

ECLIPSE AND PLAGUE: THEMISTOCLES, PERICLES, ANAXAGORAS AND THE ATHENIANS' WAR ON SCIENCE

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Abstract: The biography of Anaxagoras (500–428 BC), the most brilliant scientist of antiquity, contains many unresolved contradictions, which are best explained as follows. After he ‘predicted’ the fall of the meteorite at Aegospotami in 466, he lived nearby at Lampsacus as the protégé of its ruler Themistocles. In 460 Pericles became his patron at Athens, where he lived for the next 30 years. In 431, Pericles was taking part in an expedition to the Peloponnese when the sun was eclipsed; he tried to dispel his helmsman’s fear by covering his face with his cloak, illustrating Anaxagoras’ correct account of eclipses. In 430 he led a second such expedition, which failed badly; its return coincided with the plague. The seer Diopieithes brought in a decree that targeted the ‘atheist’ Anaxagoras by banning astronomy. This enabled Thucydides son of Melesias and Cleon to attack Pericles by prosecuting Anaxagoras, on the ground that Pericles’ impiety had angered the gods, thereby causing the plague. Pericles sent Anaxagoras back to Lampsacus, where he soon died; Pericles was himself deposed and fined, in a first triumph for the Athenian populist reaction against the fifth-century Enlightenment.

Keywords: science, religion, epidemic, law, enlightenment, Halley’s comet, freedom of thought, Athens, democracy

[T]he most striking evidence of the reaction against the Enlightenment is to be seen in the successful prosecutions of intellectuals on religious grounds which took place in Athens in the last third of the fifth century. About 432 B.C. or a year or two later, disbelief in the supernatural and the teaching of astronomy were made indictable offences. The next thirty-odd years witnessed a series of heresy trials which is unique in Athenian history. The victims included most of the leaders of progressive thought at Athens.

E.R. Dodds (1951) 189

Anaxagoras of Clazomenae in Ionia was the most consequential of the Presocratics, both for his discoveries in the field of astronomy and for his close links with Athenian leaders like Themistocles and Pericles. Unlike his predecessors, Anaxagoras made major scientific advances that were based on empirical evidence, notably by discovering the correct explanation of eclipses and proving that the heavenly bodies are heavy material objects; he can indeed be called the true founder of science.¹ Yet the details of his life are hotly contested, as the evidence is conflicted and confused.² No consensus has yet been reached on many points, and a major rethinking is needed. This article re-examines the evidence. By rejecting certain *idées reçues* while accepting the validity of more of the testimonia than have previous treatments, it offers a reinterpretation that sheds a startling light on Pericles’ fall from power and the reaction against science in Athens during the Peloponnesian War and its aftermath.

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¹ Graham (2013).

² Curd (2007) 130–31, who is, however, too sceptical about the veracity of our sources.

I. Anaxagoras' youthful discoveries

Apollodorus of Athens puts Anaxagoras' birth in 500/499 BC and his death in 428/7;³ it largely accords with this that Diogenes Laertius states that he died aged 72⁴ (the *Suda* says that he died at 70).⁵ Democritus declared that he himself was 40 years younger than Anaxagoras, from which Apollodorus deduced that Democritus was born in 460, which is consistent.⁶ He began to practise astronomy at an early age, since we are told that he made astronomical observations from Mount Mimas near Clazomenae.⁷ He is said to have studied in Miletus.⁸ Our first reasonably secure date for him is that he was aged 20 when Xerxes crossed the Hellespont in 480,⁹ which indeed dates his birth to 500. Another source records that he began to philosophize at Athens in the archonship of Callias (456/5), when he was aged 20 (ἤρξατο δὲ φιλοσοφεῖν Ἀθήνησιν ἐπὶ Καλλίου).¹⁰ However, as Johannes Meursius saw,¹¹ 'Callias' is a mistake for 'Calliades', who was archon at Athens in 480/79; thus this report indirectly confirms the dating of Anaxagoras' birth to 500. It is simply another way of saying that he was 20 when Xerxes crossed the Hellespont, a nugget of information that may even have come from his own book. However, Anaxagoras cannot have begun to philosophize at Athens in 480, since Xerxes invaded and destroyed the city in that year; rather, 'at Athens' will have originally belonged with the archon's name, in the familiar construction 'when X was archon at Athens', for which there are hundreds of parallels. Thus for Ἀθήνησιν ἐπὶ Καλλίου Diogenes' source must have read ἐπὶ Καλλι(άδ)ου Ἀθήνησιν (ἄρχοντος), as in his parallel expression ἄρχοντος Ἀθήνησι Δαμακίου.¹² Anaxagoras' alleged presence in Athens in 480 is thus an error based on a confusion in word-order.

On the contrary, as an Ionian, Anaxagoras could well have been conscripted to serve in Xerxes' fleet, and thus may have taken part in the battles of both Salamis in 480 and Mycale in 479. The Ionians' desertion of the Persian side at Mycale brought the Ionian coastal cities their freedom; this reopened them to contact with the rest of the Hellenic world, including intellectual currents from as far afield as Magna Graecia. Thus it must have been that Anaxagoras learned of Parmenides' observation that the moon derives its light from the sun,¹³ and would have drawn from it the further inferences that the moon is opaque, spherical, permanent and heavy, i.e. a three-dimensional solid.¹⁴ These inferences would enable him to develop his theory that solar eclipses occur when the moon blocks the light of the sun, and to propose, in his book, that the sky contains heavy bodies which could occasionally fall to earth.

³ Apollod. *Chron.* FGrH 244 F31, in Diog. Laert. 2.7 (Anaxag. A1 DK): φησὶ δ' Ἀπολλόδορος ἐν τοῖς Χρονικοῖς γεγενῆσθαι αὐτὸν τῇ ἐβδομηκοστῇ Ὀλυμπιάδι, τεθνηκέναι δὲ τῷ πρώτῳ ἔτει τῆς ὀγδοηκοστῆς (corr. Meursius: ἐβδομηκοστῆς codd.) ὀγδός. Meursius' emendation yields the date 428/7; the uncorrected date 468/7 is evidently impossible, as is Eusebius' statement that Anaxagoras died in 460, in the Armenian version of *Chron.* for that year. Cf. Sider (2005) 2. Hippolytus' claim (*Haer.* 1.13 = Anaxag. A3 DK) that he flourished in 428/7 is an error for his date of death. All dates are BC.

⁴ Diog. Laert. 2.7 (Anaxag. A1 DK).

⁵ *Suda* s.v., ἐξήγαγε δὲ τοῦ ζῆν ἑαυτὸν ἐτῶν ο' (Anaxag. A3 DK).

⁶ Diog. Laert. 9.34, 41 (59 A5, 68 A1 DK).

⁷ Philostr. *VA* 2.5 (A6 DK).

⁸ Gal. *Hist. Phil.* 3 (A7 DK).

⁹ λέγεται δὲ κατὰ τὴν Ξέρξου διάβασιν εἴκοσι ἐτῶν εἶναι, Diog. Laert. 2.7 (A1 DK), corroborated by Cyril.

Adv. Jul. 1.12b = Eus. *Chron.* (A4 DK).

¹⁰ Demetr. *De archont.* = FGrH 228 F2, in Diog. Laert. 2.7 (A1 DK). Mansfeld (1979) 41, 55–57, wrongly retaining 'Callias', prefers 456–436, but then has to emend the 'thirty' years that Anaxagoras is said to have spent at Athens (see section III below) to 'twenty'.

¹¹ Meursius (1622) 67.

¹² Diog. Laert. 1.22, where he is citing Demetrius of Phalerum.

¹³ Graham (2013) 90–108. Parmenides was probably born about 15 years before he was, i.e. in ca. 515, since Plato says that he visited Athens to attend the Great Panathenaea when he was about 65 and Socrates was young but eager to hear him (Pl. *Tht.* 183e; *Prm.* 127a; *Soph.* 217c); since Socrates was born in 470, if we assume that he was aged 20 during this visit Parmenides was born in ca. 515. Athenaeus denies that this meeting was possible (11.505F).

