electra*, speaks precisely of similar consequences for the climate of various parts of the world (see below). Herodotus at least weighs the possibility of such consequences, although he denies them for Egypt. However, even in this case, nothing makes us think that Herodotus or Euripides mean the death of people and civilizations and the loss of historical memory, as Plato's doctrine of periodic catastrophes in the *Timaeus* and *Critias* suggests.

In my opinion, Kurt von Fritz is also probably mistaken when he believes that the purpose of Herodotus' statement is to criticize Hesiod's idea of the golden generation of people, when the earth itself bore fruit, and people lived much longer than now, and left life

²⁰ In this regard, Herodotus' thought might be somewhat closer to another part of the same doctrine than to Plato's world catastrophic floods: that of world intensifications of fire, i.e., periodic increases in aridity, about which he speaks in less detail than about floods. But here too, Plato most likely has in mind the impoverishment of the soil and the gradual decline of civilizations located far from rivers, whereas Herodotus reflects on the possible impact of such changes on the physical properties of men themselves.

without suffering²¹. It is true that Herodotus implicitly denies this concept of Hesiodus', but the immediate context of Herodotus' statement about the four turns of the sun that did not lead to radical changes on earth is the denial that there were god-kings and thus the anthropomorphism of the deity; and the extraordinary longevity of people in the golden age still does not make them gods.

How long the periods of anomalous daily motion of the sun (phase 1) lasted, Herodotus leaves unclear. Here, however, we should avoid two possible extreme interpretation of his words, which in part stem from the interpretations of this passage already mentioned above. Herodotus hardly means short-term disturbances in the movement of the sun and then a return to the usual order of things. The following sentence speaks against this: According to the priests, despite these anomalies in the movement of the sun in Egypt for 11,340 years, there have not been any major changes related to what the earth and the river produce, and to what relates to the diseases and deaths of living beings. In other words, changes in the direction of the daily movement of the sun (that is the rotation of the world itself, according to the more advanced Greek views) did not affect the natural conditions of Egypt, its fertility, and, as a result, its people's physiology. Short-term changes in the direction of the daily motion of the sun could probably lead to catastrophes and the death of living beings, but they could not even hypothetically produce changes affecting the nature of the country and man²². It is much

²¹ Fritz, 1967, 1: 183.

²² The myth in Plato's *Statesman* (268e–274e) could have been inspired, along with the undoubted influence of the myth of Atreus and Thyestes, by Herodotus' account of the changes in the motion of the sun (see below). Plato's myth links to the reversals of the cosmos, both when the god-demiurge leaves it and when he returns to its helm, a turbulence and, consequently, the catastrophic death of living beings on earth (270b 7-d 1); alongside this, according to the myth, when the latter change in the direction of the cosmos' motion occurs, i.e., the god turns it to the west-east direction, opposite to the present one, this leads to a change in the nature of man: people arising from the earth during this motion are born as old men and develop backwards from old age to infancy (I defend and develop the traditional interpretation of the Platonic myth, according to which there are only two periodically occurring phases in the development of the cosmos in it, and not three, as L. Brisson, G. Carone, and C. Rowe believe, see Verlinsky 2008; 2009). Although the Platonic idea of the "reverse development" of human beings is very far from the more sober thought of Herodotus about the possible influence of the sun's reversals on

more likely that Herodotus was referring to anomalies that lasted for an extended period. Indirectly, an even number of changes speak in favor of the long-term nature of the anomalies: it suggests that by changing its course twice to the opposite, the sun eventually returned to its original one. If Herodotus had sought to emphasize the brevity of the anomalous course, an even number would have been superfluous. At the same time (the other extreme interpretation, that of Heidel, already mentioned), the changes that Herodotus has in mind could have been significant and had serious consequences and affected natural conditions in parts of the world other than Egypt, for example in climate and the earth's fertility, but he does imply, as the context shows, catastrophic disasters wiping out entire peoples and civilizations immediately, as in myths and philosophical theories about floods and conflagrations.²³

Euripides in *Electra* (see below) depicts a similar change that causes the previously arid north to become cool and humid, and the opposite change occurs with the south, apparently because the sun, previously rising in the west, moved through the north to the east, and now from the east through the north to the south. So, Herodotus is most likely also referring to the anomalous movement of the sun over a long period, which should have had a significant impact on climatic conditions around the world. Herodotus does not say why, according to the Egyptian priests, there were no serious climatic changes in Egypt itself, but it is quite possible that he is referring to the typical idea of Egypt as a country occupying a middle position in terms of temperature and precipitation. Such land should be the least affected by global climate change.

human nature (these changes themselves are unnamed and are denied for Egypt), the very supposition of such influence could have inspired Plato when he brought forward his extraordinary idea of alternating changes in the development of man in different phases of the cosmic cycle.

²³ Herodotus' words that the cosmic changes did not lead to changes in what the Egyptian land and the Nile produce may imply serious climatic changes in other parts of the world, similar to those depicted in Euripides' *Electra*. But from this, of course, it does not follow that Herodotus has in mind serious changes in human nature itself in these places: his argument is directed to show that the nature of people did not change in Egypt and therefore anthropomorphic gods could never exist there, and not to suppose that they could have existed once in other places.

2. Turns of the Universe and Planets: Herodotus, Euripides, and Oenopides

Let us now turn to the ideological origins of Herodotus' unusual statement. They have been sought in both Egyptian and Greek representations, and in all these cases, scholars usually assume that Herodotus himself describes cosmic changes of a periodic nature.²⁴ It was first suggested that Herodotus might have been influenced by Egyptian astronomy, the so-called Sotis (Sirius) period, that is, the period of 1460 years between the two morning risings of Sirius on July 19 in Memphis²⁵. Against this assumption, however, is the fact that these calculations by Egyptian astronomers do not suggest any changes in the direction of motion of space or celestial bodies²⁶.

Further, it has been supposed that Herodotus was influenced by the teachings of Heraclitus and Empedocles about the cyclical changes of the cosmos, its emergence and complete or partial destruction. A. Lloyd, realizing that Egyptian astronomy does not know any changes in the direction of the sun, suggested that Herodotus asked his Egyptian informants a question about cosmic cycles, for example, about their knowledge of changes from the era of hostility to the era of love, according to the teachings of Empedocles. The Egyptians, not understanding his question, reported their knowledge of irregular disturbances in the movement of the sun, quite compatible with the general stability of nature in Egypt; and Herodotus himself gave these changes a cyclical character.²⁷ This complex hypothesis is unlikely: As discussed

²⁴ Mikalson 2003: 43 drew a strange conclusion from this passage: The Egyptians, according to Herodotus, dismissed solar phenomena as omens (2.142.3-4).

²⁵ August Boeckh was the first to express this opinion, see above.

²⁶ Against the influence of the Sothic cycle, see: Heidel 1935: 88 (Even if we accept for the time of Herodotus a knowledge, even among the priests, of the Sothic period, we are as far as possible from an explanation of his words; for a Sothic period is 1,461 common years, and multiplying that number by four (or five, to take the most favorable view), we should have, say, 7,000 instead of the nearly 12,000 years which the historian reckons. It is clear, however, that the periods have nothing to do with Sothis, nor specifically with Egypt. It is more than doubtful whether Herodotus comprehended the meaning of his authority, who must have been Greek)."

²⁷ Lloyd II, 1993: 107: "The only way out of the dilemma is to assume that H. enquired about cosmic cycles, presumably mentioning a series of four as in Empedocles' doctrine, the Egs. completely misinterpreted the question and replied in terms of four mythological astronomical events like those

above, in Greek philosophical cosmologies suggesting cyclical catastrophes such as fires and floods, there is no suggestion that they are associated with turns in the movement of the sun, and Herodotus, in turn, does not mean catastrophic destruction. In addition, the Egyptian notion of disturbances in the movement of celestial bodies, which Lloyd thinks could have influenced Herodotus, is very far from what Herodotus himself reports. Lloyd refers to a magical text that talks about how Isis stopped the movement of the sun god Ra across the sky in order to achieve the protection of the baby Horus, and how this movement was then restored.²⁸ Here, however, it is not about a change in the direction of the sun's movement, but only about its temporary stoppage, which can rather be considered a folklore motif (cf. the sun and the moon standing still during the Battle of Gibeon, Book Joshua, 10:12). Herodotus' idea, by contrast, is not typical of folklore and could reflect instead the influence of certain astronomical views. Even if Herodotus was told something similar to what Lloyd suggests, he definitely subjected this account to an interpretation in accordance with some Greek ideas of his time, but these could not have been theories about the cyclic changes of the cosmos like those attested for Heraclitus and Empedocles.

