

## PLUTARCH AND ANAXAGORAS

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In Plutarch's *Lysander*, *Nicias*, and especially his *Pericles*, a fair amount is found on the life and teachings of Anaxagoras. There is also biographical and doxographical material in the *Moralia*, including two fragments, B18 and B21b, cited only by Plutarch.<sup>1)</sup> In contrast with Aristotle or Simplicius, Plutarch is not a major source for Anaxagoras. Yet what he preserves has value not only for understanding more fully the tradition about Anaxagoras, but also for understanding Plutarch's own philosophical beliefs and working methods. These will be explored in this study which will examine the ways in which Plutarch's own Platonic convictions helped to select and to shape the Anaxagorean material preserved by him. Attention will also be given to Plutarch's sources, and to his overall interpretation of Anaxagoras' thought. In short, it is hoped that a comprehensive account of Plutarch on Anaxagoras will emerge.

Now a notable example of Plutarch's use of biographical material on Anaxagoras to express his own convictions is found in *Pericles* (ch. 6, where Plutarch recounts the story of a one-horned ram brought to Pericles from his country place. The oddity is first explained by Lampon, the seer (μάντις), who regards it as a sign (σημεῖον) that the mastery of Athens would finally pass to Pericles, and not to Thucydides, son of Melesias. Anaxagoras, however, performed an autopsy on the ram's head, and explained the phenomenon scientifically.<sup>2)</sup> The story is told after Plutarch's unfavorable contrast between superstition (θειστοδαιμονία) and natural philosophy (φυσικὸς λόγος), in which superstition's ignorance of causes (αἰτίαι) is criticized. After the story's narration, however, Plutarch claims that both the φυσικὸς (Anaxagoras) and μάντις (Lampon) may have been right: the former correctly discerned the cause (αἰτία) and the

latter, the purpose (τέλος). Both "natural" and teleological explanations are justified; indeed, the significance or meaning of any phenomenon deserves as much attention as the immediate cause.

There seems little doubt that ch. 6 of *Pericles* contains Plutarch's "eigene Gedanken," and readers of his *De superstitione* will recognize them.<sup>3)</sup> Yet Plato's influence is also apparent, for at *Phaedo* 97Bff. (DK, A 47), Socrates expresses disappointment that Anaxagoras made no use of *Nous* in the ordering of things, but simply accounted "mists and air and water and many other strange things causes" (98C).<sup>4)</sup> Certainly Socrates' distinction between "teleological" and "mechanistic" explanation seems to underlie Plutarch's remarks in *Pericles* 6, and whether the incident was historical or not, it shows Plutarch's own interest in both kinds of explanation.<sup>5)</sup> Moreover, Pericles' association with Anaxagoras, and the latter's influence on the Athenian, are first found in the *Phaedrus* 269E (DK, A 15).

Probably the story of the one-horned ram should be connected with two other passages in Plutarch's *Lives* dealing with the theme of superstition. One is also found in *Pericles* (ch. 35) where Plutarch recounts Pericles' success in overcoming his crew's superstitious fears by explaining an eclipse of the sun. The story was apparently known in philosophical circles (ταῦτα μὲν οὖν ἐν ταῖς σχολαῖς λέγεται τῶν φιλοσόφων), and though Anaxagoras is not mentioned, his influence on Pericles can be presumed.<sup>6)</sup>

In *Nicias* (ch. 23), the theme of superstition is again introduced when Plutarch tells of the terror Nicias and his army experienced at an eclipse of the moon.<sup>7)</sup> Though solar eclipses were somewhat understood, those of the moon were not: "men thought it uncanny - a sign sent from God in advance of divers great calamities."<sup>8)</sup> Plutarch then interrupts his narrative somewhat abruptly with an excursus on Anaxagoras' contributions to the study of the moon: he was the first to "put in writing the clearest and boldest of all doctrines about the changing phases of the moon" (περὶ σελήνης καταυασμῶν καὶ σκιᾶς), literally, its "shinings" or "illuminations," and "shadow" (or "eclipse").<sup>9)</sup> But since he was not an ancient or highly regarded authority, his views won only slow and cautious acceptance;<sup>10)</sup> in fact, his theory was kept secret (ἀπόρητος), and was known only to a few. For natural philosophers were then regarded with suspicion and considered "star gazers" (μετεωρολέσχας); (cf. *Per.* 5 where Pericles is filled with μετεωρολογίας καὶ μεταρσιολεσχίας as a result of his association with Anaxagoras). Protagoras

was exiled, and Anaxagoras rescued from prison by Pericles. The excursus culminates with praise of Plato who subordinated (ὑπέταξε) physical necessities (τὰς φυσικὰς ἀνάγκας) to divine and more important or sovereign principles (ταῖς θείαις καὶ κυριωτέραις ἀρχαῖς). This seems to correspond closely to Plato's critique of Anaxagoras at *Phaedo* 97Bff. cited above.

Plutarch's admiration for Plato is here obvious. That much of his interest in and criticism of Anaxagoras, at least in *Nicias* and *Pericles*,<sup>11)</sup> stem from his own Platonic convictions is well illustrated by *De def. orac.* 435F-436 where Plutarch discusses his own beliefs about the divine. With remarks reminiscent of both *Per.* 6 and *Nic.* 23, he writes:

I shall defend myself by citing Plato as my witness and advocate in one (μάρτυρα καὶ σύνδικον ὁμοῦ). That philosopher found fault with Anaxagoras, the one of early times, because he was too much wrapped up in the physical causes (φυσικαῖς αἰτίαις), and was always following up and pursuing the law of necessity as it was worked out in the behaviour of bodies, and left out of account the purpose and the agent (τὸ οὐ ἔνεκα καὶ ὑφ'οὔ), which are better causes and origins. Plato himself was the first of the philosophers, or the one most prominently engaged in prosecuting investigations of both sorts, to assign to God, on the one hand, the origin of all things that are in keeping with reason, and on the other hand, not to divest matter of the causes necessary for whatever comes into being... (Babbitt's translation)

Plutarch's Platonism, as will be seen, further explains much of his interest in details of Anaxagoras' life. For the moment, however, since the report in *Nicias* is important for understanding Anaxagoras' astronomical contributions, what value can be placed on it? Is it historically correct to maintain, as Plutarch does, that Anaxagoras was the first to explain the moon's changing phases, including eclipses? The question has recently been revived by H. Görgemanns and D. O'Brien, and merits discussion.<sup>12)</sup> The *Nicias* passage should probably be considered in conjunction with Plutarch's report on Anaxagoras at *De fac. orb. lun.* 929B, according to which Anaxagoras believed that: ἥλιος ἐντίθησι τῇ σελήνῃ τὸ λαμπρόν (B 18, one of the two fragments preserved by Plutarch).<sup>13)</sup> Now behind both 929B and *Nicias* 23 is probably a remark of Socrates in *Cratylus* (409A) according to whom Anaxagoras recently (νεωστὶ) maintained the moon's illumination by the sun.