¹⁴ Graham (2013) 111–17.

D.W. Graham and E. Hintz have shown that Anaxagoras must have based his statement that the sun was a molten lump larger than the Peloponnese¹⁵ on actual observations of the annular eclipse of 17 February 478, when he was 22.¹⁶ In an annular eclipse, a bright circle of the edge of the sun remains visible, for example if viewed in a bowl of water, when the eclipse is otherwise total. Anaxagoras' choice of the Peloponnese as a unit of measurement cannot be gratuitous, but based on astronomical data.¹⁷ In fact it reflects the area that was covered by that particular eclipse; the entire Peloponnese, except for its far northwestern corner, was obscured as the dark circle of the eclipse passed across the Mediterranean, including over Clazomenae.¹⁸ Anaxagoras somehow learned that this eclipse covered the whole of the Peloponnese, and deduced that the sun was larger than it, since it exceeded the size of the shadow cast by the moon.¹⁹ Wherever Anaxagoras was when he observed the eclipse himself, he would have needed to find Peloponnesian informants who recalled that they were at, for instance, Olympia, Sparta or Corinth when this memorable eclipse occurred. However, it does not follow, as Graham argues, that Anaxagoras must have obtained his information about this eclipse in Athens. Graham holds that this will explain how he could have had access to multiple informants while memories were still fresh, given the difficulty of communications in wartime; his supposed presence in Athens from 480 onwards would also explain his alleged links with Themistocles.²⁰

However, Anaxagoras' success in conducting this piece of *ἵστορίη* in 478 does not prove that he was already in Athens or linked with Themistocles; he was surely too young and obscure to have been introduced to the latter in the early 470s.²¹ Instead, Anaxagoras could readily have learned of the extent of the eclipse on the Greek mainland from *Peloponnesians* who were serving with the allied fleet while it was led by Pausanias, regent of Sparta, in the summer of 478; Pausanias sailed with 20 Peloponnesian, 30 Athenian and many other allied ships first to Cyprus and then to Byzantium, necessarily passing through Ionia on the voyage between these two destinations.²² Perhaps Anaxagoras himself served in the fleet during this critical year; or, if he was studying in Miletus, the fleet would surely have stopped there, giving him the chance to talk to a great many Peloponnesians (20 triremes needed over 4,000 men). In the winter of 478/7, the Ionians joined the Delian League under Athenian leadership; after Pausanias was removed from his command at Byzantium, the Spartans, retreating into isolationism, undertook no more naval operations,²³ and no Peloponnesian fleet returned to Ionia for many years. Thus Anaxagoras surely formulated his theory by talking to Peloponnesian sailors of the allied fleet whom he met in the summer of 478.

The next event in Anaxagoras' career, as Graham has established,²⁴ was the publication of his book *On Nature* (others conjecture that it was published in *ca.* 440).²⁵ In it Anaxagoras announced his findings about the cause of eclipses and his theory that the skies contain heavy objects that are maintained there by the centrifugal force of a vortex, and could fall out of orbit if the vortex was disturbed; he posited such invisible 'asteroids' in order to explain how lunar eclipses can

¹⁵ Plut. *Mor.* 932A; Hippol. *Haer.* 1.8.8 = 59 A42 DK; Diog. Laert. 2.8 = 59 A1 DK.

¹⁶ Graham and Hintz (2007); Graham (2013) 161–70; <https://eclipse.gsfc.nasa.gov/SEcat5/SE-0499--0400.html> (NASA Eclipse website), with the track of this particular eclipse of 17 February 478 (no. 03649) at <https://eclipse.gsfc.nasa.gov/5MCSEmap/-0499--0400/-477-02-17.gif>.

¹⁷ So already West (1971) 233 n.1; Sider (1973).

¹⁸ Graham and Hintz (2007) 324–27, fig. 1; Graham (2013) 151–52, fig. 5.1. The path of the eclipse (no. 03649) was 326km wide and its central duration was six minutes exactly, which is exceedingly long (<https://eclipse.gsfc.nasa.gov/SEcat5/SE-0499--0400.html>).

¹⁹ Graham and Hintz (2007) 330; Graham (2013) 143–59.

²⁰ Graham (2013) 154–55.

²¹ Themistocles may even have been in Sparta in February 478 when the eclipse took place, since he dallied there pretending to negotiate with the Spartans while the Athenians rebuilt their fortifications (Thuc. 1.91).

²² Thuc. 1.94.

²³ Thuc. 1.95.

²⁴ Graham (2013).

²⁵ Cf. Curd (2007) 131; following Mansfeld (1979–80).

occur near the horizon of an earth that he still considered to be flat.²⁶ When the spectacular fall of meteorites at Aegospotami and Abydos in 466 confirmed the existence of such bodies, he became famous and his ideas were widely accepted. We have already seen why 478 is the *terminus post quem* for his book's publication. Graham has shown that *ca.* 466 is its *terminus ante quem*, for four reasons. (i) The fall of the meteorite at Aegospotami in *ca.* 466 (discussed in section II below) was taken as a decisive confirmation of his theory that the sky contains heavy objects that could sometimes fall to earth, and made him famous.²⁷ (ii) Since his book's explanation of comets as the conjunction of two planets releasing flames²⁸ was disproved by the comet of *ca.* 466, which far outshone the planetary conjunction that occurred at the same time, the book was written before *ca.* 466.²⁹ (iii) His explanation of why the Nile floods during the drought of late summer, which was also in his book, is already referred to by Aeschylus at *Supplices* 497 and 641, a play that was first performed in 463, as well as in another fragment.³⁰ (iv) If it is true that he was the first to publish a book containing a diagram,³¹ this too seems to favour an earlier rather than a later date. Graham argues that Anaxagoras must have been in Athens for his book to have gained such acclaim so rapidly,³² but I would expect Ionia rather than Athens to have dominated the book-trade at such an early date (as witness the early prevalence of the Ionic alphabet, as seen in the late fifth-century papyrus from Daphni near Athens or the fourth-century one from Callatis in Romania);³³ Athenian dominance came later. Moreover, Ionia was by no means cut off from Athens by the territory of the Delian League, but had revolted from Persia after Mycale.³⁴ However, these are only small corrections to Graham's compelling reconstruction of this part of Anaxagoras' scientific career.

II. Halley's comet, the Aegospotami meteorite and Themistocles

In *ca.* 466, according to our sources, Anaxagoras 'predicted' that a rock would fall 'from the sun'. A rock duly fell, in daylight, near Aegospotami on the northern shore of the Hellespont, and other rocks fell at Abydos nearby and at Potidaea, places that lie in an arc from the Hellespont across the north Aegean.³⁵ Pliny the Elder tells the story:

celebrant Graeci Anaxagoran Clazomenium Olympiadis LXXVIII secundo anno praedixisse, caelestium litterarum scientia, quibus diebus saxum casurum esset e sole, idque factum interdiu in Thraciae parte ad Aegos flumen (qui lapis etiam nunc ostenditur magnitudine vehis, colore adusto), comete quoque illis noctibus flagrante. quod si quis praedictum credat, simul fateatur necesse est, maioris miraculi divinitatem Anaxagorae fuisse solvique rerum naturae intellectum et confundi omnia, si aut ipse sol lapis esse aut umquam lapidem in eo fuisse credatur. decidere tamen crebro non erit dubium. in Abydi gymnasium ex ea causa colitur hodieque modicus quidem, sed quem in media<m> (*correx*) terrarum casurum idem Anaxagoras praedixisse narretur. colitur et Cassandriae, quae Potidaea <quondam> (add. Mayhoff) vocitata est, ob id deductus (*correx*: deductae *secunda manus ap. cod. Par. 6795*: deducta *codd. alii*).