Heidel was obviously right when he refused to search for the Egyptian origins of Herodotus' account of the turns of the sun. But he tried to prove instead that Herodotus, like Plato, was influenced by a complex set of ideas that he calls "astrological", that is, views about cosmic cycles associated with periods of planetary motion (the

mentioned above: "During the time you mention, Herodotus, we know of four instances where the sun's course has been interrupted"").

²⁸ Lloyd II, 1993: 107: "This idea [of the stability of the Egyptian natural environment] is completely at variance with the Gk. notion that a cosmic cycle ended with complete destruction, but would be entirely compatible with the idea of temporary interruptions of the astronomical order like that described in the Metternich Stele.". [Asheri]-Lloyd -[Corcella] 2007: 344: "Herodotus or his Egyptian informants mistakenly combined the Greek idea of cosmic cycles (for example, of Empedocles) with the Egyptian mythological conception of disruptions in the motion of heavenly bodies..." Lloyd refers to Sander-Hansen 1956: Invocation XIV, p. 64, lines 203 ff. (see translation: p. 71-72, and summary of contents on p. 11-12); see also: Sternberg-el Hotabi: 1988, 367-368. This is a hieroglyphic magical text of the epoch of the 30th dynasty (360-342 BC, Sternberg-el Hotabi: 1988, 358).

“great year”), which are accompanied by world catastrophes.²⁹ In his considerations, Heidel arbitrarily mixes heterogeneous ideas that belong to various epochs, not caring about their mutual relation, but here is not the place to discuss in depth the development of Greek teachings about world cataclysms. As mentioned above, Heidel's proposal about the influence on Herodotus of a doctrine close to Plato's theory of periodic ignitions and floods in the *Timaeus* and *Critias* is not plausible: Herodotus does not mean the catastrophic death of people and civilizations, and the catastrophes of the *Timaeus* and *Critias* are not associated with turns in the movement of the luminaries.

To determine the origins of Herodotus' view of the turns of the sun, another view is worthy, which Heidel mentions among the conglomerate of teachings he quotes, which he incorrectly called “astrological.” This is close to Herodotus' idea of changes in the direction of the daily rotation of the sun around the earth, with consequent consequences for the climate.

A similar idea, as has been repeatedly noted, is found in several of Euripides' tragedies, in which the rotation of the sun is associated with the mythological story of how Zeus, having come to the aid of Atreus in a dispute with his brother Thyestes about the kingdom, ordered the sun to reverse its direction of movement, in order to confirm the correctness of Atreus and bear witness to Thyestes' deception. The version of the myth of Atreus and Thyestes that we find in *Electra* (726–736), staged about 420 BC,³⁰ comes closest to Herodotus' account of the sun's turns:

τότε δὴ τότε <δὴ> φαεν-
νὰς ἀστρον μετέβας' ὁδοῦς
Ζεὺς καὶ φέγγος ἡελίου
λευκόν τε πρόσωπον αὐῶς,
τὰ δ' ἔσπερα νῶτ' ἐλαύνει
θερμαὶ φλόγι θεοπύρῳι
νεφέλαι δ' ἔνυδροι πρὸς ἄρκτον,
ξηραὶ τ' Ἀμμωνίδες ἔδραι
φθίνουσ' ἀπειρόδροσοι,
καλλίστων ὄμβρων Διόθεν στερεῖσαι.

Then Zeus changed the shining paths of the luminaries, both the light of Helios and the white face of Eos, and (Helios) now rushes with the hot

²⁹ Heidel 1935: 88-92.

³⁰ On the date, see Seidensticker 2025: 9 with further literature.

flame of the divine fire across the western part of the sky, clouds full of moisture rush north, the dry Ammon dwellings wither, unaware of dew, deprived of the most beautiful rains of Zeus.

At least in *Electra*'s version of the Atreus-Thyestes myth, this is the turn after which the sun begins to move in its current direction from east to west, that is, it is not a temporary, but a permanent change³¹. A change in the direction of the sun's rotation in *Electra* entails, as I said, climate change throughout the inhabited world: Arid, hot areas become wet and cold and vice versa³². Cropp believes, rightly in my view, that the implied reason for this change is that the sun, which previously moved from the west through the north to the east during the day, is now moving from east to west through the south³³.

However, if the sun previously moved not just in the west to east direction, but also passed over the northern, not the

³¹ I leave aside other mentions of changes in the sun's motion in Sophocles and Euripides, whose interpretation is fraught with difficulties (see Cropp 2013: 194–195).

³² I freely use in this section my earlier comments on Euripides and Oenopides in Rowe, Verlinsky 2025: 47–49.

³³ This interpretation was first proposed by Kembell-Cook 1950 and further developed by Cropp 2013: 195–196. Morrison argued instead (1970: 85–90) that in *Electra*, 726–736, Euripides has in view not the reversal of the sun's diurnal rotation, but the tilting of the universe (this idea has been ascribed to Anaxagoras and Diogenes of Apollonia); this, according to Morrison, should have affected the elevation of the sun's orbit and changed the climate on the earth; Morrison emended Euripides' text according to his interpretation. This proposal has no support in Euripides' text and obviously contradicts it because the elevation of the sun's orbit could not result in the mutual change in the position of wet and dry zones which Euripides clearly mentions. Willink 1986: 254, endorsed this proposal (he explains: “for the newly hot or hotter midday sun causing drought in the south”—does the elevation of the sun's annual orbit make the midday sun hotter?), but he notes simultaneously that “of more immediate interest for this passage is Oenopides' discovery of the sun's eastward path along the ecliptic in relation to the stars and his association of this ἐναντία περιφορά with the Banquet of Thyestes”. It is not clear to me how Willink thought both ideas could coexist in Euripides' verses, but his proposal is manifestly wrong about Euripides' relation to Oenopides: the latter had in view the reversal of the sun's annual revolutions from the earlier westward movement to the present eastward one (see further on Oenopides). This does not fit with the reversal as depicted in the *Electra*, which certainly shows the change in the sun's daily course.

southern parts of the earth, it means that previously the inclination of the plane in which the sun and other planets move would not be to the south, as it is now, but to the north. This may indicate that Euripides conveys in a simplified form someone's more complex, quasi-scientific hypothesis that in ancient times the sun at some time not only began to reverse its direction of rotation, i.e., its current east-west direction (that is, the direction in which the whole universe rotates has changed from west-to-east to east-to-west direction), but, in addition, the inclination of the plane relative to the earth in which the sun and other planets rotate, the plane of the Zodiac, has also changed.

It is probable that the suggestion about climate change on the earth due to the change in the rotation of the sun, as stated in the *Electra*, is not Euripides' invention but was also a part of some theory by someone before him about the cosmic change. As I said, Herodotus may also mean that the rotation of the sun should cause significant changes in the environment outside of Egypt.

Although representations of a temporary standstill or temporary change in the direction of the sun's movement are found in folklore, the idea of lasting change or even permanent change in that movement, as we find in Herodotus, in Euripides' *Electra*, and in myth in Plato's *Statesman*, is definitely not derived from folklore, but reflects the influence of scientific and philosophical ideas³⁴. It has in fact been suggested that Euripides' version of the myth of Atreus and Thyestes with a change in the daily motion of the sun reflects the influence of the ideas of the Greek astronomer Oenopides (born about 490–485 BC)³⁵.

Oenopides is credited (41 A7 DK) with the discovery of the inclination of the sun's orbit to the earth's equator and of its movement in the direction opposite to that of the universe (the latter is also the direction of the daily revolutions of the sun).

According to Achilles Tatius, Oenopides also claimed that the sun once moved across the Milky Way but because of Thyestes' dinner both reversed its course and changed its path: it now moves through the Zodiac in the west-to-east direction, viz. it moved earlier across the Milky Way in the east-to-west direction.