Certainly the *Crat.* passage was known to Plutarch as is clear from *De E* 391A-B, though here Plutarch apparently understood Socrates to mean recent *and* first.<sup>14)</sup> And at *De fac. orb. lun.* 929B the moon's illumination by the sun is referred to as the "very proposition" of Anaxagoras (τοῦτο δὴ τὸ Ἀναξαγόρειον).

A major problem with the *Nic.* report, however, is that there is evidence attributing theories about the moon's illumination by the sun, and presumably lunar eclipses, to thinkers before Anaxagoras, e.g. Anaximenes, Parmenides, and Empedocles (?). Even Plutarch himself in *De fac. orb. lun.* refers to Anaxagoras' theory that the moon derives its light from the sun, right after attributing what would seem to be the same theory of Parmenides.<sup>15)</sup> In view of such evidence, Görgemanns has maintained that Plutarch's report can be accepted only with "Einschränkungen" and that Plutarch tried to reconcile the inconsistencies ("die überlieferte Priorität des Anaxagoras mit den konkurrierenden Ansprüchen") by adding that Anaxagoras' doctrine was initially kept secret (ἀπόρρητος).<sup>16)</sup> This may be correct, though it should also be noted that in *Nic.* 23 Plutarch claims only that Anaxagoras was the first to put his views *in writing* (εἰς γραφὴν καταθέμενος), and in his zeal to prove Anaxagoras' "temporal" priority over Empedocles, O'Brien dismisses the remark perhaps too quickly.<sup>17)</sup>

All things considered, however, Plutarch does not seem especially well informed about Anaxagoras' views on the moon, despite his assertions in *Nicias* and *De fac. orb. lun.* For example, he seems to know nothing of Anaxagoras' belief that the moon was made of earth ("es scheint fast als hätte er nicht davon gewußt"),<sup>18)</sup> and though Plutarch reports at *De fac. orb. lun.* 932B that the moon is, according to Anaxagoras, the size of the Peloponnesus, he says nothing about the latter's reasons for the belief.<sup>19)</sup> A report such as this was probably taken from secondary sources, and there seems to be no good reason for thinking that Plutarch had first-hand knowledge of Anaxagoras' beliefs either about the moon's size or about its nature other than its illumination by the sun.<sup>20)</sup>

At *Lysander* 12 there is also a digression on Anaxagoras' views similar to *Nicias* 23.<sup>21)</sup> When remarking on Lysander's defeat of the Athenians at Aegospotamoi (404 B.C.), Plutarch notes that some say the fall of a stone

from the sky was a "sign" (σημεῖον) of this event, and:

Anaxagoras is said to have predicted<sup>22)</sup> that if the bodies fastened in the sky (τῶν κατὰ τὸν οὐρανὸν ἐνδεδεμένων σωμάτων) should be loosened by some slip or shake (ὀλισθήματος ἢ σάλου), one of them might be torn away and might plunge and fall to earth; none of the stars is in its natural place, for since they are heavy and stony, they shine by the resistance and twisting round (ἀντερείσει καὶ περικλάσει) of the aither. They are dragged about by force, being tightly held by the whirl and tension (δίνη καὶ τόνω) of the revolution, just as at the beginning, they were prevented from falling on earth when cold and heavy things were being separated from the whole (τῶν ψυχρῶν καὶ βαρέων ἀποκρινομένων τοῦ παντός).

Guthrie believes that by this report, Plutarch "usefully fills a gap in our knowledge of Anaxagoras' theory," and that τῶν κατὰ τὸν οὐρανὸν ἐνδεδεμένων σωμάτων is even reminiscent of Anaximenes.<sup>23)</sup> Lanza, however, is suspicious of Plutarch's information, especially since the expression τῶν... ἐνδεδεμένων σωμάτων belongs to the Aristotelian theory of the "fixed stars" (cf. *De cael.* 289b 33), and in Anaxagoras' cosmology there seems to be no such conception (see DK, A 42). Lanza thus thinks it possible that Plutarch's report goes back to an intermediate source, probably Peripatetic.<sup>24)</sup>

Now some of Plutarch's report certainly seems to be couched in Anaxagoras' language (e.g. τῶν ψυχρῶν... ἀποκρινομένων, the latter term being quite characteristic; cf. B2, B4, and B6), but because of the expression "Anaxagoras is said" (λέγεται) by which Plutarch introduces his report, it can be inferred that it is based certainly not on Anaxagoras' own writings, but on secondary sources. The story of the fall of the stone at Aegospotamoi was well known in antiquity (see Pliny, *Nat. hist.* II, 149f. (DK, A 11) and Diog. Laert. 2, 10);<sup>25)</sup> also Anaxagoras' theory that the whole sky was made of stars, the rapidity of their rotation causing them to stay in place (συνεστάναι), seems to have been general knowledge in antiquity (see Diog. Laert. 2, 12 who quotes the 3rd cent. B.C. historian Silenus as his source). In *Lysander*, however, Plutarch never mentions his sources for Anaxagoras' astronomical doctrines. After presenting them, he later (also in ch. 12) refers to Daimachus' books on piety (τῶ δ' Ἀναξ-αγόρα μαρτυρεῖ... ἐν τοῖς περὶ εὐσεβείας), but in view of the reference's context, it seems unlikely that Plutarch took Anaxagoras' views from Daimachus.<sup>26)</sup>