²⁶ Hippol. *Haer.* 1.8.8 = 59 A42 DK; with Graham (2013) 122–26.

²⁷ Curd (2007); Graham (2013) 161–65.

²⁸ Diog. Laert. 2.9 = 59 A1 DK; Arist. *Mete.* 1.6, 342b27–29 = 59 A81 DK; Aët. 3. 2. 2 = 59 A81 DK.

²⁹ Graham (2013) 165–70.

³⁰ A. *fr.* 300 Radt (undated); with Graham (2013) 170–74.

³¹ Diog. Laert. 2.11, where I prefer Ruestow's emendation *ὄν γραφαῖς* for the *συγγραφῆς* of the MSS.

³² Graham (2013) 164–65.

³³ For the papyrus from Callatis, see Janko et al. (2021).

³⁴ Hdt. 9. 105.

³⁵ Their geographical coordinates are: Aegospotami 40°19'30"N 26°35'30"E (by the mouth of the river Bağlar Deresi near Sütluce); Abydos 40°11'43"N 26°24'18"E; Potidaea 40°11'37"N 23°19'40"E. If these three meteorites all fell at the same time and originated from the comet (West (1960)), their coordinates would help to retrodict its trajectory more precisely, but meteorites rarely originate from comets – except from Halley's.

The Greeks praise Anaxagoras because, in the second year of the 78th Olympiad [467/6], he predicted, from his knowledge of the literature on astronomy, on what days a rock would fall from the sun. This occurred in daylight in the part of Thrace by Aegospotami (this stone is still shown, as big as a cartload and of a burnt colour), while a comet too was blazing in those nights. If anyone believes that this was predicted, he must at the same time allow that Anaxagoras' power of divination was even more marvellous, and that our understanding of the universe is annihilated and everything is thrown into confusion, if it is believed either that the sun itself is a stone or that it ever had a stone in it. But it will not be doubted that stones do frequently fall. For this reason, a smallish one is still conserved in the gymnasium at Abydos; the same Anaxagoras may be said to have predicted that it would fall onto the middle of the continents. Another is kept at Cassandreia (which was <once> called Potidaea) that was brought down on this account.³⁶

A meteorite as big as a cartload would have measured perhaps one cubic metre in volume, and, to judge by the Hoba meteorite in Namibia, which is mainly composed of iron and is about twice that size, would have weighed about 30 tonnes; its impact would have been very dramatic. The original meteoroid must have been huge, since much of it would have burnt up on entry to the earth's atmosphere; even so, it would have left a large crater, which, like the meteorite itself, has yet to be found.³⁷ Pliny is quite correct that Anaxagoras could not have predicted this particular fall of this particular object; generally, comets do not shed meteorites (although Halley's may do so), but, as he notes, meteorites do fall. In his own account, Plutarch makes clear, from his knowledge of Anaxagoras' writings, that in fact Anaxagoras did not predict this individual event. Rather, as Graham has shown,³⁸ the meteorite's fall dramatically exemplified and confirmed his theory that the skies contain heavy stones ('asteroids') that are invisibly held aloft by a vortex unless that vortex weakens:

οἱ δὲ καὶ τὴν τοῦ λίθου πτώσιν ἐπὶ τῷ πάθει τούτῳ σημεῖόν φασι γενέσθαι· κατηνέχθη γάρ, ὡς ἡ δόξα τῶν πολλῶν, ἐξ οὐρανοῦ παμμεγέθης λίθος εἰς Αἰγὸς ποταμοῦς· καὶ δείκνυται μὲν ἔτι νῦν, σεβομένων αὐτὸν τῶν Χερροννησιτῶν· λέγεται δὲ Ἀναξαγόραν προειπεῖν ὡς τῶν κατὰ τὸν οὐρανὸν ἐνδεδεμένων σωμάτων, γενομένου τινὸς ὀλιθήματος ἢ κάλου, ῥῆσις ἔσται καὶ πτώσις ἐνὸς ἀπορραγέντος· εἶναι δὲ καὶ τῶν ἄστρον ἕκαστον οὐκ ἐν ἧ πέφυκε χώρα· λιθώδη γὰρ ὄντα καὶ βαρέα λάμπειν μὲν ἀντερείκει καὶ περικλάσει τοῦ αἰθέρος, ἔλκεσθαι δὲ ὑπὸ βίας σφριγγόμενα δίνη καὶ τόνῳ τῆς περιφορᾶς, ὡς πού καὶ τὸ πρῶτον ἐκρατήθη μὴ πεσεῖν δεῦρο, τῶν ψυχρῶν καὶ βαρέων ἀποκρνομένων τοῦ παντός.

But some say that the fall of the stone occurred as a sign with regard to this event [sc. the Battle of Aegospotami]. For a huge stone was brought down from the sky, in most people's opinion, at Aegospotami; it is exhibited even now, since the people of the Chersonese revere it. Anaxagoras is said to have stated that, 'since solid bodies are bound into the sky, when some slippage or surge occurs, if one breaks away it will be thrown and fall. Each of the heavenly bodies is not in the position where it arose by nature; for since they are stony and heavy, they shine by resistance and drag of the ether, but are drawn by force, squeezed by a whirl and tension in their rotation, as of course they were originally kept in place so as not to fall to earth when the cold and heavy elements were separated out from the universe.'³⁹

Plutarch appends a full account by the historian Daïmachus of Plataea of the fourth century BC, which confirms Pliny's statement that a comet was visible at the time:

³⁶ Plin. *HN* 2.149–50.

³⁷ It is surprising that it has yet to be located. A search for it by remote sensing was promised by Kocahan et al. (2005), but no announcement of any discovery has

been made.

³⁸ Graham (2013) 161–63.

³⁹ Plut. *Lys.* 12.1–2 = DK 59 A12.

τῷ δ' Ἀναξαγόρα μαρτυρεῖ καὶ Δαΐμαχος ἐν τοῖς Περί εὐσεβείας, ἱστορῶν ὅτι πρὸ τοῦ πεσεῖν τὸν λίθον ἐφ' ἡμέρας ἑβδομήκοντα καὶ πέντε συνεχῶς κατὰ τὸν οὐρανὸν ἑωρᾶτο πύρινον σῶμα παμμέγεθες, ὥσπερ νέφος φλογοειδές, οὐ χολάζον, ἀλλὰ πολυπλόκου καὶ κεκλασμένας φορὰς φερόμενον, ὥστε ὑπὸ κάλου καὶ πλάνης ἀπορηγνύμενα πυροειδῆ σπάσματα φέρεσθαι πολλαχοῦ καὶ ἀστράπτειν, ὥσπερ οἱ διάττοντες ἀστέρεις. ἐπεὶ δὲ ἐνταῦθα τῆς γῆς ἔβρισε καὶ παυσάμενοι φόβου καὶ θάμβου οἱ ἐπιχώριοι συνήλθον, ὄφθη πυρὸς μὲν οὐδὲν ἔργον οὐδ' ἴχνος τοσοῦτο, λίθος δὲ κείμενος, ἄλλως μὲν μέγας, οὐθὲν δὲ μέρος, ὡς εἶπεῖν, ἐκείνης τῆς πυροειδοῦς περιοχῆς ἔχων.