³⁴ Lloyd 1993: 106 therefore, I believe, searches in vain for the origins of this idea in Greek and Egyptian folklore conceptions.

³⁵ See note 33.

Achilles Tatius, *Isagoge in Arati Phaenomena* 24 (ed. Maass) p. 55, 18–21 = 41 A 10 Diels—Kranz = Oenopides T 11 Bodnár: ἕτεροι δὲ φασιν, ὧν ἔστι καὶ Οἰνοπίδης ὁ Χῖος, ὅτι πρότερον διὰ τούτου [sc. τοῦ γαλαξίου] ἐφέρετο ὁ ἥλιος, διὰ δὲ τὰ Θυέστεια δεῖπνα ἀπεστράφη καὶ τὴν ἐναντίαν τούτῳ πεποιῆται περιφοράν, ἣν νῦν περιγράφει ὁ ζῳδιακός. Others, among them Oenopides, say that earlier the Sun moved through this [the Milky Way], but because of the feast of Thyestes he turned away and made the opposite revolution to this, which is now circumscribed by the Zodiac (tr. I. Bodnár).

As István Bodnár correctly observes, although Oenopides' hypothesis is also associated with the myth of Atreus and Thyestes, it does not correspond to the idea that was reflected in Euripides' *Electra* and subsequently in Plato's *Statesman*³⁶ (I will add: also in Herodotus). According to Oenopides, once there was a change, not in the direction of the daily motion of the sun (that is, the *daily* rotation of the cosmos around the earth), as in these authors, but in the direction of the *annual* motion of the sun and other planets. If earlier they rotated in the plane of the Milky Way and from east to west (that is, in the same direction as the cosmos itself), then after the change they began to rotate as it is now, that is, in the plane of the Zodiac and from west to east, opposite to the rotation of the world. Furthermore, Oenopides himself, if the account of Achilles Tatius is to be believed, associated the turn, not with Zeus' testimony in favor of Atreus, as in Euripides and Plato, but with the ominous feast of Thyestes. Oenopides thus offered a rationalistic interpretation of another version of the myth, according to which a change in the movement of the sun occurred in response to the crime of Atreus.

Thus, the similarity between the idea of the turns of the cosmos in Euripides, on the one hand, and Herodotus and Oenopides' hypothesis, on the other, turns out to be remote. Since it is unlikely that Herodotus' brief mention of turns could have been the source of a much richer cosmological detail in the Euripides myth, which would be chronologically possible, it must rather be assumed that both Herodotus and Euripides go back to some common source that we cannot identify.

It is of interest nevertheless that Oenopides' discovery concerning the direction of the sun's annual movement being opposite to the daily one is apparently ascribed to Atreus in Euripides' fragmentarily preserved *Thyestes* (fr. 861 Nauck = 397

³⁶ Bodnár: 2007, 27.

Kannicht). This rationalist version of the myth thus implicitly denies any historical connection of the reversal of the sun (of any kind) to the myth of Atreus and Thyestes, but it is remarkable that it associates the hero of this myth, usually associated with the reversal of the sun's daily course, with the discovery related to its annual movement. Can it be that Oenopides' idea about the change of the sun's annual course and its link with the story of Thyestes began to retroactively influence a legend derived from lore about changes in the sun's daily course? This might have produced the new version of its lasting changes, like those we find in Herodotus and Euripides (Plato's version in the *Statesman* is rather derivative from these two³⁷)? Let us also keep in mind that Euripides' version implies the change in the inclination of the sun's path in relation to the earth, and the discovery of the inclination itself was ascribed to Oenopides. This is however only a speculation.

Let us now turn to the passage of Herodotus that precedes his account of the fourfold turns in the daily motion of the sun. Herodotus refers here to the reports of the "Egyptians and priests" that from the first human king, Min (Menes), to Sethos, 341 generations of people lived in Egypt, which corresponds to 11,340 years, and during this time there was not a single "human-like god" among the Egyptian kings. He then adds that "nothing like this", according to the priests, had happened before Min, nor later, that is, from Sethos to Herodotus' time (2. 142.1–3).

³⁷ Plato refers in the *Statesman* directly to the myth of Atreus and Thyestes, and gives it the interpretation similar to the treatment of this myth in the *Electra*, as a reflection of real changes in the direction of the rotation of the cosmos: the creator god of the world alternately either himself guides the motion of the cosmos in the direction from west to east, or leaves his helm as a steersman, and the cosmos, left to itself, turns to move in the opposite direction, from east to west, until the cosmos begins to degrade, and the demiurge, having again returned to the helm, turns it again in the direction west to east, etc. Cosmologically, this theory of Plato (which has no direct relation to his own theory of conflagrations and floods in the *Timaeus* and *Critias*), is close to the myth in the *Electra*; the change in the direction of the cosmos' motion is what is reflected in the visible change of the direction of the sun's diurnal motion. Plato's theory also includes climatic changes; in the epoch of the cosmos's rotation under the guidance of the demiurge, natural abundance reigns in the world (the "epoch of Cronus"), which is not, however, as far as I can see, connected with the direction of the sun's diurnal motion.

At first glance, this statement looks strange, since further on Herodotus tells about the three dynasties of god-kings that alternately ruled in Egypt before Min (144. 2). In reality, however, there is no contradiction here: Herodotus does not deny that Egypt was ruled by god-kings, but that it was ever ruled by gods in the form of humans, anthropomorphic gods, not only for 11,340 years, from Min to Sethos, but ever. Herodotus thus denies the existence of anthropomorphic god-kings and implicitly the existence of anthropomorphic gods in principle. As far as I can see, this apparent implication was overlooked by Herodotus' researchers,³⁸ and some of them even directly attribute to Herodotus what contradicts it: that anthropomorphic gods ruled over Egypt before Min.³⁹ Between this statement about the gods and the following account of the sun's turns, which, according to Herodotus' Egyptian informants, did not lead to any changes in the nature of people, there is an obvious connection that, as far as I can tell, went unnoticed by commentators: Herodotus apparently sees in the absence of any evidence that human nature has ever changed radically confirmation of his thesis that god cannot have the

³⁸ Lloyd 1993: 106, commenting on the sentence that from Menes to Sethos anthropomorphic gods did not rule in Egypt, says nothing about the continuation, about the fact that anthropomorphic gods among the Egyptian kings in Egypt did not exist at all. He considers the indicated sentence the central assertion of this excursus, whose purpose is to harmonize the chronology underlying Greek myths and the much greater length of human history reflected in Egyptian tradition. ("This is, in a nutshell, the thesis of the excursus and reflects a dominant concern of H[erodotus] and his contemporaries, i.e. the problem of reconciling the chronology of Greek myth and tradition with the temporal perspective opened up by Eg[yp]tian historical tradition.") But Lloyd rightly objects to those scholars who believe that the priests' assertion about the absence of anthropomorphic gods in Egypt after Min (Menes) contradicts the deification of the pharaohs. He points out that the pharaoh was considered an incarnation of the god Horus, but was not strictly speaking Horus, and that in general the cult of the pharaoh differed from the cults of such gods as Rē, Amūn, and Thoth.

³⁹ Dillery 2026: 23: "The point of Herodotus' time reckoning at 2.142, which is supported by that of the priests at chapter 143 in contrast to Hecataeus' count, is that the historical epoch, from the start of which gods did not appear in human form (cf. 142.3: ἔλεγον [the priests] θεὸν ἀνθρωποειδέα οὐδένα γενέσθαι), as opposed to the legendary epoch when they did (my italics — A.V.), is of much greater duration than what Hecataeus initially calculated and presented to the priests at Thebes".

physical properties of man — not only in the modern era, but in general ever. This idea of Herodotus', which is almost ignored by commentators, will become clearer when we turn to his story about the famous meeting with the Theban priests of Hecataeus of Miletus, Herodotus' predecessor, in Chap. 143.