Now from *Pericles*, *Nicias*, and *Lysander*, it is clear that Plutarch was interested in Anaxagoras' astronomical doctrines,

if only because he considered the latter an enemy of "superstition." For at *De superstit.* 169E, in querying why superstition is no less impious than atheism, Plutarch reports that Anaxagoras was brought to trial for impiety (ἀσεβεια) because he said the sun is a stone (λίθος). The Cimmerians, however, are not called "impious" because they do not believe at all in the sun's existence. Indeed, superstitious beliefs about the gods, e.g. that they are fickle, vengeful, and cruel, are worse than "atheism." Again, Platonic influence on Plutarch's critique of superstition, seems clear (see *Rep.* 367Eff.), and à propos the remark on Anaxagoras' trial, Babbitt noted that Plutarch "probably drew from the well-known passage in Plato's *Apology*, p. 26D."<sup>27)</sup> Plutarch, however, accepts Anaxagoras' position, as we have seen, in explaining natural causes. But he considers it a one-sided, perhaps even impious view, insofar as the teleological side remains neglected. For Anaxagoras did not really employ the concept of *Nous* in explaining the natural world, and thus in Plutarch's (and Plato's) eyes, he failed to provide teleological insights.<sup>28)</sup>

Yet Anaxagoras, the natural philosopher, was for Plutarch not only an astronomer, but also a geometrician. At *De exil.* 607F, when illustrating his own contention that no place can remove either well-being (εὐδαιμονίαν), virtue or understanding (οὐδὲ ἀρετὴν οὐδὲ φρόνησιν), Plutarch cites Anaxagoras and his devotion to geometry as an example: while in prison he was "busied with squaring the circle" (τὸν τοῦ κύκλου τετραγωνισμόν ἔγραφε). The report has caused a fair amount of discussion about its meaning and historical value,<sup>29)</sup> but again, the influence of Platonic tradition on Plutarch is likely, for that the report was known in Platonic circles is suggested by Proclus (*Eucl.* 65. 21. A9) who says that Anaxagoras "applied himself to many geometrical problems."

For Plutarch, not only was Anaxagoras a student of astronomy, but also of the earth's natural phenomena. Several of Plutarch's references to Anaxagoras show interest in his beliefs about terrestrial happenings. One at *Quaest. nat.* 911D (DK, A 116) is quite brief. In a discussion of why sea water does not nourish trees, Plutarch asks whether it may not be for the same reason that it provides none for animals "seeing that Plato, Anaxagoras, and Democritus think that a plant is an animal fixed in the earth" (ζῆον γὰρ ἔγγαιον τὸ φυτὸν εἶναι).<sup>30)</sup> In itself, the report is of little value, but the mention of Anaxagoras (also Democritus)

together with Plato, suggests Plutarch's esteem for Anaxagoras as a student of the natural world. At *Quaest. conv.* 722A<sup>f.</sup>, Plutarch and his Platonic teacher, Ammonius,<sup>31)</sup> when discussing why sounds carry better at night than during the day, seem well informed about Anaxagoras' belief that sounds are muffled in day time by the hissing of air in the sunshine.<sup>32)</sup> Plutarch here cites Anaxagoras as claiming that:

the air is moved by the sun with a quivering, vibrating motion, as is clear from the little bits and fragments always dancing in the air, which some call motes ( $\tau\lambda\alpha\sigma$ ). Anaxagoras says that these, hissing and buzzing in the heat, by their noise make other sounds hard to hear in the daytime, but that at night their dancing and their noise abate.  
(Minar's translation)

In DK, A 74, the report is given with (Aristot.) *Probl.* XI 33, 903a 7, but Lanza noted that the testimonies are not wholly identical, and that the movement of bodies dancing in the air "which some call motes," is reminiscent of Democritus (cf. *Lucr.* II, 116-120). Thus, according to Lanza, Plutarch's testimony is inserted in an Epicurean context ("il contesto in cui la testimonianza plutarchea è inserita è epicureo").<sup>33)</sup> But whatever its source, the report shows that Anaxagoras' views on sound were of interest to Plutarch and to his teacher Ammonius, and thus to Platonists of the 1st cent. A.D.<sup>34)</sup>

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Thus far, these scattered reports on Anaxagoras may not add up to much. Anaxagoras is the astronomer, the geometer, the student of nature. He is also the teacher of Pericles. Was there any connection in Plutarch's mind between these facets of Anaxagoras' activity, or was his interest wholly doxographical? In my opinion, there is a connection by Plutarch's emphasis on associating Anaxagoras with Pericles: it lies in Plutarch's Platonic conviction that philosophers have the responsibility of entering political life, for at 777A of *Maxim. cum princip.*, Plutarch maintains that a philosopher's influence is expanded and perpetuated, not by his effect on private persons, but on rulers and statesmen:

but if these teachings (those of philosophy) take possession of a ruler, a statesman, and a man of action and fill him with love of honour, through one he benefits many, as Anaxagoras did by association with Pericles, Plato with Dion, and Pythagoras with the chief men of the Italiote Greeks.  
(Fowler's translation)

Plato's involvement with Dion is, of course, well known from the VIIth Epistle, and underlying this involvement is the famous conviction that unless "philosophers" become kings, or kings "philosophers," there can be no cure for the ills of society (*Rep.* 472Ef.). Now Plutarch's familiarity with both the VIIth Epistle and the *Republic*, is clear from his own *Life of Dion* and passages throughout the *Moralia*.<sup>35)</sup> And it is at *Rep.* 521Cff. that Plato outlines his education program for the guardians of society. Within this program, γεωμετρία and άστρονομία have a place of prominence. Thus, in view of the anecdotes about and doctrines of Anaxagoras reported by Plutarch, it seems likely he considered Anaxagoras a precursor of the Platonic ideal: though not himself a "king" or ruler, Anaxagoras was able to influence Pericles by his life and teachings, a life devoted to astronomy, geometry, and exploration of the nature of things. But despite this influence, there really remains a basic difference between the life of a philosopher and that of a statesman.