Daïmachus in his *On Piety* also bears witness for Anaxagoras, recounting that before the stone fell an immense fiery body had been visible in the sky for seventy-five days on end, resembling a flame-like cloud, not inactive, but borne along with complex, forked motions, so that fiery fragments, detached by the fluctuating surge, were carried in all directions, and flashed like shooting-stars. When it had crashed there onto the earth, and the local people, getting over their fear and amazement, had gathered round, no action of fire or even trace of it was seen, but a stone lying there, big indeed, but with almost no share in that fiery environment.⁴⁰

As D.J. Schove first suggested,⁴¹ this is most probably the earliest recorded sighting of Halley's comet, which is first securely attested in 240 BC. Already in 1917 M.A. Viljev calculated the date of its appearance as -465.73 (i.e. ca. 23 September 466), and two independent retrodictions of it each determined, within eight hours of each other, that its perihelion occurred on 18 July 466.⁴² The comet would have been visible for as many as 80 days, from about 4 June to 27 August; the meteorite fell after 18 July, when the comet would have moved into the western sky.⁴³ Although it came within 0.46 astronomical units (AU) of the Earth, which is not particularly close, the Earth probably passed through its field of debris.⁴⁴

The reports of this event have been doubted,⁴⁵ but there is too much evidence to dismiss them. Anaxagoras' own interpretation of it is given by Silenus of Caleacte,⁴⁶ but the date that is supplied seems corrupt:

φρσι δὲ Κυληνὸς ἐν τῇ πρώτῃ τῶν Ἱστοριῶν ἐπὶ ἄρχοντος Δημύλου [cod. B: Δι- cod. P: Λυκανίου Scaliger] λίθον ἐξ οὐρανοῦ πεσεῖν· τὸν δὲ Ἀναξαγόραν εἶπεῖν, ὡς ὅλος ὁ οὐρανὸς ἐκ λίθων συγκεῖτο· τῇ σφοδρᾷ δὲ περιδιθήσει συνεστάναι, καὶ ἀνεθέντα κατενεχθήσεσθαι.

Silenus in the first book of his *Histories* says that a rock fell from the sky in the archonship of Demylus. Anaxagoras said that the whole sky was composed of rocks that were held together by their rapid rotation, and would be carried down if it slackened.

The relevant Athenian archons were Theagenides in 468/7,⁴⁷ Lysistratos in 467/6, Lysanias in 466/5, whose name seems closest palaeographically to that given by Silenus or his copyists,⁴⁸ and Lysitheos in 465/4. As a comet was seen in China in 467,⁴⁹ according to the *Shi Ji* by Sima Qian,⁵⁰

⁴⁰ Plut. *Lys.* 12.4–5, citing Daïmachus, *FGrH* 65 F8 = DK 59 A12.

⁴¹ Schove (1948) 181; cf. West (1960).

⁴² Viljev (1917); Yeomans and Kiang (1981) 643; Landgraf (1986) 258–59 (but he thinks the Aegospotami comet could not have been Halley's comet, as he is misled by erroneous dates in some ancient sources); Graham (2013) 167.

⁴³ Arist. *Mete.* 1.7, 344b31; with Graham and Hintz (2010). As they write, 'Its orbital period typically varies between 75 and 76 years, but [it] can return in as few as 74 or as many as 79 years.' If its orbit was 76 years, it should have appeared in 316, 392 and 468 BC. If its orbit

was 75 years, it should have appeared in 315, 390 and 465.

⁴⁴ Graham (2013) 169.

⁴⁵ West (1960); (1971) 232–33.

⁴⁶ *FGrH* 27 F2, in Diog. Laert. 2.11; he wrote on the Hannibalic War. Was Demylus an archon then?

⁴⁷ The *Marmor Parium* ep. 57 (*FGrH* 239A 57 ii.1000) dates the fall of the stone to this year.

⁴⁸ ΛΥΣΑΝΙΟΥ is closer to ΔΙΜΥΛΟΥ than are the other archons' names (Dorandi (2013) wrongly prints Λυκανίου in his critical apparatus to the passage).

⁴⁹ Graham (2013) 167.

⁵⁰ In Sima Qian's *Records of the Grand Historian* (*Shi Ji* in Chinese) volume 15 ('The chronological table

the date remains somewhat uncertain, since its reappearance is rendered irregular by interference from the gravitational fields of the heaviest outer planets, Jupiter and Saturn. But given Pliny's Olympiadic dating, the best way to reconcile the conflicting evidence is to suppose that the stone fell in late August of 466, after midsummer when the Olympic games were held and after the inauguration of the new Athenian archon Lysanias in July/August (the month of Hecatombaeon), when the comet had already been visible for two and a half months.

Anaxagoras must have inspected the meteorite of Aegospotami soon after it fell; his base would have been the city closest to Aegospotami, i.e. Lampsacus opposite on the southern shore of the Hellespont, where he would die many years later. He also studied another meteorite that had fallen on the southern shore of the Hellespont, namely at Abydos.⁵¹ The fact that Pericles would eventually rescue Anaxagoras from the Athenians by sending him into exile at Lampsacus suggests that the astronomer already had an association with that city, which was to honour him after his death (see section IV below). At some stage in his career he attracted Metrodorus of Lampsacus as a disciple; he is more likely to have done so at this time than during his dying years in Lampsacus, when he was a broken man. These considerations lead me to offer a new explanation for the stories that link Anaxagoras with Themistocles (524 to *ca.* 459), the Athenian statesman, who was, I believe, Anaxagoras' first patron.

Despite Aeschylus' best efforts in his *Persians*, with the young Pericles as his *chorēgos*, to remind the Athenians that Themistocles was the victor of Salamis, they ostracized him from Athens in 472 or 471. He lived in Argos for about three years, but the Spartans intrigued against him. When, as a result, the Athenians condemned him *in absentia* for treason, he fled via a circuitous route to Ionia, learned the Persian language and customs, and eventually went over to the Great King. Artaxerxes I had just ascended the throne,⁵² which took place in 465/4, according to oriental sources.⁵³ According to Thucydides, the king gave him the revenues of Magnesia on the Maeander for his grain, nearby Myus for his fish and Lampsacus on the Hellespont for his wine.⁵⁴ Neanthes of Cyzicus and Phantias of Eresus report that he was also given the benefice of two lesser cities, Palaescepsis and Percote, for bedding and clothing;⁵⁵ Palaescepsis is in the Troad, while Percote is the next town along the coast from Lampsacus.

Our Greek sources make Themistocles' situation clear without being explicit about it, as if they are squeamish about the extent of his compromise with the king. The latter assigned him the revenues from five cities along the coast of Ionia, Aeolis and the Hellespont. These cities were so readily accessible from their landward sides that they had not dared to throw off the Persian allegiance, or at least not openly. In Persian terms, Themistocles was in effect the king's tyrant over them, just as Xerxes had given some towns in Aeolis to Gongylus of Eretria and his descendants, and others to the Spartan Demaratus and his.⁵⁶

The defeat of the Persian navy at the Battle of the River Eurymedon had left the Persians gravely weakened in western Asia Minor. To the king, the opportunity to put the best Greek admiral, who manifestly could not return to his homeland, in charge of cities in this vulnerable area must have

of the six countries' in Han's edition of 2010, 410–13), the passage of comets is recorded in both the seventh year of Duke Ligong of Qin (470) and his tenth year (467): (秦厉共公)十年, 庶长将兵拔魏城。彗星见, i.e. 'in the tenth year of Ligong of Qin, the chief secretary sent troops to Wei. At this time, a comet appeared in the sky' (tr. Tao Tao). Sima Qian completed the *Shi Ji* in *ca.* 94 BC after it had been started by his father, Sima Tan, Grand Astrologer of the Imperial Court.

⁵¹ Plin. *HN* 2.150.

⁵² Thuc. 1.137.3; *cf.* Charon of Lampsacus *FGrH* 262 F11. Plut. *Them.* 27.1–2 cites other sources who say

that Xerxes was still king, in which case Themistocles went to the Persian court a year or two earlier, but Thucydides' account seems preferable (Frost (1980) 209–12).

⁵³ Artaxerxes came to the throne in year 284 (starting in December 465) of the Babylonian Nabonassar era; the chronology is complicated by the brief and officially unrecognized reign of Xerxes' assassin Artabanus.

⁵⁴ Thuc. 1.138.5.