3. Herodotus and Hecataeus on the origin of people from the gods: Herodotus 2. 143–144

143. Πρότερον δὲ Ἑκαταίῳ τῷ λογοποιῷ ἐν Θήβῃσι γενεηλογήσαντι [τε] ἑωυτὸν καὶ ἀναδήσαντι τὴν πατριὴν ἐς ἐκκαιδέκατον θεὸν ἐποίησαν οἱ ἱερεῖς τοῦ Διὸς οἷόν τι καὶ ἐμοὶ οὐ γενεηλογήσαντι ἐμεωυτόν. (2) Ἑσαγαγόντες ἐς τὸ μέγαρον ἔσω ἐὸν μέγα ἐξηρίθμεον δεικνύντες κολοσσοὺς ξυλίνους τοσοῦτους ὅσους περ εἶπον· ἀρχιερεὺς γὰρ ἕκαστος αὐτόθι ἰστᾷ ἐπὶ τῆς ἑωυτοῦ ζόης εἰκόνα ἑωυτοῦ· (3) ἀριθμέοντες ὧν καὶ δεικνύντες οἱ ἱερεῖς ἐμοὶ ἀπεδείκνυσαν παῖδα πατρὸς ἑωυτῶν ἕκαστον ἐόντα, ἐκ τοῦ ἀγχιστα ἀποθανόντος τῆς εἰκόνης διεξιόντες διὰ πασέων, ἐς ὃ ἀπέδεξαν ἀπάσας αὐτάς. (4) Ἑκαταίῳ δὲ γενεηλογήσαντι ἑωυτὸν καὶ ἀναδήσαντι ἐς ἐκκαιδέκατον θεὸν ἀντεγενεηλόγησαν ἐπὶ τῇ ἀριθμῇσι, οὐ δεκόμενοι παρ' αὐτοῦ ἀπὸ θεοῦ γενέσθαι ἄνθρωπον. Ἀντεγενεηλόγησαν δὲ ὧδε, φάμενοι ἕκαστον τῶν κολοσσῶν πῖρωμιν ἐκ πῖρώμιος γεγονέναι, ἐς ὃ τοὺς πέντε καὶ τεσσεράκοντα καὶ τρηκοσίους ἀπέδεξαν κολοσσοὺς πῖρωμιν ἐκ πῖρώμιος γενόμενον, καὶ οὔτε ἐς θεὸν οὔτε ἐς ἥρωα ἀνέδησαν αὐτούς. Πῖρωμις δὲ ἐστὶ κατ' Ἑλλάδα γλῶσσαν καλὸς κἀγαθός. 144. Ἦδη ὧν τῶν αἰ εἰκόνες ἦσαν, τοιοῦτους ἀπεδείκνυσάν σφεας πάντας ἐόντας, θεῶν δὲ πολλὸν ἀπαλλαγμένους.

(2) Τὸ δὲ πρότερον τῶν ἀνδρῶν τούτων θεοὺς εἶναι τοὺς ἐν Αἰγύπτῳ ἄρχοντας οἰκέοντας ἅμα τοῖσι ἀνθρώποισι, καὶ τούτων αἰεὶ ἓνα τὸν κρατέοντα εἶναι. Ὑστατον δὲ αὐτῆς βασιλεῦσαι Ὠρον τὸν Ὀσίριος παῖδα, τὸν Απόλλωνα Ἑλληνες ὀνομάζουσι· τοῦτον καταπαύσαντα Τυφῶνα βασιλεῦσαι ὑστατον Αἰγύπτου. Ὀσιρις δὲ ἐστὶ Διόνυσος κατὰ Ἑλλάδα γλῶσσαν.

143. Earlier, when the writer of stories Hecataeus set out his genealogy in Thebes and traced his ancestors in the sixteenth generation to the god, the priests of Zeus treated him as they did me, although I did not speak about my genealogy. They led me into a huge megaron and, showing me huge wooden statues, of which there were as many as I said, began to count them: Each high priest put his own image there during his lifetime. And so, counting and showing [these statues], the priests showed me that each depicted was the son of his father, starting with the statue of the last deceased and showing each until they demonstrated it for all the statues. (4) To Hecataeus, when he reported his genealogy and traced

himself to a god in the sixteenth generation, the priests, disagreeing with his assertion that man was born of god, opposed to him another genealogy, referring to the number [of generations].

And they contrasted it with the genealogy as follows: They claimed that each of the depicted, that is, the "pyromis," was born of the "pyromis," until they demonstrated in relation to 345 huge statues that [each time] it was a "pyromis" born of the "pyromis." The priests thus did not elevate them to a god or a hero. "Pyromis" in Greek means "a noble man." So, the priests argued that those whose images stood there, although they were such [i.e., noble] people, were very different from the gods.

(2) Earlier than these people, as the priests claimed, the rulers of Egypt were gods, although they lived with people, and each time one of them occupied a dominant position. And the last (of the gods) in Egypt was Horus, the son of Osiris, whom the Greeks call Apollo. He defeated Typhon and was the last to reign in Egypt. Osiris in Greek corresponds to Dionysus.

Thus, following the report that Egypt was never ruled by gods in human form, that the Egyptians knew of the four turns of the sun for 11,340 years, and that there was no change in the nature of Egypt and in the physiology of humans during that time, Herodotus recounts how the Egyptian priests refuted Hecataeus of Miletus' claim of his descent from a god in the sixteenth generation. Researchers of Herodotus do not always consider a link between these two reports, and those who have tried to establish this connection go too far in reconstructing the ideas that underlie these chapters. However, it seems to me that Herodotus' exposition here is internally connected, and the course of his thought is not so difficult to understand.

So, according to Herodotus, when Hecataeus of Miletus presented his genealogy to the Theban priests and claimed that he, Hecataeus, was a descendant of a god in the sixteenth generation, the priests brought him to the temple of Zeus, that is, the god Amun-Ra, as they did with Herodotus, although Herodotus did not tell them his own genealogy. The priests showed Herodotus the statues — "as many as I said" — of the Theban high priests, all of whom erected them for themselves, and showed him that each depicted "is the son of his father". The last statement could be understood in such a way that the priests demonstrated the similarity of each high priest with his father, thereby proving, as during their conversation with Hecataeus, that during all this time no one was born of a god. But the literal meaning of what is said—they showed that each of

them was the son of his father — may imply a different purpose for their demonstration: Pointing, apparently, both to the inscriptions of the statues and to the images themselves, the priests wanted to show that the power of the high priest always passed from father to son (and not to a brother or other relative). It was this that was to ensure the accuracy of the counting of time by generation, which, as I will try to show later, was of great importance to Herodotus.

Let's pay further attention to Herodotus' seemingly incomprehensible statement that the statues shown to him were "as many as I said"⁴⁰. Herodotus had not previously mentioned the statues of the Theban high priests and their number. In fact, as has long been noted, this is a reference to 2.142. 2: Herodotus says, referring to the stories of the Memphis (not Theban!) priests, that from the time of the first Egyptian king Min, who was not a god but a man, until the reign of the priest Sethos, there were 341 generations of people, and that during this time there were the same number of high priests and kings, that is, 341 kings and 341 high priests. Since the Theban statues were also used for the count of generations, it is clear that Herodotus has in view the earlier passage on 341 generations. However in the account of Hecataeus' conversation with the Theban priests a little below (2.143.4), the number of statues is given exactly: 345. At first sight there is a contradiction between 341 generations at 2.142. 2 and 345 at 2.143.4⁴¹, but in fact Herodotus is very precise. As Legrand explained, this means that from the end of the reign of Sethos to Hecataeus' visit to Thebes, four more generations passed (four statues in addition to 341) and a fifth was in progress⁴². But Legrand and other scholars after him supposed that Herodotus' words "as many as I said" are not precise: they should mean something like "as many plus those that were erected before Sethos and Hecataeus' (or Herodotus') time"⁴³. I think there

⁴⁰ At first sight it is not clear whether Herodotus means the statues shown to him or to Hecataeus. But ἐμοί at 143. 3 shows that here Herodotus has in view his own, not Hecataeus', conversation with the priests.

⁴¹ Stein (Stein 1902: 166) saw here an inaccuracy of Herodotus, who supposedly did not notice the contradiction, since for him only the great antiquity of the Egyptians was important, and the extra four generations only confirmed his understanding.

⁴² Legrand 1936: 440–441, see also Lloyd 1993: 108.