Such a summary of Plutarch's attitude to Anaxagoras, also helps to explain many of the other anecdotal or biographical incidents preserved by him. For example, at *Pericles* 16 Plutarch reports that the statesman's parsimony in economic matters (the doing of Pericles' servant, Evangelus) was not in accord with Anaxagoras' σοφία since "that philosopher actually abandoned his house and left his land to lie fallow for sheep-grazing, owing to the lofty thoughts with which he was inspired. But the life of a speculative philosopher (θεωρητικοῦ φιλοσόφου) is not the same thing, I think, as that of a statesman (πολιτικοῦ)." Diels speculated that the anecdote was taken from the historian Ion, but Meinhardt correctly noted that there is no evidence that Ion mentioned Anaxagoras' relationship with Pericles.<sup>36)</sup> Moreover, the same story is found in *De vit. aer. al.* (831F) right after Plutarch mentions the Cynic Crates. That Plutarch's report had a Cynic source is likely, though a number of anecdotes circulated in antiquity (e.g. Diogenes Laertius, Valerius Maximus, Clement of Alexandria) showing that Anaxagoras had become a symbol of the "theoretical life" (βίος θεωρητικός).<sup>37)</sup> Also in *Pericles* 16, another incident is mentioned about Anaxagoras starving himself to death, and Plutarch introduces it with "they say" (λέγουσιν). The subject of λέγουσιν cannot be determined, but it is not amiss to speculate that this as well as the previous anecdotes, formed part of a tradition on the theoretical



life which ultimately went back to Plato.<sup>38)</sup>

Since Anaxagoras' life as a philosopher was closely connected with Pericles' own political fortunes, it is not surprising that Plutarch gives a fair amount of attention to Anaxagoras' trial. One of the reports at *De superstit.* 169E, as noted earlier in this study, probably goes back to Plato's *Apol.* 26D. The *Apology* is, of course, the earliest extant source for Anaxagoras' trial, and though Socrates' remarks in his own defense leave some doubt as to whether Anaxagoras was actually tried,<sup>39)</sup> the ancient tradition is unanimous that such a trial took place. Problems arise, however, concerning the historical details, e.g. when it occurred and the names of the accusers. Most studies begin with the report in *Diog. Laert.* 2, 12 that different accounts of Anaxagoras' trial are given (περὶ δὲ τῆς δίκης αὐτοῦ διάφορα λέγεται),<sup>40)</sup> and Plutarch's version in *Per.* 32 deserves attention:

Diopieithes brought in a bill providing for the public impeachment of such as did not believe in the gods (τὰ θεῖα), or who taught doctrines regarding the heavens, directing suspicion against Pericles by means of Anaxagoras.

(Perrin's translation)

According to Plutarch, however, Anaxagoras' trial presumably did not take place, for Pericles fearing for Anaxagoras, sent him from the city (ἔξεπεμψεν ἐκ τῆς πόλεως).

Now there seems to be scholarly agreement about Plutarch's sources for *Per.* 32: a) the *psephism* of Diopieithes (for which Plutarch is the only ancient authority) was probably taken from Craterus' ψηφισμάτων συναγωγή;<sup>41)</sup> and b) Ephorus perhaps provided the basic schema for Plutarch's report, namely, that Anaxagoras' accusation was only a pretext to attack Pericles who, fearful of his own position, helped to create the Peloponnesian War.<sup>42)</sup> Aside from reconciling *Per.* 32 with other ancient versions, however, there is also the problem of reconciling it with Plutarch's references to Anaxagoras' persecution elsewhere. At *De superstit.* 169F, for example, Anaxagoras is said to be a defendant in a trial for impiety (δίκην ἔφυγεν ἀσεβείας). Other reports at *De prof. in virt.* 84F (εἰργμόν Ἀναξαγόρου), *De exil.* 607F (ἐν τῷ δεσμοτηρίῳ), and *Nicias* 23 (εἰρχθέντα) place Anaxagoras in prison, though according to the last version, Pericles rescued Anaxagoras with difficulty (μόλις). To return briefly to Diogenes Laertius, it is clear that different versions of Anaxagoras' trial circulated in antiquity. According to Sotion (*D. L.* 2, 12), for example, Pericles defended Anaxagoras who was fined five talents and banished (φυγαδευθῆναι; cf. ἔξέπεμψεν in *Per.* 32); Hermippus

of Smyrna reports that Anaxagoras was in prison (καθειρήθη ἐν τῷ δεσμοτηρίῳ) awaiting execution, but Pericles convinced the Athenian people to release Anaxagoras. Hermippus' work was known to Plutarch and it is possible that his accounts of Anaxagoras' imprisonment were taken from him.<sup>43)</sup> Speculation about Plutarch's sources for Anaxagoras' trial and imprisonment, however, remains an uncertain endeavor owing to the confusion of his own and other ancient sources.

Some of Plutarch's sources for Anaxagoras seem, of course, to have been of a "traditional" nature, e.g. the λέγεται of *Lysander* 12 (cf. *Per.* 35, ἐν ταῖς σχολαῖς λέγεται τῶν φιλοσόφων), or the λέγουσιν of *Per.* 16, 7. At *Consol. ad Apoll.* 118D, assuming the work is by Plutarch,<sup>44)</sup> the incident of Anaxagoras' son's death along with the philosopher's remark, ἦδειν ὅτι θνητὸν ἐγέννησα, is reported as a "traditional" story (παρειλήφαμεν).<sup>45)</sup> In reference to the same story, Plutarch cites a specific source, and that is at *De coh. ira* 463D where he writes that Panaetius mentions somewhere (ὡς πού) that we should make use of (χρησθαι) Anaxagoras' saying on the occasion of his son's death. It would seem rash, however, to conclude that Panaetius was Plutarch's only source, for if the reference proves anything, it is that the story was known among Stoic, and possibly other philosophical circles.

Aside from such anecdotal material, the source(s) of which one can only conjecture, a major question is: did Plutarch have access to Anaxagoras' book? Though some scholars maintain that copies of it did not exist after the 3rd cent. B.C., there is evidence that they were available at least until the 2nd cent. A.D., and that one was in the imperial "Schatzkammer" at Rome.<sup>46)</sup> It is also possible that Simplicius, who wrote in the 6th cent. A.D., made use of a copy at Athens.<sup>47)</sup> Assuming, then, that Anaxagoras' work was extant at Rome and Athens, Plutarch would have had opportunity to make use of it. Unfortunately, however, though Plutarch is informed about Anaxagoras' life, and even some of his doctrines, there is little to prove first-hand knowledge of Anaxagoras' book. Plutarch in referring to Anaxagoras seems to remain in the topics of the Academic-Stoic tradition.