⁵⁵ Plut. *Them.* 29.7, citing Neanthes of Cyzicus (*FGrH* 84 F17ab) and Phantias of Eresus, *fr.* 28 Wehrli.

⁵⁶ Frost (1980) 220–21, citing Xen. *Hell.* 3.1.6 and *An.* 7.8.8.

seemed like a gift from heaven. Themistocles too would have found this an attractive solution to his problems: he could use his expertise for government, earn a good many talents on the side (the revenue from Magnesia alone was 50 talents),⁵⁷ ensure a good future for his numerous progeny, who had mostly joined him, and act as an intermediary between the Athenians and their allies on the one hand and the Great King on the other. To the Ionians, he was a tyrant in the neutral sense, on the model of Histiaeus in Darius' time or Mausolus in the fourth century; we hear of no complaints about his rule. To himself, he remained, as always, his own man, no less proud than his biographers record; he even struck silver coins at Magnesia, which bore, for the first time in history, the head of an individual ruler on them – his own, wearing either an Attic helmet or a Phrygian bonnet – together with his own name or initials, ΘΕ,⁵⁸ a nice reproach to the Athenians, whose coins bore the initials ΑΘΕ. Were the larger denominations of these coins, which partly conform to the Attic standard of weight (some of his small denominations even bear an owl),⁵⁹ struck in order to make payments to the Delian League? By 454/3 Lampsacus, Myus and two cities controlled by Gongylus' family had formally joined the Athenian Empire, as the Athenian Tribute List shows,⁶⁰ but loyalties were not in any case mutually exclusive.⁶¹ Following Themistocles' precedent, later satraps of this heavily monetized region, like Pissuthnes, Tissaphernes and Pharnabazus, struck coinage bearing their portraits and their names in Greek;⁶² they also sometimes showed considerable independence from the king in their actions. Themistocles must have calculated that, if at some point he could not maintain his semi-independent position, he could always lead the Ionians into a revolt against the king, which might well succeed, given the skilful use of his new-found riches and the backing of both the anti-Persian and the pro-Themistoclean factions at Athens. If such was his typically bold, well-founded and far-sighted plan, it was destined never to be put into action.

Thucydides gives us the sense that Themistocles ruled these cities for only a few years, because the historian's next sentence is about the difficulty that his relatives had in burying his remains in Attica, since, being a traitor, he could not be interred there.⁶³ Themistocles most probably died in 460 or 459. In 460 the Athenians aided the rebellion of Inaros in Egypt, a development that threatened Themistocles' ability to continue his balancing act between the king and the Athenians. Plutarch says he died aged 65 in 459/8 or perhaps a year earlier, a date that suits the story that he committed suicide in order to avoid having to act as a general against Athens.⁶⁴ Such a story, whether true or false, would of course have helped Pericles to rehabilitate his reputation in Athens. Such a date for his death turns out to coincide with the date, arrived at on other grounds, when Anaxagoras went to Athens, viz. 460/59.⁶⁵ Themistocles and his son Cleophantus were remembered with such gratitude by the Lampsacenes that a festival in their honour was still celebrated two and a half centuries later;⁶⁶ this must have been because he had persuaded Artaxerxes to reduce their tribute to him, or indeed to remit their hereditary obligation to pay it.⁶⁷

⁵⁷ Thuc. 1.138.5.

⁵⁸ Almost no rulers had put their name on coins before (Cahn and Gerin (1988) 18).

⁵⁹ Cahn and Gerin (1988) 17.

⁶⁰ List 4.iv.5; cf. Meiggs (1972) 53–54; Frost (1980) 221.

⁶¹ So Frost (1980) 220–21; Cahn and Gerin (1988) 18 n.22, with further references; Hornblower (1991–2008) on Thuc. 1.138.5.

⁶² Cahn and Gerin (1988) 20.

⁶³ Does Sophocles' *Ajax* relate to the controversy over his burial? The author of [Lys.] 6.10, possibly Socrates' prosecutor Meletus, says that Pericles once told a jury to enforce the unwritten laws expounded by the Eumolpidae; cf. Sophocles' *Antigone*, where unwritten

laws are preferred to King Creon's decree (*Ant.* 453–55). Cf. Ostwald (1986) 531; Hornblower (1991–2008) on Thuc. 1.138.6, with bibliography.

⁶⁴ Plut. *Them.* 31.4–7; cf. *Cim.* 18.6–7.

⁶⁵ For a convincing analysis of the conflicting evidence, see Davies (1971) 214–15. Woodbury ((1981) 313) holds that Anaxagoras went to Lampsacus in 450 and would have found Themistocles still alive or recently dead.

⁶⁶ See the proxeny decree of Lampsacus of ca. 200 BC in Lolling (1881) 103–05; Hill (1951) 324, no. B 122; cf. Woodbury (1981) 311.

⁶⁷ [Themist.] *Ep.* 20, p. 761 Hercher. The fact that this letter is a forgery need not make this detail in it false.

Stesimbrotus of Thasos, writing in the 420s BC, says that Themistocles was a student of Anaxagoras and Melissus;⁶⁸ this would have been in his book *On Themistocles, Thucydides and Pericles*.⁶⁹ This and the similar claim that Pericles was Anaxagoras' student must not be taken literally, but means that both politicians discoursed with Anaxagoras on intellectual matters. Plutarch ridicules the chronology of Stesimbrotus' assertion.⁷⁰ However, as Christopher Pelling remarks, 'it is hard to believe that this is all there was to it, as Stesimbrotus was after all talking about contemporaries and must have known better'.⁷¹ The dating of Melissus is certainly compatible with his claim. Although Melissus commanded the Samian fleet during their war with Athens in 440, which is why Apollodorus put his *floruit* in Olympiad 84 (444–441),⁷² he may have been quite old by that time: for we also hear that he was a pupil of Parmenides and met Heraclitus.⁷³ This is compatible with a lifespan of perhaps 510–435. In theory, Themistocles could have associated with Anaxagoras and Melissus either in the 470s in Athens, if Anaxagoras was there (but he would only have been in his 20s and would not have been famous),⁷⁴ or in *ca.* 465–460 in Asia Minor. The latter theory makes much more sense,⁷⁵ and also provides a more plausible context for him to have met Melissus.⁷⁶ The meteorite fell at Aegospotami only a year or two before the inauguration of Themistocles' rule just across the Hellespont in Lampsacus and Percote; he would certainly have heard of Anaxagoras' celebrated 'prediction' from locals who had witnessed that event. It seems probable that, on the strength of such reports, he invited the philosopher to join his court, like the poets Simonides, Lasus of Hermione and Onomacritus at that of the Pisistratids or Pindar and Bacchylides at that of Hiero.⁷⁷

Anaxagoras' association with Themistocles also explains why he was accused of 'Medism', since this was a constant charge against the Athenian statesman. Satyrus of Oxyrhynchus claims that Thucydides son of Melesias prosecuted Anaxagoras for Medism as well as for impiety.⁷⁸ The sobriquet of Medizer, which had no legal standing, was still bandied about in Athens for many decades after the Persian Wars.⁷⁹ Anaxagoras' association with Themistocles also lies at the origins of Anaxagoras' close relationship with Pericles. In spring 472 the latter, aged only 20, sponsored Aeschylus' *Persians*,⁸⁰ in which Themistocles' role in the Greek victory at Salamis is highly praised, even though the Athenian leader is not named.⁸¹ Pericles' policies of subjugating Athens' allies, supporting her fleet and opposing the Spartans directly continued those of Themistocles;

⁶⁸ *FGrH* 107 F1 = Plut. *Them.* 2.5.

⁶⁹ *FGrH* 107 F10a.

⁷⁰ Plut. *Them.* 2.5–6; Frost agrees ((1980) 20, 67).

⁷¹ Pelling (2016) 117–18; he rightly holds that Themistocles associated with these intellectuals in his old age.