⁴³ Legrand 1936: 439. Legrand suggests that Herodotus says "as many as I said" because he was interested only in the number of statues up to the time of Sethos, since the chronology after this time is reliably known to Herodotus. I agree in essence with Legrand that it was precisely the

are no reasons for this supposition: Herodotus does not say how many statues were shown to him, although he reports how many statues Hecataeus saw before him. I propose that we should take his words literally: 341 statues were shown to him, fewer than to Hecataeus, precisely as many as there were generations up to Sethos, not up to Herodotus' own time.

Legrand suggested that it was the statues in the Theban temple that served as the basis for Herodotus' chronology of early Egyptian history. A. B. Lloyd retorted that Herodotus should rather have relied on the information he mentions earlier (2.100.1); the Memphis priests read to Herodotus the name of Min, the first king, followed by 330 kings, and after that 11 more, whose names and deeds are listed in 2.100–141, which gives a total of 341. This corresponds to the equal number of 341 kings and high priests of the Memphis god Ptah, which the priests of this god reported to Herodotus, according to 2.142.1, and which he himself, equating three generations to 100 years, defined as corresponding to 11,340 years (see above about the error in the calculation)⁴⁴. However, although the number of kings derives in all probability from Egyptian historical tradition and thus is not an invention by Herodotus' informants (and certainly not by him)⁴⁵, it is quite possible that Herodotus was looking for confirmations from other sources: Herodotus had to realize that not all kings came from the same family and did not always transfer power to their children, so they were not suitable for counting by generations. The statues of the Theban high priests served as the decisive confirmation of Herodotus' reckoning, because here he received (or so he believed) the continuous transfer of power from father to son and thus a reliable foundation for the number of generations⁴⁶. Information about the number of their Memphis

chronology before Sethos that interested Herodotus in the conversation with the Theban priests, but I believe, unlike him, that we should take Herodotus at his word.

⁴⁴ Lloyd 1993: 106: "The 341 generations are in complete agreement with the preceding historical narrative, though the number of kings is actually 342 since Anysis and Sabacos were contemporaries. Legrand's suggestion that the figure is derived from the number of statues is, therefore, unnecessary." Cf. Erbse 1992: 170.

⁴⁵ The number of kings as reported by Herodotus is close to what Manetho later reports, in all probability independently from Herodotus, and thus corresponds to Egyptian historical tradition (see Lloyd 1993: II, 13).

⁴⁶ Each of the gods in Egypt, according to Herodotus, has a chief priest, whose office was invariably passed down from father to son (2.37.5).

colleagues is much less spectacular and was possibly conveyed by Memphis priests as coinciding with the number of kings, that is, much less convincingly.

According to Herodotus, the same thing shown to him, that is, the statues depicting the high priests, was shown to Hecataeus of Miletus by the priests, about 60 years earlier,⁴⁷ in response to his assertion that he was descended in the sixteenth generation from a god. The priests disputed his pedigree, disagreeing that a man was born of a god. So, the priests contrasted the genealogy of Hecataeus with the genealogy of the Theban high priests, showing him 345 statues of the high priests who inherited their power from father to son and demonstrated that each of them was each time the son of a “pyromis”, that is, was καλὸς κἀγαθός, as Herodotus translated the Egyptian word, i. e., “noble man”, but his appearance was very different from god. Thus, they literally “did not trace these men back to a god or a hero”, that is, they tried to prove that this priest’s family, much older than Hecataeus’ family, did not trace back to a god or a divine being. Their argument when they displayed the statues, therefore, was that if even the oldest of the known families had no god as an ancestor, then nothing of the kind could be asserted with regard to Hecataeus. This demonstration has nothing to do with the determining the temporal continuum of history as such, as opposed to Hecataeus’ and general Greek beliefs about it, as many scholars supposed.

It may seem that Herodotus does not deny in principle the possibility of man’s origin from a god, but only criticizes Hecataeus, who raises his ancestor, born of a god, to such a recent time (see Ch. 143)⁴⁸. However, although Herodotus does not say this directly,

⁴⁷ Jacoby 1912: 2670, 18 ff. cautiously dates the time of travels to the interval after 516 and before 500. The travels of Herodotus (born in the 80s of the 5th century) are dated approximately to 454-444 (Lendle 1992: 38). According to Lloyd 1975: 61-62, the indisputable terminus post quem for Herodotus’ visit to Egypt is the battle of Papremis (Hdt. 3.12.4), but the probable date is no earlier than 449/8 BC (the Peace of Callias).

⁴⁸ This is how Kurt von Fritz understands it (Fritz 1966: 1, 182 (the opinion of the priests): “Sie hatten ihm auch nicht geglaubt, daß *in dieser Zeit* ein Mensch von einem Gott abstammt habe” (my italics); Bertelli 2001: 91: “I believe that Hecataeus introduced his lineage in an excursus at the beginning of the *Genealogies* (against Jacoby’s opinion that this account of Hecataeus goes back to the *Periegesis*) and... derived from the comparison with the antiquity of the Egyptians a good argument to refute the claim of the Greek γένη to have sprung from a divine ancestor in the space of a few

there is no doubt that in principle he does not allow the birth of a person from a god. In favor of this is the way he conveys his disagreement with Hecataeus to the priests a bit earlier (2.143.4); they did not agree with him that a man could be descended from a god, thus generally, and not only with regard to Hecataeus. Nestle quite correctly interprets the position of the priests and, implicitly, Herodotus as a denial that the gods can in principle marry mortals and produce human beings⁴⁹. This position of Herodotus, that a man cannot be descended from a god, corresponds to his statements in other places of his work, as Nestle and more recently T. Harrison and R. Fowler have already noted⁵⁰. To these already expressed considerations can be added the evidence I have discussed: In the immediately preceding passage, Herodotus refers to the Memphis priests' statement that there were never anthropomorphic god-kings in Egypt. The argument based on the statues of high priests and this earlier statement give us a coherent picture: There were dynasties of gods who ruled Egypt, but these gods were not anthropomorphic; the long chain of the high priests demonstrates that, contrary to Hecataeus' and traditional Greek beliefs, there were no descendants of gods in human history as far back as historical tradition reaches. In the context of talking to priests, the earlier statement makes sense; the non-anthropomorphic character of gods should exclude

generations. Egyptian history showed that the gods had disappeared from men's sight long before the time which could be calculated by the reckoning of the heroic generations"; Mikalson 2003: 175: "Herodotus offers further welcome incidental information on the 'dates' of these gods through their human descendants. He has his contemporary Hecataeus make the claim that his family went back sixteen generations to a god (2.143.1). Because Herodotus here gives, for purposes of rough estimates, 100 years to three generations (2.142.2) and since we place Hecataeus about 500, Hecataeus' unnamed divine ancestor consorted with a woman about 1030. Similarly the Spartan king Leonidas was the twenty-first descendant of Heracles, and that places Heracles 840 years before 480, or about 1320 (7.204). Through these genealogies the Greeks put such divine activities about the time of the Trojan War, a war in which several children of divinities (e.g., Achilles, Aeneas, Sarpedon, and Helen) played a major role. Clearly those were fruitful times for Greek gods, goddesses, and heroes."

⁴⁹ Nestle 1942: 504; see also Fowler 2013: 662: "That it began with a god would have made it even more risible, since Herodotos rejects the whole notion of gods mating with humans."

⁵⁰ Nestle 1942: 134; Harrison 2000: 88–90; Fowler 2013: 661.

the possibility that people could be born from the gods. I will return to the connection of this thought with the reversals of the sun in the logic of this entire section.