But according to the Diels-Kranz edition, two fragments of Anaxagoras are preserved only by Plutarch. B 18 at *De fac. orb. lun.* 929B concerning the moon's illumination by the sun, was considered previously in this study. The other, B 21b

at *De fort.* 98F, is as follows:

... in all these matters we are less fortunate than beasts; yet we use experience and memory and intelligence (σοφία) and skill (τέχνη) which according to Anaxagoras are our very own, and we take honey, and draw milk, and having gathered them together we lead and drive them, so that in this there is nothing of chance, but wholly prudence and forethought (τῆς εὐβουλίας καὶ τῆς προνοίας).

The citation appears in ch. 3 where Plutarch argues that the human senses,<sup>48)</sup> e.g. sight and hearing, are not the result of chance (τύχη), but of reason (λογισμός); it is because of reason that humanity is superior to animals who are otherwise better equipped physically τύχη γε καὶ φύσει γενέσεως. Many animals are, for example, swifter and stronger than humans, yet mankind remains the master of all things. According to Ziegler, many conceptions in *De fort.* are "zweifellos stoisch,"<sup>49)</sup> even though it is impossible to find a specific source for the treatise. In the chapter, however, in which Anaxagoras is mentioned, there are two specific references to Plato, *Tim.* 67B at 98B, and *Prot.* 321C at 98D. There are also quotations of Heraclitus, Empedocles, and Greek dramatists. Thus, in view of the number of quotations, it would not be amiss to speculate that Plutarch is drawing from his own *hypomnēmata*, though the ultimate source for his quotation of Anaxagoras cannot be determined.<sup>50)</sup> That it came from Anaxagoras' book is possible, but unlikely.

The purposive activity of nature (φύσις) is also stressed by Plutarch at *De frat. amor.* 478Df. (cf. *De fort.* 98B-C) where Anaxagoras' views are again mentioned. In a discussion of how nature has made many bodily parts double, e.g. hands, feet, eyes, for mutual support and preservation (à propos the treatise's theme of the nature and benefits of brotherly affection), Plutarch cites Anaxagoras as believing that the reason for man's intellectual skill is the possession of hands (τὴν αἰτίαν τίθεσθαι τῆς ἀνθρωπίνης σοφίας καὶ συνέσεως). But, according to Plutarch, the opposite seems true: "it is not because man acquired hands that he is the wisest of animals; it is because by nature he was endowed with reason and skill (φύσει λογικὸν ἦν καὶ τεχνικόν) that he acquired instruments of a nature adapted to these powers." That this passage

should be understood in conjunction with Arist. *Part. an.* 687a 7, seems clear.<sup>51)</sup> Aristotle writes:

Anaxagoras says that man is the wisest of animals because he has hands, but it is reasonable to suppose that he received hands because he is the wisest. The hand is a tool, and nature like a wise man allots each tool to the one who is able to use it.

That this passage was Plutarch's source is possible, but more important, it shows in conjunction with *De frat. amor.* 478D, that whatever Plutarch's source was, one of his main criticisms of Anaxagoras was the latter's lack of teleological explanation. That this critique ultimately derives from Socrates in Plato's *Phaedo*, was argued earlier in this study.

On the whole, there is no conclusive evidence that Plutarch's knowledge (and criticism) of Anaxagoras was based on primary sources. Neither the quotation at *De fort.* 98F (B 21b) nor the passage at *De frat. amor.* 478D, reveals first-hand acquaintance with Anaxagoras' work. But perhaps the clearest proof that Plutarch made use of secondary sources is found at *Pericles* 4. The passage is worth quoting *in extenso*:

but the man who most consorted with Pericles... was Anaxagoras the Clazomenian, whom men of that day used to call "Nous," either because they admired that comprehension of his, which proved of such surpassing greatness in the investigation of nature; or because he was the first to enthrone in the universe, not Chance (τύχην), nor yet Necessity (ἀνάγκην), as the source of its orderly arrangement, but Mind (Nous) pure and simple, which distinguishes and sets apart, in the midst of an otherwise chaotic mass, the substances which have like elements (τὰς ὁμοιομερείας).  
(Perrin's translation)

At first glance, the report seems based on fragments of Anaxagoras' work, e.g. *nous* is pure (καθαρός), and mixed with nothing (see B 12, for example), but the term ὁμοιομέρεια suggests strongly that Plutarch is drawing from a Peripatetic summary of Anaxagoras' thought, for it was Aristotle who apparently first attributed the doctrine of *homoiomerē* to Anaxagoras.<sup>52)</sup> Since Theophrastus was certainly a source for Plutarch's *Pericles*, it would not be amiss to conclude that a passage such as this was based partly on Theophrastus' φυσικῶν δόξαι.<sup>53)</sup> In the absence, however, of reference to Theophrastus, a specific source for Plutarch's report cannot be determined.

In conclusion, there is little or no evidence that Plutarch had direct access to Anaxagoras' book, and whatever his sources (secondary) were, cannot easily be determined. A fairly consistent impression arises, however, that much of Plutarch's interest in and knowledge of Anaxagoras was probably based on a Platonic-Aristotelian-Stoic tradition. For example, Plutarch's interest in details of Anaxagoras' life is explainable because of the Clazomenian's association with Pericles, an association which seems to have anticipated Plato's own relationship with Dion, and, of course, Plato's conception of the philosopher king. The biographical anecdotes preserved by Plutarch show Anaxagoras as one interested primarily in the intellectual life, a life devoted to the study of celestial and terrestrial phenomena. Because of Plutarch's own personal interest in the workings of nature, it is not surprising that he has regard for Anaxagoras' views as is clear, for example, from *Quaest. conviv.* and *De fac. orb. lun.* where he preserves some valuable information on Anaxagoras. In Plutarch's eyes, Anaxagoras was also a precursor of his own fight against superstitious explanations of the world's happenings. But however sympathetic Plutarch may have been to Anaxagoras' beliefs, the latter's views did not really explain the purposive activity of nature, a doctrine dear to both Plutarch and to his master Plato.<sup>54)</sup>

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#### NOTES

1) See K. Ziegler's brief summary of Plutarch's treatment of Anaxagoras in his *Plutarchos von Chaironeia*<sup>2</sup> (Stuttgart 1964) 282. A list of passages on Anaxagoras is in W. C. Helmbold and E. N. O'Neil, *Plutarch's Quotations* (London 1957) 3, s.v. "Anaxagoras."