⁷² Apollod. *FGrH* 244 F72.

⁷³ Diog. Laert. 9.1, 9.23.

⁷⁴ Graham and Hintz ((2007) 330) have argued that they were together in Athens, because only thus could Anaxagoras have learned that the eclipse of 17 February 478 covered the whole of the Peloponnese and that the sun was therefore larger than it, since the war made communications across the Aegean difficult. However, even if the latter assumption were correct (in fact, as Hornblower (1991–2008) notes on Thuc. 1.95.1, the mainland Ionians were largely liberated from Persian rule in 478), Anaxagoras would still have been able to find plenty of informants in the summer of 478 among the Peloponnesian crews of the allied fleet, as we have seen.

⁷⁵ So Sider (2005) 6.

⁷⁶ Woodbury ((1981) 305) objects that after 470 Themistocles had gone over to Persia, while Melissus

represented allied disaffection after 440; but Melissus must have been teaching philosophy well before 440.

⁷⁷ For this point I thank the journal's anonymous referee, who compared Archelaus of Macedon and Hermias' and Philip's patronage of Aristotle.

⁷⁸ Diog. Laert. 2.12 = F16 Schorn: Κάτυρος δ' ἐν τοῖς Βίοις ὑπὸ Θουκυδίδου φησὶν εἰσαχθῆναι τὴν δίκην, ἀντιπολιτευομένου τῷ Περικλεῖ· καὶ οὐ μόνον ἀσεβείας, ἀλλὰ καὶ μηδικμοῦ. Schorn (2004) follows Dover (1975), Wallace (1994) 133 and Raaflaub (2000) in rejecting the historicity of all trials of intellectuals except Socrates.

⁷⁹ Isocrates, writing his *Panegyricus* in 380, notes that 'even now' Medizers are cursed in the assembly before any other business is done (Isoc. 11. 157): πολλῶν μὲν οἱ πατέρες ἡμῶν μηδικμοῦ θάνατον κατέγνωσαν, ἐν δὲ τοῖς συλλόγοις ἔτι καὶ νῦν ἀρὰς ποιοῦνται, πρὶν ἄλλο τι χρηματίζειν.

⁸⁰ Pericles was choregus for Aeschylus in the archonship of Menon (473/2), i.e. for the *Persai* in spring 472 (Didascaliae A1,1 = A.T 55b *TrGF*). He successfully rehabilitated Themistocles' reputation in the 450s after the latter's death.

⁸¹ Aesch. *Pers.* 355–63; cf. Broadhead (1960) 324–27.

his ascent to power with Ephialtes in 461 entailed their resumption.⁸² Equally, Pericles' enthusiasm for learning continued Themistocles' interest in the ideas of Anaxagoras and Melissus attested by Stesimbrotus;⁸³ even if he was uneducated in the liberal arts, Themistocles was a highly intelligent man. Anaxagoras' move from Lampsacus to Athens, for which I have argued here, coincides perfectly with his change of patron from Themistocles to Pericles.

III. Anaxagoras in Athens

Anaxagoras lived in Athens for 30 years;⁸⁴ no ancient source says that he lived there for only 20.⁸⁵ There has been great controversy as to which 30 years these were.⁸⁶ Diogenes Laertius, citing Demetrius of Phalerum, says that he began to study philosophy in Athens in the archonship of Callias (456/5) when he was aged 20,⁸⁷ and that 'they say that he spent thirty years there'.⁸⁸ As we have seen,⁸⁹ Demetrius confused the archonship of Callias with the report that he was aged 20 in the archonship of *Calliades*, i.e. in 480/79, when Xerxes sacked Athens. Demetrius does not say that he came to Athens when Callias was archon; had he said that, it would imply that he stayed until 426/5, which is incompatible with the other information about his death and would place his trial and exile after Pericles had died, whereas these events are almost unanimously dated to the 430s. Hence it is most unlikely that Anaxagoras came to Athens in 480 and stayed until 450.⁹⁰ It is quite an understatement to say that, had he arrived in 480, 'he would have had a bad audience and poor accommodation';⁹¹ he could hardly have entered a war-zone in 480 without being a combatant! Instead, we must accept that Anaxagoras was 20 in 480,⁹² but came to Athens only later. A passage in Aeschylus' *Supplices* of 463 refers to Anaxagoras' theory about the cause of the Nile's flood,⁹³ but this need not entail that he reached Athens before 463. Instead, it shows that his book and its contents were already famous.⁹⁴

An important but obscure event in Anaxagoras' life is dated to 462/1 (Olympiad 79.3) or 460/59 (Olympiad 80.1). The Armenian version of Eusebius' *Chronicle* dates his *death* to either the former year (together with an eclipse of the sun, which actually happened on 30 April 463)⁹⁵ or the latter.⁹⁶ It is of course impossible that he died in the late 460s. Instead, the first of these records probably refers to the eclipse of 463 and Anaxagoras' role in explaining it, and the second to Anaxagoras' arrival in Athens, which I would date to precisely 460, since he left Athens in autumn 430 (section IV below). As we have seen in section II, if Anaxagoras arrived in Athens in 460, this also correlates well with the date of Themistocles' death, which is reported by Plutarch as 459/8 or a year

⁸² The three politicians and Aeschylus all belonged to the same circle and shared similar views (Rhodes (1981) 312, 319–20). The story in Arist. *Ath. Pol.* 25.3–4 that Ephialtes and Themistocles together curtailed the powers of the Areopagus must be conflating a failed attempt before Themistocles' exile with the achievement of this reform by Ephialtes and Pericles in 462/1.

⁸³ *FGrH* 107 F1, in Plut. *Them.* 2.

⁸⁴ Diog. Laert. 2.7.

⁸⁵ *Pace* Curd (2007) 129, 131; following Mansfeld (1979) 41, 55–57.

⁸⁶ 480–450 (Taylor (1917); Woodbury (1981) 313) or 464–434 (Sider (2005) 6). Schofield ((1980) 33–35) claims that his residence in Athens lasted only a decade and was over by 460. This rests primarily on two arguments: (i) Anaxagoras' doctrines are reflected in Aeschylus' *Supplices* of 463 and *Eumenides* of 458, from which he rightly concludes that Anaxagoras was influential by that date, and Stesimbrotus' attempt (*FGrH* 107 F) to link Anaxagoras with Themistocles points to the same conclusion; and (ii) Socrates in the *Phaedo* (97b–

99c) first learned of Anaxagoras' thought in his youth from a book, from which he infers that Anaxagoras was no longer in Athens from *ca.* 460. This latter inference seems both hazardous and unduly sceptical of the other evidence.

⁸⁷ Demetr. *De archont.* = *FGrH* 228 F2, in Diog. Laert. 2.7 (Anaxag. A1 DK); see above, with n.10. Whitmarsh (2015) 64 holds that Anaxagoras arrived in Athens only in the 430s, but gives no evidence in support of this view.

⁸⁸ Diog. Laert. 2.7 = A1 DK.

⁸⁹ Above, with n.11.

⁹⁰ Taylor (1917); Woodbury (1981) 313.

⁹¹ Meiggs (1972) 436.

⁹² Sider (2005) 5–6.

⁹³ Aesch. *Suppl.* 559, 792–93 (cf. *Eum.* 657–66); with Sider (2005) 9–10; Curd (2007) 132 n.13.

⁹⁴ Graham (2013) 170–74.

⁹⁵ <https://eclipse.gsfc.nasa.gov/SEcat5/SE-0499--0400.html>, no. 03686 (NASA Eclipse website).