However, before that, it is necessary to consider another difficulty: what kind of information Herodotus received about Hecataeus' meeting with the priests and how reliable his story about this meeting is. For a long time it was considered indisputable that Herodotus uses the work of Hecataeus in his story, and, as Felix Jacoby believed, his earlier historical and geographical work, which is traditionally called *Περὶ ἡγήσεις* or otherwise *Γῆς περίοδος*, and which, as Jacoby argued, is earlier than his second work, later called *Γενεαλογία* or *Ἱστορίαι*⁵¹. Here, researchers have to deal with two difficulties. The first is that the reasoning of the Egyptian priests, assuming that Hecataeus agreed with it, conflicts with the views he expresses in his own writings. Nestle drew attention to this difficulty in 1940: He pointed to evidence that in the *Genealogies* Hecataeus traced origin to the gods for at least some Greek families known from mythology. Nestle therefore suggested that Hecataeus, under the influence of conversation with the priests, abandoned his naive view of the divine origin of the famous ancestors of the royal and noble families, to which he adhered in his *Genealogies*, as well as in relation to his own origin⁵². Nestle's suggestion, however, encounters a difficulty: If this episode is borrowed from Hecataeus' *Periegesis*, as the scholars at that time in general believed, then one has to think that the *Genealogies* were written earlier, whereas usually *Periegesis* is considered an earlier work. This forced Nestle to reconsider the chronological relationship between Hecataeus' two writings. However, in doing so, Nestle unduly ignores Jacoby's arguments for the later origin of the *Genealogies*. This led L. Bertelli to return to the *Periegesis*' relatively earlier date than the *Genealogies*, following Jacoby, and to suppose that Hecataeus cited the reasoning of the priests in the *Genealogies* as an argument only against beliefs in relatively recent origin from the gods, and

⁵¹ Jacoby 1912: 2670, 18 ff.: the geographical work of Hecataeus was published before 500; *Genealogies* belong to a later time (see 2741, 48 ff.); Jacoby 1957: 319; 343: *Genealogies* was published in the 480s; see further Bertelli 2001: 88.

⁵² Nestle 1942: 134: the conversation with the priests and the realization of the deep antiquity of human history prompted Hecataeus to abandon his genealogical researches, in which one should see "ein Zeichen von Selbstkritik".

addressed it to representatives of the Greek aristocracy, that is, in principle, he did not exclude divine origin⁵³. But this contradicts, on the one hand, Herodotus' assertion that the priests denied the descent of men from the gods in principle, and, on the other hand, leaves it unclear why Hecataeus, in the same *Genealogies*, continued to mention the divine origin of the legendary families. Moreover, there is no certainty that Herodotus used the *Genealogies*, while his drawing on the *Periegesis* is virtually certain. Summing up, we can say that although the hypothesis of a change in Hecataeus' views and his peculiar palinode in the form of a story about the views of the Egyptian priests cannot be completely excluded, it is doubtful that this change of views really took place, because there is no reason to date his *Genealogies*, in which he sticks to the divine ancestry of noble families, earlier than his meeting with the Theban priests.

Another difficulty related to the interpretation of this meeting can be called rather a problem of the psychologization of source data. Some scholars, considering it certain that Hecataeus, during his conversation with the priests, as portrayed by Herodotus, had experienced a kind of shock and had to abandon his previous views (either the belief in his divine ancestor or the related belief that human history is as short as this ancestor implies), doubted that Hecataeus could describe in his work the conversation that puts him in such an unfavorable light. Therefore, various hypotheses appeared: Heidel tried to prove that Hecataeus, an enlightened Greek, could not believe in his own divine ancestry and simply invented the whole story of his conversation with the priests, who on the contrary could not argue that a man could not descend from a god, since they, like all Egyptians, believed that a pharaoh is the son of the god Ra: Hecataeus simply put his own critical views in the mouth of the priests, because "his fellow Greeks...were not yet, as they were later to become, accustomed to the iconoclastic teachings of the Sophists". Herodotus, as in other cases, did not understand this device of Hecataeus⁵⁴. Ingenious as this proposal is, it was rightly not supported in scholarship: there are no reasons to believe that Hecataeus wanted to put in doubt those genealogies of the gods' descendants he presented in the *Genealogies*, even less that he would have been ready to make his own family a laughing stock. And of course, the Egyptian priests, while accepting that the

⁵³ Bertelli 2001: 91.

⁵⁴ Heidel 1935: 93–95.

pharaoh was a son of Ra, did not claim that the pharaoh was engendered by this god in a physical sense.

It has also been suggested that Herodotus did not learn about this story from Hecataeus, but from some oral source⁵⁵. Finally, following D. Fehling, who questioned many of Herodotus' references to its sources, Stephanie West, summarizing all the difficulties of the text in question, concludes that Herodotus simply invented the story of Hecataeus' meeting with the priests⁵⁶.

Other scholars disagreed with such a radical approach and put forward more moderate hypotheses, trying to reconstruct precisely how Hecataeus described his conversation with the priests, in order, on the one hand, to protect the reputation of Herodotus, and, on the other, plausibly to explain how Hecataeus could have communicated something in his composition that put his views in the wrong light. J. Dillery relatively recently tried to cope with this difficulty with the suggestion, building on an earlier proposal by Alan Lloyd, that Hecataeus first mentioned in his *Genealogies* his origins in the sixteenth generation from a god, and then in the *Periegesis* reported his meeting with the Egyptian priests, during which he did not mention his origin and in which the priests showed him statues demonstrating how erroneous his own ideas, like those of all other Greeks, were about the duration of human history. Hecataeus formulated it in such a way as if the ideas about the duration of the history of all Greeks were refuted, not his own. Herodotus, in turn, having visited Thebes and received a lesson from the priests on how many generations of Theban high priests there had been and how limited the Greeks' ideas about their history are, therefore, involuntarily mixed two different messages in the writings of Hecataeus: he described Hecataeus reporting to the Egyptian priests his origin from a god (which Hecataeus described in the *Genealogies*), and the priests showing Hecataeus the same as they showed Herodotus: the array of the statues of the high priests. But they did this in order to refute his, Hecataeus' origin from a god, not to demonstrate the duration of history, as they really did⁵⁷.

In general, it seems to me that this less skeptical approach is correct in its basis; it is more likely that here Herodotus uses the

⁵⁵ See the works cited by Stephanie West 1991: 146.

⁵⁶ West 1991.

⁵⁷ Dillery 2018: 45-48. For an earlier version of the same hypothesis that Herodotus conflated Hecataeus' visit to Thebes and his own, see Bertelli 2001: 92.

story of Hecataeus meeting with the Theban priests, which he found in the latter's work, and rather in the *Periegesis*, which served him as an important source of information about Egypt, than in the *Genealogies*. This is more plausible than that Herodotus simply attributed this story to Hecataeus (why?) or took advantage of the oral tradition of Hecataeus' meeting with the priests (the Egyptian tradition on how Hecataeus was in the same temple 60 years earlier? The Greek tradition on how Hecataeus was refuted by Egyptian priests the same number of years earlier?). But I nevertheless find also risky the attempts of the less-skeptical scholars, reminiscent of the naive rationalism of ancient authors, to modify the message of Herodotus about what he learned about Hecataeus' conversation with the priests, suggesting how the facts known to him got mixed up in Herodotus' head⁵⁸. It seems more correct to proceed from the most accurate interpretation of Herodotus' thought and try to understand whether it is possible to find a historically plausible explanation for the facts reported by him.

We have no good reason to doubt that the reports of Hecataeus and Herodotus about the numerous statues of priests they saw in the temple of Amun-Ra are true: not all, but a significant number of these images showed generations of high priests and priests who inherited positions from their ancestors⁵⁹. I will not touch upon the

⁵⁸ I believe this is one of the dangers that arises when interpreting evidence that, for one reason or another, seems unreliable to us. We strive to reconstruct the process of distortion of truth that resulted in the evidence we deem unreliable. In doing so, we forget how precarious such hypotheses are when we lack the foundations for such a reconstruction. Shouldn't we limit ourselves to arguments that demonstrate what is unreliable in our text, rather than resort to fantasy?

⁵⁹ On the images that Hecataeus and Herodotus could have seen in the sanctuary of Amun at Karnak, see Lloyd 1993: 109: numerous statues of persons who received the right to erect statues in the temple and receive posthumous honors along with the god, among them statues of priests and high priests, including statues with genealogical information, not only stone, but also wooden; see further details in Moyer 2002: 76: "A cachette of around 800 statues was, in fact, discovered by Legrain in the forecourt of the seventh pylon of the temple of Amun at Karnak. Many of these were statues of priests, including high priests. The latest of them date to the Ptolemaic period, at which time the sculptures were likely cleared from the cluttered temple of Amun and buried. Most of the statues of the Karnak cachette, therefore, were present to be viewed by visiting Greek intellectuals in the sixth and fifth centuries. Though Hecataeus and Herodotus

difficult question of what the Egyptian priests could actually tell Hecataeus, since this is entirely the prerogative of Egyptologists. I will confine myself to the cautious assumption that both Hecataeus and Herodotus saw statues of the high priests in the temple of Amun-Ra in Thebes, were told their number, and that with the help of their Egyptian informants were able to transform the information they reported about the number of statues into what was the subject of their interest: the descent of mortals from a god in the case of Hecataeus, the number of generations in a continuous dynasty dating back to ancient times, as a foundation of Egyptian chronology, in the case of Herodotus — in accordance with what Herodotus in fact reports.