2) On the incident, see W. K. C. Guthrie, *A History of Greek Philosophy* II (Cambridge, England 1965) 287 who refers in n. 2 also to D. L. 2, 7. The incident, however, is not mentioned by Diogenes; it is reported only by Plutarch. For further discussion, see E. Meinhardt, *Perikles bei Plutarch* (Frankfurt 1957) who believes Pericles' relation with Lampon "findet durch Aristot. *rhet.* 1419a 2... eine Bestätigung und dürfte somit ebenfalls zum Philosophen-Überlieferungsgut gehören, das bis zu Plutarch manche Variationen erfahren haben mag." For bibliography on Lampon, see E. Derenne.

"Les Procès d'impiété intentés aux philosophes à Athènes au Vme et au IVme siècles avant J.-C.," *Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège*, XLV (1930), 16 n. 2.

3) Meinhardt, *Perikles*, 27. See also R. Flacelière and F. Chambry, *Plutarque Vies: Périclès-Fabius Maximus - Alcibiade-Coriolan*, III (Paris 1964) 12: "Les lecteurs des *Moralia* reconnaîtront là une des positions fondamentales de sa doctrine."

4) R. S. Bluck's translation, *Plato's Phaedo* (London 1955).

5) See, for example, D. Lanza, *Anassagora: testimonianze e frammenti*, Biblioteca di studi superiori, LII (Florence 1966) 28 n. on A 16: "Non si può stabilire con sicurezza la veridicità della notizia..." See also Derenne, *Les Procès d'impiété*, 21-22: "l'histoire du bélier unicolore, si elle n'est pas historique, est du moins née du souvenir de l'opposition très réelle qui ne pouvait que se manifester entre le naturaliste et le devin." Or J. A. Davison, "Protagoras, Democritus, and Anaxagoras," *CQ* 47 (1953) 42: "if we believe the story of the one-horned ram, Anaxagoras had returned to Athens before the ostracism of Thucydides (probably in the spring of 443)."

6) Flacelière, *Vies*, III, 55 n. 1 remarks that "Plutarque, d'ailleurs, ne se porte nullement garant de l'authenticité de cette anecdote, 'racontée dans les écoles des philosophes'."

7) See also *De superstit.* 169A, where without reference to Anaxagoras Plutarch reports the Nicias incident: "it would perhaps have been the best thing in the world for Nicias... to have got rid of his superstition... rather than to be affrighted at the shadow on the wall in eclipse and sit inactive while the enemy's wall was being built around him..." (Babbitt's translation). Plutarch then explains eclipses of the moon as an "obstruction of light caused by the earth's coming between sun and moon..." On the incident in *Nicias*, see R. Flacelière and E. Chambry, *Plutarque Vies: Cimon-Lucullus - Nicias-Crassus*, VII (Paris 1972) 136 and 298 (n. on p. 177). See also Guthrie, *History*, II, 308.

8) B. Perrin's translation, *Plutarch's Lives III* in *The Loeb Classical Library* (Cambridge, Mass. repr. 1958). Here and elsewhere the translation of Plutarch, unless they are mine, are from the *LCL*, and the translators' names are placed in brackets behind the quotations.

9) D. O'Brien, "The Relation of Anaxagoras and Empedocles," *JHS* 88 (1968) 107 writes: "in the context *περὶ σελήνης καταυασμῶν καὶ οὐαῖς* clearly meant to include the correct explanation of the moon's eclipse."

10) Plutarch's reference to Anaxagoras as οὐτ'αὐτός ἦν παλαιός at *Nic.* 23 seems inconsistent with *De def. orac.* 435F and *De frat. amor.* 478E where Anaxagoras is referred to as παλαιός. The "inconsistency" is explained probably by Plutarch's historical awareness: at the time of Nicias' campaign in 413 B.C. Anaxagoras was not yet "ancient"; by Plutarch's time (ca. 100 A.D.) he was.

11) The Platonic influence on Plutarch in the *Pericles* is great; e.g. in chaps. 1-2, inspired by Plato, he develops a moral theory of imitation or *mimēsis*, and several times he refers to the "divine" Plato, e.g. 7, 8; 15, 2; and 24, 7. See also Flacelière and Chambry, *Plutarque Vies*, III, 6 and 11 for further references and discussion. Except for ch. 23, however, Plato's influence on Plutarch in the *Nicias* is much less obvious.

12) See D. O'Brien, "The Relation of Anaxagoras and Empedocles," *JHS* 88 (1968) 93-113, esp. 106-09, and "Derived Light and Eclipses in the

Fifth Century," *JHS* 88 (1968) 114-127, esp. 125-26. Also H. Görgemanns, *Untersuchungen zu Plutarchs Dialog De facie in orbe Lunae* (Heidelberg 1970) 35-37.

13) According to Guthrie, *History* II, 306, "Plutarch is possibly quoting the philosopher's actual words when he speaks of 'the proposition of Anaxagoras that the sun imparts the brightness to the moon'." See also Lanza, *Anaxagoras*, 240, n. on B 18.

14) Though the *Crat.* passage is cited as A 76 in DK, no reference is given to Plutarch's *De E* 391A-B. For the interpretation of Plutarch's meaning given in the text, see O'Brien, *JHS* 88 (1968) 107.

15) O'Brien, *ibid.*, 107, argues that Empedocles wrote later than Anaxagoras. See also *ibid.* 118, where he notes that "there is nonetheless a variety of evidence that attributes derived light for the moon to a number of thinkers before Anaxagoras."

16) Görgemanns, *Untersuchungen* 35, n. 67.

17) O'Brien seems to overlook recent studies, e.g. E. Havelock's *Preface to Plato* (Cambridge, Mass. 1963) or J. Hershbell, "Empedocles' Oral Style," *CJ* 63 (1968) 351-57, which give reasons for believing that Presocratics prior to or roughly contemporary with Anaxagoras, composed their works orally. Plutarch's report provides evidence for an oral tradition, and Anaxagoras' *written* book may well have been a novelty among the "philosophical" works of the fifth century B.C.