⁹⁶ Euseb. *Chron.* arm. a. Abr. 1554 and 1557.

or two earlier, and with the high degree of continuity between the policies, both political and cultural, of Themistocles and Pericles. As Isocrates notes,⁹⁷ Pericles associated with various intellectuals (*sophistai*) who were later called his 'teachers', notably Anaxagoras and Damon. Anaxagoras is said to have taught Pericles rhetoric and high-mindedness.⁹⁸

Plentiful evidence confirms Anaxagoras' presence in Athens after 460.⁹⁹ He had there as 'pupils', in addition to Pericles, the playwright Euripides, the physicists Archelaus¹⁰⁰ and Diogenes of Apollonia, and the historian Thucydides; Apollodorus adds Socrates to the list.¹⁰¹ The claim that he taught Thucydides¹⁰² is usually dismissed as fiction, but explains the latter's remark about the eclipse of 431 (Thuc. 2.28) and his general attitude towards religion.¹⁰³ Surely, because of their ages, these persons belong to the decades after 450, not earlier. Socrates, born in 470, was 'young', presumably under 20, when he heard Anaxagoras' book being read.¹⁰⁴ He may have heard his lover Archelaus reading the book;¹⁰⁵ for Socrates' association with Archelaus is guaranteed by an impeccable pre-Platonic source, Ion of Chios. Ion, who died in 422 and is as contemporary a source as we could wish for, says that 'when he was young Socrates went to Samos with Archelaus'.¹⁰⁶ Plato's failure to depict Socrates meeting Anaxagoras carries no weight, and neither does the silence of the extant remains of old comedy.¹⁰⁷

Plutarch's famous story of Anaxagoras' naturalistic explanation of the one-horned ram¹⁰⁸ that supposedly portended Pericles' supremacy in politics takes place during Pericles' rivalry with Thucydides son of Melesias, which ended when the latter was ostracized. Since the alternative, religious interpretation of this portent was offered by the seer Lampon, who took part in the foundation of Thurii in 443, Thucydides' ostracism is usually dated to 443. However, its date depends on Plutarch's statement that, after it occurred, Pericles had 'no less than fifteen years' of uninterrupted power holding the office of general;¹⁰⁹ if Plutarch is correct, this actually points to 445, since Pericles was deposed only in autumn 430.¹¹⁰ The story of the ram cannot be dated to after Thucydides' ten-year term of exile ended, because Plutarch's narrative entails that his ostracism ensued.

IV. Anaxagoras' exile and the fall of Pericles

From the autumn of 430 onwards, the Athenians turned towards religion and against intellectuals because of the Spartans' invasion of Attica and the sudden outbreak of plague in the city.¹¹¹ Thucydides records the terrible effects of the war and plague on morale in the city,¹¹² but chooses to emphasize the immediate collapse of religious belief, whereas in fact expressions of religion were reinforced over the longer term.¹¹³

⁹⁷ Isoc. *Antid.* 235 (= Anaxag. A15 DK). This pairing is paralleled in Libanius' *Apology* (1.156–57) and confirms that these figures appeared in Polycrates' attack on Socrates.

⁹⁸ Pl. *Phdr.* 269e; Plut. *Per.* 4; Cic. *De or.* 3.138 (= A15 DK).

⁹⁹ Pace Woodbury (1981) 295.

¹⁰⁰ Strabo 14.1.36; Gal. *Hist. phil.* 3; Clem. Al. *Strom.* 1.63 (Anaxag. A7 DK).

¹⁰¹ *Marm. Par.*; FGrH 239 A60 = Apollod. FGrH 244 F34 (om. DK): Socrates and Euripides were contemporaries of Anaxagoras.

¹⁰² Marcellin. *Vit. Thuc.* 22, relying on the undated biographer and commentator Antyllus.

¹⁰³ Thuc. 2.28; cf. Whitmarsh (2015) 81–86; for unconvincing counterarguments, see Hornblower (1991–2008) 1.62–64.

¹⁰⁴ Pl. *Phd.* 98b. Note that, when Socrates has finished speaking of Anaxagoras, he compares the effect of his teachings to being blinded by a solar eclipse (*Phd.*

99d).

¹⁰⁵ Woodbury (1981) 297.

¹⁰⁶ Ion *fr.* 111 Leurini = FGrH 392 F9: Ἴων δὲ ὁ Χῖος καὶ νέον ὄντα σὺν Ἀρχελάῳ ἀποδημῆσαι (Diog. Laert. 2.23). Graham (2008) proves the authenticity of Ion's report and shows that it does not refer to a military expedition but to a journey well before 440.

¹⁰⁷ Pace Woodbury (1981) 305.

¹⁰⁸ Plut. *Per.* 6 (Anaxag. A16 DK).

¹⁰⁹ Plut. *Per.* 16.3: οὐκ ἐλάττω τῶν πεντεκαίδεκα ἐτῶν.

¹¹⁰ Cf. Andrewes (1978) 6–7.

¹¹¹ This argument, adumbrated by Dodds (1951) 189–93, has been developed at length in the important but neglected work of Rubel (2000); (2014). See also Flower (2009); Schaps (2011). My own version of this idea (Janko (2001)) appeared too soon to take Rubel (2000) into account.

¹¹² Thuc. 2.51–54.

¹¹³ Rubel (2000); (2014).

Under the pressure of such dire events, Anaxagoras' indifference to traditional religion became a pretext for Athenian political and religious leaders to attack his friend Pericles by putting the astronomer on trial, and indeed to create an anti-intellectual climate in Athens that would last far beyond the execution of Socrates in 399. Some have alleged that Plato's failure to mention Anaxagoras' trial proves that it never happened;¹¹⁴ but he does mention it at *Apology* 26d, when Socrates asks Meletus 'do you think you are accusing Anaxagoras?'¹¹⁵ Sotion, writing in the third century BC, said that Anaxagoras' accuser was Cleon, who was targeting his beliefs about the sun:

Κωτίων μὲν γάρ φησιν ἐν τῇ Διαδοχῇ τῶν φιλοσόφων ὑπὸ Κλέωνος αὐτὸν κριθῆναι, διότι τὸν ἥλιον μύδρον ἔλεγε διάπυρον.

For in his *Succession of the Philosophers* Sotion says that he was tried by Cleon because he claimed that the sun was a lump of red-hot iron.¹¹⁶

Satyrus states that Thucydides son of Melesias accused Anaxagoras of impiety and medism:¹¹⁷

Κάτυρος δ' ἐν τοῖς Βίοις ὑπὸ Θουκυδίδου φησὶν εἰσαχθῆναι τὴν δίκην, ἀντιπολιτευομένου τῷ Περικλεῖ· καὶ οὐ μόνον ἀσεβείας, ἀλλὰ καὶ μηδισμοῦ· καὶ ἀπόντα καταδικασθῆναι θανάτου.¹¹⁸

Satyrus in his *Lives* says that he was brought to trial by Thucydides, who was opposing Pericles in politics, not only for impiety but also for Medism, and that he was condemned to death *in absentia*.

We will discuss later who the accusers were, but their identities are relevant to the dating of the trial. Since Thucydides was exiled for ten years in 445, it would have occurred before 445 (or, as most scholars believe, *ca.* 443) or after 435 (or *ca.* 433). References in comedy prove that Thucydides did return from his ostracism, albeit in a decrepit state;¹¹⁹ thus he could have lent his support to a prosecution of Anaxagoras by Cleon or others. Reports that Anaxagoras had different accusers have led scholars to suggest that the philosopher was put on trial twice, once on a charge of Medism before the Peace of Callias in 449 and once on a charge of impiety in about 430;¹²⁰ this theory must be rejected on the basis of Occam's razor, as it posits entities unnecessarily. That Anaxagoras was charged with Medism must be technically false, since Medism was never a formal offence in Athenian or other law; it was subsumed under 'treason' (προδοσία).¹²¹ It has been argued that no accusation of Medism could have been made after the Peace of Callias between the Athenian and Persian Empires in 449.¹²² But that Peace may not have been an openly acknowledged fact,¹²³ and 'Medizer' was still a useful epithet to hurl even after that time.¹²⁴ Members of Themistocles' family were allowed to return to Athens shortly after 459, no doubt encouraged by the radical democrats' takeover;¹²⁵ Thucydides may well have learned details of Themistocles' biography from them. But their return does not prove that the jibe of Medism could not have been dragged up later by Pericles'

¹¹⁴ Rubel (2014) 35–41; *cf.* (2000) 91–109. Raaflaub (2000) 110 follows Dover (1975) and others (listed in Bakola (2010) 215 n.69) in holding that the only trial of an intellectual that actually occurred was that of Socrates. There is far too much contrary evidence for this to be a credible position: see Ostwald (1986) 228–38; Janko (2006); Curd (2007) 136; Rubel (2014) 35; *cf.* (2000) 91–93. Nor can one disbelieve in the prosecutions of Pericles' friends (Bauman (1990) 37–42).