Further, as mentioned above, understanding the positions of Hecataeus and Herodotus is hampered by the view firmly established in scholarship that the conversation of Hecataeus with the priests seems to refute the ideas typical of the Greeks about the brevity of human history. In fact, although, as can be seen from the chronological calculations of Herodotus in a number of places of his work, the duration of Egyptian civilization does far surpass not only the earliest known facts of both Greek and all other civilizations, it does not follow from Herodotus' text that he or Hecataeus was interested, at least directly, in the general duration of history and that they compared Greek and Egyptian views on this subject. Of course, Hecataeus' ancestor born of a god around the 11th century BC, that is, during the time of Ionian colonization, did not live in what the Greeks of Hecataeus' era thought was the most ancient era of history. Denying that Hecataeus came from a god who lived at that time would not mean refuting the views of the Greeks on the recent nature of their civilization: the Greeks of Hecataeus' time were aware of the myths about the Deucalion flood, which occurred much earlier than any event of Greek mythological history, and these events were much earlier than the birth of Hecataeus' ancestor; see also Herodotus' calculation of the time of Dionysus' birth from Semele: 1,600 years before his time, 2.145. 4, much later than the

certainly did not see statues representing consecutive generations of high priests at Thebes, it is plausible enough that their Egyptian guides and interpreters showed them images representing extensive genealogies of priests succeeding to the offices of their forefathers. Remarkable examples do, in fact, survive of the sort of visual record of genealogy which would have impressed upon the travelling Greek historians the long continuum of the Egyptian past.”

time of Egyptian Dionysus-Osiris, but considerably earlier than the time of Hecataeus' ancestor.

In fact, Herodotus does not say that the priests' refutation of Hecataeus' opinion about his divine ancestor has anything to do with the duration of history in general: The Theban priests sought to prove to Hecataeus that the origin of a man from a god is implausible in principle, whenever it is thought to have occurred. As for Herodotus, he, as his words show, found this argument convincing, and it served to him as a confirmation of the words of the Memphis priests that there were never anthropomorphic gods in Egypt: if there were never human descendants of gods, it is in fact plausible that human nature could never be other than today and that a god could be similar to a man, that is, possess human physiology.

Herodotus' primary interest in his conversation with the Theban priests was not this question of the anthropomorphism of gods and their human descendants. Herodotus points out that, unlike Hecataeus, he did not tell the priests his genealogy and thus did not discuss with them this question: it was settled for him before he came to Thebes. For his own subject of interest, Herodotus' reference back is decisive; the priests showed him as many statues of the high priests as he mentioned above. As was already said, this refers to the beginning of chapter 142; the priests reported to Herodotus 341 generations of people from Min to Sethos, during which there were the same number of kings and high priests. Thus there is no reason to doubt that only 341 statues were shown to Herodotus, that is, only until the time of Sethos, although the statues, according to Herodotus, reached his own time. This happened because Herodotus was not interested in the total number of generations, but in their number until the time of Sethos, whose reign ended for Herodotus somewhere in the first third of the 7th century B.C., after which he already possessed a more reliable chronology. Herodotus does not say and we need not suppose that Hecataeus used the dynasty of Theban high priests for any chronological calculations of the duration of all of history or of Egyptian history⁶⁰. On the contrary, it can be stated with a high

⁶⁰ Against the view that genealogical chronology played the major role in Hecataeus' *Genealogies* and that he was the most important predecessor of Herodotus in this, a view that goes back to Eduard Meyer, see Bertelli 2001: 90 (he cites the literature that demolishes Meyer's view). I cannot understand what makes Bertelli (p. 92 f.) ascribe nevertheless to Hecataeus the reckoning in 2.142.1–2, in spite of Herodotus' statement that the

degree of confidence that, in Thebes, Herodotus was interested in chronology of Egyptian history.

Herodotus' interest in the meeting of Hecataeus with the priests was thus due, on the one hand, to its importance for the question of the nature of the gods and its relation to human nature; according to Herodotus, the priests demonstrated to Hecataeus that man was not descended from gods. On the other hand, this conversation apparently suggested to Herodotus the possibility of using the genealogy of the high priests to determine (or to confirm) the duration of Egyptian history: chronological calculations based on the number of generations was his usual way of establishing the chronology of the most ancient period of various civilizations, for which more accurate documentary data did not exist. In addition, Herodotus' interest in this episode could stem from the fact that Hecataeus not only claimed that he was descended from a god, but also wrote the *Genealogies*, which reflected his belief in the descent from gods of various legendary dynasties of the Greek tradition. However, we have no certainty that Herodotus knew this work by Hecataeus.

I come to the most important point, which escaped the attention of scholars who doubted that Hecataeus reported in his essay about the meeting with the Theban priests, because it showed him in a disadvantageous light. In fact, we do not know what conclusion Hecataeus himself drew from the conversation with the priests. Both the assumptions — that Hecataeus changed his views under the influence of a conversation with the priests, and that the story of this conversation does not go back to Hecataeus — are superfluous. It should be borne in mind that the story of Herodotus, who himself finds the arguments of the priests convincing, does not make it clear whether Hecataeus himself agreed with these arguments. Indeed, 345 generations of high priests, who were not born of gods and heroes and did not resemble deities in their own way, prove only

number of generations of the kings and Memphis high priests was reported to him by the Memphis priests and that the total number of years from Min to Sethos was reckoned from this number of generations by means of equating a generation to thirty years, obviously by Herodotus himself, because Hecataeus did not meet the Memphis priests. Bertelli next infers from this that “Hecataeus also knew the ‘Egyptian standard’ of three generations per century”, without any evidence for this Egyptian standard or for Hecataeus' using of the equation 3 generations = 100 years. As far as I can see, there is no evidence of Hecataeus' interest in Egyptian chronology.

that all these priests were born of mortals. However, the question inevitably arises whether the high priest whose statue is the most ancient, and whose mortal father the priests could not present to Hecataeus, could not be descended from a god. In addition, there were no statues of kings at the disposal of the priests, so the origin of some of them from the gods could not be categorically excluded either. Therefore, I believe that Hecataeus had no reason to consider his genealogy refuted. The conversation with the Egyptian priests may well have been cited in his essay as an argument that he found curious but inconclusive⁶¹.

However, Herodotus, unlike Hecataeus as we have seen, undoubtedly rejects the very idea of the origin of humans from gods. I think that is why his retelling of the conversation not only states that for a huge period of time there were never any god-kings in Egypt, but additionally stipulates that Egypt was never ruled at all by gods who had a human “form”, even when the gods reigned in Egypt. As confirmation of this, he refers to the argument about the immutability of human nature, despite changes in the rotation of the cosmos. Even if these catastrophes did not lead to fundamental changes in human physiology, it can be assumed that human nature has never been different than it is now, that is, it has always been susceptible to disease and death. Apparently, as Herodotus sees it, this excludes the possibility that a god may be endowed with a human body and, therefore, the possibility that a person may be born of a god. As I said, Herodotus accepts the Egyptian tradition that Egypt was once, before human dynasties, ruled by god-kings.

⁶¹ When I arrived at this more or less obvious consideration, I saw that Max Pohlenz had briefly expressed it many years ago: Hecataeus did not consider himself refuted in his aristocratic pride, but merely recognized Egyptian culture’s greater antiquity than the Greek; Pohlenz also correctly contrasts Hecataeus’s position with Herodotus, who does not recognize the descent of men from gods (Pohlenz 1937: 103 note 4). Pohlenz cites other evidence that Herodotus expressed disbelief or doubt about the descent from gods of this or that mythological character, but in ch. 142, he, like other scholars, did not pay attention to Herodotus’s direct statement about the absence in Egypt of god-kings who had the form of men. As far as one can judge, this interpretation by Pohlenz is usually not taken into account by scholars. However, H. Erbse mentions it (Erbse 1979: 184) and makes the objection: “Jedoch wie wollte er sich vor den 345 Standbildern behaupten?”, i. e., Erbse believes that Hecataeus should have considered himself refuted in the face of 345 statues. I hope that the reasons I adduce can disable this objection.