18) Görgemanns, *Untersuchungen*, 35.

19) In the Loeb Classical Library, XII of *Plutarch's Moralia* (Cambridge, Mass. repr. 1968) H. Cherniss observes on p. 121, n. c that Plutarch's "statement here concerning the moon is missing from Diels-Kranz." The "traditional" report is that the sun, not the moon is larger than the Peloponnesus according to Anaxagoras. Thus, Görgemanns writes, *Untersuchungen*, 135, "bekannt ist, dass Anaxagoras die Sonne für grösser erklärte als die Peloponnes: 59A1, 8.42, 8.72 D.-K. All diese Zeugnisse gehen auf Theophrast zurück (s. die Zusammenstellung bei Diels, *Dox.* S. 138)."

20) At 923C-D Plutarch reports that the moon is kept from falling because of its motion, a view similar to that of Anaxagoras mentioned in *Lysander* 12 (see Cherniss, *Plutarch's Moralia*, XII, 59 n. d). But this possible reference to Anaxagoras as well as the report at 932B and the fragment at 929B, are not enough to prove Plutarch's direct acquaintance with Anaxagoras' work.

21) In R. Flacelière and E. Chambry, *Plutarque Vies: Pyrrhos-Marius - Lysandre-Sylla*, VI (Paris 1971) it is observed, 170, n. 2, that this discussion at *Lys.* 12 "qui a trait à des questions de sciences physiques peut être rapprochée notamment de celle qui, dans la *Vie de Paul-Émile*, 14, concerne l'origine et la formation des eaux souterraines." A closer parallel, however, is with the *Nicias* passage where Anaxagoras' astronomical views are also discussed. The *Lysander* passage bears, moreover, similarity to *Per.* 6 where, although the subjects are different, both chapters end with almost the same remark: in *Per.* 6 - ταῦτα μὲν οὖν ἴσως ἑτέρας ἐστὶ πραγματείας; in *Lys.* 12 - ταῦτα μὲν οὖν ἑτέρῳ γένοι γραφῆς διακριβωτέον.

22) The word predicted (προειπεῖν) has caused discussion. O. Gilbert, *Die meteorologischen Theorien des griechischen Altertums* (Leipzig 1907) 689, n. 1, remarked: "wenn Plut. *Lys.* 12 und Diog. L. 2, 10, berichtet wird, Anaxagoras habe den Fall vorhergesagt, so heisst das nur, daß

der Fall die Bestätigung der Lehre des Anaxagoras von der Natur der Meteoriten sei." Gilbert's view has been adopted by Guthrie, *History* II, 304, who writes "the belief that Anaxagoras had actually foretold the fall of the meteorite is fairly obviously a particularization, easy in a credulous age, of his general statement that the sun and stars were heavy bodies held aloft by force, so that it was natural to expect that occasionally something of them would fall."

23) *Ibid.*, 303 n. 1: "here again the language is reminiscent of Anaximenes. See vol. I, 135."

24) Lanza, *Anaxagora*, n. on A 12, 22-23.

25) For a discussion of the sources, see Flacelière-Chambry, *Plutarque Vies*, VI, 170-71. See also Gilbert, *Meteorologie*, 642 and n. 1.

26) For bibliography on Daimachus, see Flacelière-Chambry, *Plutarque Vies*, VI, 320, n. on p. 188.

27) F. C. Babbitt, *Plutarch's Moralia*, II, Loeb Classical Library (Cambridge, Mass. repr. 1971) 482, n. 2.

28) On Plutarch's teleology and belief in a providential ordering of the world, see, for example, P. Geigenmüller, "Plutarchs Stellung zur Religion und Philosophie seiner Zeit," *Neue Jahrbücher für das klassische Altertum* 47 (1921) 251-70, esp. 258ff. See also E. Zeller, *Die Philosophie der Griechen*, III, 2 (Leipzig 1881)<sup>3</sup> 178ff.

29) For a summary of previous discussion, see Guthrie, *History*, II, 270. See also Lanza, *Anaxagora*, 43-44, n. on A 38, who referring to Luria, concludes it is probable that Plutarch "intende ἔγραφε come imperfetto di conato: 'zu konstruieren versuchte' (γράφειν = konstruieren è derivato da E. Sachs, *Die fünf platon. Körper*, Berlin 1917, 77)."

30) On this passage, see Guthrie, *History*, II, 316, n. 2. It is likely that Plato's view at *Tim.* 77A-B that a plant is a ζῷον, and thus akin to human nature (φύσις), underlies Plutarch's report.

31) On Ammonius, see Ziegler, *Plutarchos*, 15-17.

32) O'Brien, *JHS* 88 (1968) 109, considers this report evidence of "a knowledge of the detail of Anaxagoras' system."

33) Lanza, *Anaxagora*, 133, n. on A 74.

34) Ammonius further remarks that night has, in and of itself, nothing to cause movement in the air, but day has one important thing: the sun, as Anaxagoras himself said (τὸν ἥλιον, ὡς περ αὐτὸς ὁ Ἀναξαγόρας εἶρηκεν).

35) For a listing of Plutarch's numerous references to Plato's letters, see Helmbold and O'Neil, *Plutarch's Quotations* 57; references to the *Republic* are on 60-1.

36) See DK, A 13, and Meinhardt, *Perikles*, 47.

37) See Lanza, *Anaxagora*, 24-25, n. on A 13.

38) Meinhardt, *Perikles*, 47, refers only to a "philosophische Überlieferung" without mentioning Plato. Yet as Gauthier and others have noted, "c'est Platon qui a le premier élaboré l'idéal d'une sagesse non plus seulement théorique, mais contemplative..." and "Anaxagore était pour l'Académie le type de la vie contemplative"; see R. A. Gauthier and J. Y. Jolif, *L'Éthique à Nicomaque*, II (Paris 1959) 487 and 885. Certainly the anecdotes in Plutarch about Anaxagoras should be compared with those in Aristotle (see DK, A 30), and they remind one of Plato's story about



Thales at *Theaet.* 174A.