However, even when Egypt was ruled by gods, they had no human physiological attributes, meaning humans could not have been born from them.

Hecataeus did not consider the statues of the Egyptian high priests a convincing refutation of his own views. Perhaps this is why Herodotus above cites his additional argument, which is based on the immutability of the nature of Egypt and, as a result, of the nature of people. The absence of news of any radical changes shows that the nature of people, despite the colossal anomalies in the movement of the cosmos, recorded four times in 11,340 years, from which there is evidence, did not differ from the modern one. Therefore, there is no reason to expect that during this time there were people endowed with supernatural properties, such as could lead us to assume their origin from the gods, as the Greeks naively believe about the birth of some of their heroes. However, Herodotus extends this argument to a more ancient era, when Egypt, as he admits, was ruled by the gods, and about which we have no information about the state of nature and the properties of people in that era. Apparently, Herodotus uses the story of the turns of the sun and the absence of any major resulting changes in the nature of Egypt and the people living in it as an argument *a fortiori*: If even the turns of the cosmos did not significantly change human nature, what more radical change in the nature of the world could occur to make us believe that in ancient times human physiology could permit immortality?

So, I draw a cautious conclusion that in this case we are dealing, first, with a rationalistic criticism of one of the most important Greek religious views — belief in heroes as children of gods— criticism based on the belief in the unchanging nature of human nature; second, Herodotus rejects primitive anthropomorphism in views of gods: He agrees that gods exist, participate in human affairs, and even ruled in ancient times directly. But although Herodotus is inclined to accept on faith that in ancient times the gods were closer to people and entered into direct communication with them, in his opinion an insurmountable boundary has always separated divine nature from human nature.

Bibliography

- Asheri, D. Lloyd, A. Corcella, A. 2007: A Commentary on Herodotus Books I–IV. Oxford: Oxford University Press.
 Böckh, A. 1845: Manetho und die Hundsternperiode. Berlin: Veit.

- Bertelli, L. 2001: Hecataeus: From Genealogy to Historiography in: Luraghi N. (ed.) *Historian's Craft in the Age of Herodotus*. Oxford: Oxford University Press, 67–94.
- Bodnár, I. 2007: *Oenopides of Chius: A Survey of the Modern Literature with a Collection of the Ancient Testimonia*. Max Planck Institute for the History of Science. Preprint 327.
- Cropp, M. J. 2013: *Euripides Electra* (Aris & Phillips Classical Texts. 2nd ed. Oxford: Oxbow Books).
- Dillery, J. 2018: Making Logoi: Herodotus' Book 2 and Hecataeus of Miletus. In: Harrison T., Irwin E. (eds.) *Interpreting Herodotus*. Oxford: Oxford University Press, 17–52.
- Dillery, J. 2026: *The Origin and Early Practice of Greek Historiography. The First Century*. Leiden; Boston: Brill.
- Erbse, H. 1992: *Studien zum Verständnis Herodots*. Berlin; New York: Walter de Gruyter.
- Fowler, R. 2013: *Early Greek Mythography*. Vol. 2. *Commentary*. Oxford: Oxford University Press.
- Fritz, K. von. 1967: *Die griechische Geschichtsschreibung*, Bd. 1 *Von den Anfängen bis Thukydides*. [Tl. 1]: Text; [Tl. 2]: Anmerkungen. Berlin; New York: Walter de Gruyter.
- Harrison, T. 2000: *Divinity and History: The Religion of Herodotus*. Oxford: Clarendon Press.
- Heidel, W. A. 1933: A Suggestion concerning Plato's Atlantis. *Proceedings of the American Academy of Arts and Sciences*. Vol. 68, No. 6, 189–228.
- Heidel, W. A. 1935: Hecataeus and the Egyptian Priests in Herodotus, Book II. *Memoirs of the American Academy of Arts and Sciences*, New Series, Vol. 18, No. 2, 49–134.
- How, W.W., Wells, J. 1936: *Commentary on Herodotus 1, Books 1–4*. Oxford: Clarendon Press.
- Huffman, C. 1993: *Philolaus of Croton: Pythagorean and Presocratic: a Commentary on the Fragments and Testimonia with Interpretive Essays*. Cambridge: Cambridge University Press.
- Jacoby, F. 1912: Hekataios von Milet. *RE*. Bd. 7, 2666–2769.
- Jacoby, F. 1957: *Die Fragmente der griechischen Historiker*. Tl. I a. Kommentar. Leiden: Brill.
- Kemball–Cook, B. H. 1950: Euripides, *Electra* 726–42. *Classical Review* 64, 95.
- Legrand, Ph.-E. 1936: Hérodote, II, 100, 142–143, *Revue des etudes anciennes* 38, 439–442.
- Legrand, Ph.-E. 1944: *Hérodote, Histoires, Livre II. Euterpe*.
- Lendle, O. 1992: *Einführung in die griechische Geschichtsschreibung: von Hekataios bis Zosimos*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Lloyd, A. B. 1975: *Herodotus Book II Introduction*. Leiden: Brill.
- Lloyd, A. B. 1993: *Herodotus Book II Commentary* 99–182. Leiden: Brill.
- Mikalson, J. D. 2003: *Herodotus and Religion in the Persian Wars*. Chapel Hill: University of North Carolina Press.

- Morrison, J. S. 1970: Passages from Aristophanes and Euripides. *Proceedings of the Cambridge Philological Society*. N.S. 26, 83–90.
- Moyer, I. S. 2002: Herodotus and an Egyptian Mirage: The Genealogies of the Theban Priests. *Journal of Hellenic Studies* 122, 70–90.
- Nestle, W. 1975 (=1942) *Vom Mythos zum Logos: Die Selbstentfaltung des griechischen Denkens*. 2. Aufl. Stuttgart: Kröner.
- Panchenko, D. 1990: *Plato and Atlantis*. Leningrad, Nauka.
Панченко Д. В. Платон и Атлантида. Л.: Наука.
- Pohlenz, M. 1937: *Herodot, der erste Geschichtschreiber des Abendlandes*. Leipzig; Berlin: Teubner.
- Powell, J. E. 1935: Notes on Herodotus, *Classical Quarterly*, 29: 2, 72–82.
- Powell, J. E. 1949: *Herodotus*, Translated by J. Enoch Powell. Oxford: Clarendon Press.
- Rowe, C., Verlinsky, A. 2025: More on the Cosmic Myth in the *Statesman*. *Philologia philosophica* 5, 25–54.
- Sander-Hansen, C.E. 1956: *Die Texte der Metternichstele*. Kopenhagen: Ejnar Munksgaard.
- Schwenck, K. 1846: Herodot 2.38. *Philologus* 1, 159–162
- Seidensticker, B. 2025: *Euripides. Elektra*, herausgegeben, übersetzt und kommentiert. Berlin; Boston.
- Stein, H. 1902: *Herodotos*. Erklärt von H.S. H. 2. Buch 2. 5. Aufl. Berlin, Weidmann.
- Sternberg-el Hotabi, H. 1988: Die Texte der Metternichstele, in: Butterweck C. et al. *Texte aus der Umwelt des Alten Testaments*. Bd. II: *Religiöse Texte. Rituale und Beschwörungen II*. Gütersloh: Gütersloher Verlagshaus.
- Verlinsky, A. 2008: The Cosmic Cycle in the *Statesman* Myth. Pt. I. *Hyperboreus*, 14:2, 57–86.
- Verlinsky, A. 2009: The Cosmic Cycle in the *Statesman* Myth. Pt. II. *Hyperboreus*, 15: 2, 221–250.
- West, S. 1991: Herodotus' Portrait of Hecataeus. *Journal of Hellenic Studies* 111, 144–160.
- Willink, C. W. 1986: *Euripides. Orestes*, Oxford: Clarendon Press.
- Wilson, N. G. 2015a: *Herodoti Historiae*. T.II. Libri V–IX. Oxford: Oxford University Press.
- Wilson, N. G. 2015b: *Herodotea*. Oxford: Oxford University Press.