39) See, D. E. Gershenson and D. E. Greenberg, *Anaxagoras and the Birth of Physics* (New York 1964) 348, who believe that Socrates' question at his trial as reported by Plato, "Do you think you are prosecuting Anaxagoras, my dear Meletus?" was taken "as an allusion to a historical event, rather than as an outraged protest at the absurdity of accusing *him* of corrupting the youth through doctrines everyone knew to be *Anaxagoras'* and not his."

40) The bibliography on Anaxagoras' trial is fairly extensive, and consists mainly of attempts to reconcile the ancient reports. According to Diogenes L. (2, 12-13), the versions are: Sotion reports Anaxagoras was indicted by Cleon on a charge of impiety, defended by Pericles, fined five talents and banished; Satyrus says Anaxagoras was prosecuted by Thucydides, son of Melesias, on charges of Medism and impiety, and sentenced to death by default. Thus J. A. Davison, "Protagoras, Democritus, and Anaxagoras," *CQ* 47 (1953) 39ff., followed by R. Meiggs, *The Athenian Empire* (Oxford 1972) 435ff., tried to reconcile these seemingly inconsistent reports by arguing for *two* trials of Anaxagoras (ca. 456 by Thucydides and ca. 433 by Cleon). For other assessments of the evidence, see A. E. Taylor, "On the Date of the Trial of Anaxagoras," *CQ* 11 (1917) 81-7, who argues in favor of Satyrus' testimony and Derenne, "Procès d'impiété," 11-41 who claims that Anaxagoras was accused by *both* Thucydides and Cleon.

41) On Craterus as a source for Plutarch, see Meinhardt, *Perikles*, 61 and n. 195; also Derenne, "Procès d'impiété," 22 and n. 2.

42) According to Meinhardt, *Perikles*, 60, "Ephoros (bei Diod. 12, 39, 2)" is Plutarch's "Gewährsmann." M. Casevitz, *Diodore de Sicile*, XII (Paris 1972) xiii, however, observes that "Ephore n'est nommé, comme source pour les causes de la guerre du Péloponnese, qu'en 41 et, dans ce récit, il semble que tout ne soit d'Ephore."

43) There are several references to Hermippus Smyrnaeus in the *Lives*; see Helmbold and O'Neil, *Plutarch's Quotations*, 34.

44) J. Hani, *Plutarque Consolation à Apollonius* (Paris 1972) esp. 27-43, has argued extensively for Plutarch's authorship of this treatise.

45) There is no mention of Plutarch at DK, A 33; only Galen is quoted who also refers to the story as παρείληφεν. Hani, *Plutarque*, 189 n. 3, remarks that "l'exemple d'Anaxagore était particulièrement utilisé dans les écoles de philosophie: Val. Max. 5, 10, 3 (le ch. 10 de V. M. est entièrement consacré à ce sujet); *Tusc.* 3, 14; apprécié de Chrysippe (ap. Galien, voir ch. 21, comm. du fragment de *Thésée* d'Euripide); de même par Panaitios (Plut., *de coh. ir.* 16-463D), qui en étendait l'usage à la répression de la colère; Epict., *Entr.* 3, 24; D. Chr., *Or.* 37 (464D); Sen., *ad Pol.* 30."

46) See Gershenson and Greenberg, *Anaxagoras*, 370 who doubt the authenticity of the fragments in Simplicius. According to them, Anaxagoras' book was "most probably" lost before the end of the third cent. B.C., and so Simplicius did not have a copy. Contrary to such a claim, D. Sider in a paper read before the Society for Ancient Philosophy, U.S.A., "Anaxagoras on the Composition of Matter" (p. 6 of mimeographed copy) maintains that Anaxagoras' book was extant until at least the 2nd cent. A.D.: "Ibn abi Usabia (8th century) records, in a work that has been translated into German ('Uyunu l'anb' fī tabaqāti l'atibbā, ed. A. Müller (Cairo 1882) vol. I, pp. 84. 31-85.2) that Galen 'sagte in seinem Buch (Π. ἀλυπίας, not extant), daß in der grossen königlichen Schatzkammer der Stadt Rom zahlreiche Bücher und Wertgegenstände verbrannt seien. Einige der verbrannten Exemplare waren von der Hand (αὐτόγραφα for ἀντίγραφα?) des Aristoteles,

des Anaxagoras, und des Andromachus." If this report is correct, Plutarch because of his visits and official duties in Rome, would have had every opportunity to see Anaxagoras' book. On Plutarch's connections with Rome, see C. P. Jones, *Plutarch and Rome* (Oxford 1971), especially 13ff.

47) See Guthrie, *History* II, 269, who says simply "a copy was still available to Simplicius in the sixth century A.D."

48) *Ibid.*, 316 n. 3: "The passage of Plutarch (*De fort.* 98f) given by DK as fr. 21b can hardly be said to add anything to Anaxagoras' opinions about human superiority to the beasts in mental faculties, owing to the difficulty of deciding how much is to be referred to Anaxagoras." For a similar view, see Lanza, *Anassagora*, 248 n. on B 21b who believes "il frammento è conservato da Plutarco e probabilmente è stato tratto da una summa dossografica o gnomologica; perciò è assai difficile stabilire i limiti della citazione, vuoi di Plutarco rispetto al dossografo, vuoi di questo (o della sua fonte) rispetto al testo originale."

49) Ziegler, *Plutarchos*, 88.

50) On Plutarch's use of *hypomnēmata*, see H. Martin, Jr., "Plutarch's Citation of Empedocles at *Amatorius* 756D," *GRBS* 10 (1969) 69-70.

51) Guthrie, *History* II, 316, quotes this passage of Aristotle and refers (n. 3) to *De fort.* 98F.

52) See, for example, *ibid.*, 282.

53) On Theophrastus as a source, see Meinhardt, *Perikles*, 10 and 12. For references to Theophrastus in the other Lives, see Helmbold and O'Neil, *Plutarch's Quotations*, 70.

54) I thank the Alexander von Humboldt-Stiftung for helping to make this research possible. I am further indebted to Prof. Dr. Ernst Vogt and Dr. Gerhart Schneeweiß, University of Munich, for their helpful criticisms. I bear the responsibility for the remaining faults.