¹¹⁵ Mansfeld (1980) 82–83.

¹¹⁶ Diog. Laert. 2.12 = Sotion *fr.*: 3 Wehrli.

¹¹⁷ Schorn (2004) 46–52.

¹¹⁸ Diog. Laert. 2.12 = F16 Schorn.

¹¹⁹ Bakola (2010) 219; *cf.* Olson (2002) on Ar. *Ach.* 703, where Aristophanes refers to Thucydides' great age when he was prosecuted by Euathlus son of Cephisodemus.

¹²⁰ Meiggs (1972) 283, 435–36.

¹²¹ Graf (1984) 15–16, citing Hdt. 7.30.

¹²² Woodbury (1981) 305.

¹²³ Thucydides omits it, but his narrative implies it (Hornblower (1991–2008) 1.179–81).

¹²⁴ *Cf.* Isoc. 11.157 (380 BC), cited in n.79 above.

¹²⁵ Davies (1971) 217–18.

enemies; after all, like Themistocles, Pericles had pursued a policy of peace with Persia and hostility toward Sparta, to which Cimon and his political successor Thucydides son of Melesias were vehemently opposed.

Most scholars date the trial, together with the decree of Diopieithes that enabled it, to 433/2 or, most influentially, to 438/7,¹²⁶ on the ground that ten years would permit Anaxagoras to spend enough time in Lampsacus before his death in *ca.* 428 for him to become a 'much-revered public figure';¹²⁷ a minority has urged that it occurred in 430, since that is when the plague broke out and Pericles was deposed.¹²⁸ However, most primary sources place the trial around the start of the Archidamian War in 431. It is entwined with the controversies about the prosecutions of Pericles' two friends, the sculptor Pheidias and his mistress Aspasia, and that of Pericles himself.

In Diodorus, who relied on Ephorus,¹²⁹ the trials of Pheidias and Anaxagoras immediately precede Pericles' decision to begin the Peloponnesian War.¹³⁰ Plutarch offers the same relative sequence as Diodorus. After recounting the negotiations over the Megarian decree, he considers the causes of Pericles' stubborn refusal to rescind it, and gives as a reason Pericles' enemies' prosecution of Pheidias for embezzling precious materials from the statue of Athena Parthenos. Likewise, Aristophanes alleges that Pheidias was in trouble before Pericles set the war in train with his Megarian decree, and stoked the war to distract attention from Pheidias' case.¹³¹ Pheidias' trial has normally been placed in the mid-430s,¹³² because Philochorus is supposed to have dated it to 438/7;¹³³ in fact, however, this rests on a false emendation, and the correct date is 432/1.¹³⁴ Thucydides makes Pericles mention, in a speech delivered in spring 431, the gold plates on the statue of Athena Parthenos as a valuable resource for the city,¹³⁵ which would not have been wise if Pheidias had already been accused of peculation and temple-robbing in overseeing the precious materials on that statue. The date of the Megarian decree is itself disputed,¹³⁶ but Philochorus again gives its date as 432/1.¹³⁷ Thus Philochorus' date of 432/1 for the start of Pheidias' trial fits the evidence well; as Emmanuela Bakola notes, the case could have dragged on for a while, as might well happen at Athens,¹³⁸ i.e. into the late summer of 430.

¹²⁶ Mansfeld (1979); (1980); Curd (2007) 131.

¹²⁷ Curd (2007) 131.

¹²⁸ So already F.E. Adcock in Walker (1927) 478; Gomme (1956) 184–88; Horstmanshoff (1989) 226; Rubel (2014) 35–41; *cf.* (2000) 95–109. None of them mentions the stories of Pericles' helmsman (Plut. *Per.* 35.2–3) or of the deaths of Anaxagoras' sons (Diog. Laert. 2.12), on which I will rely below.

¹²⁹ *FGrH* 70 F196.

¹³⁰ Diod. Sic. 12.39.1–3.

¹³¹ Ar. *Plut.* 605–11.

¹³² Plut. *Per.* 31. The chronology of Pheidias' trial, and of his presence in Athens and then Olympia, is also contested. Adcock (in Walker (1927) 477–80), Gomme (1956) 184–88 and Bakola (2010) 213–20, 304–12 all put his trial in 430; for supporters of 438/7, see Bakola (2010) 215 n.70. Olga Palagia tells me (personal communication 2015) that Pheidias was in Olympia in the 430s, and was not responsible for the pediments of the Parthenon (Agoracritus his pupil did one of them). Margaret Miles, however (personal communication 2015), says Pheidias' hand is thought to be present in the pediments, if not also in the frieze, and so he ought to have been in Athens until 433/2 (*cf.* Stadter (1989) 286; Delivorrias (1994)). The accounts continue until 432, and the famous cup of Pheidias at Olympia which dates his workshop there is of a type that is most common in the

last quarter of the fifth century, even though it can be found a little earlier. His presence in Elis after the outbreak of the Peloponnesian War is perfectly possible, since he had then been exiled from Athens.

¹³³ Nowhere do either Apollodorus of Athens or Demetrius of Phaleron date Anaxagoras' trial to this year, *pace* Curd (2007) 131; for the origin of this error, see n.134.

¹³⁴ Philoch. *FGrH* 328 F121, in schol. Ar. *Pac.* 605a–b Holwerda, twice gives the archon as Πυθοδώρου (432/1), which Lepaulmier ((1668) 746) changes each time to Θεοδώρου (438/7); Bakola proves the alterations mistaken ((2010) 305–07). The pressure for emending the date arose because in 605a Philochorus discussed both the dedication of the statue in 438/7 and Pheidias' trial in 432/1 under the latter date, though in 605b he claimed that the theft occurred in 432/1. Bakola (2010) 312 shows that the accounting in which the discrepancy was found may have occurred in 434 (*JG* I³ 449.389–94), which confirms that the trial happened in or after that year.

¹³⁵ Thuc. 2.13.5.

¹³⁶ Bakola (2010) 310 with n.17.

¹³⁷ In schol. Ar. *Plut.* 605b (Philoch. *FGrH* 328 F121) Lepaulmier ((1668) 746) was at least right to alter the *vox nihili* Κυθοδώρου to Πυθοδώρου, which has the effect of dating the Megarian decree to 432/1 when Pythodorus was archon.

¹³⁸ Bakola (2010) 309–10.

‘At around this time’,¹³⁹ Plutarch continues, the comic poet Hermippus unsuccessfully prosecuted Aspasia for impiety and running a brothel; this may reflect accusations in comedy rather than in a court of law. But Anaxagoras was certainly impeached while other cases were going on. The scientist’s trial arose, according to Plutarch, when the people accepted the slanders against Pericles and voted for the decree of Diopieithes:

ψήφισμα Διοπειθήος ἔγραψεν εἰσαγγέλλεσθαι τοὺς τὰ θεῖα μὴ νομίζοντας ἢ λόγους περὶ τῶν μεταρσίων διδάσκοντας, ἀπερειδόμενος εἰς Περικλέα δι’ Ἀναξαγόρου τὴν ὑπόνοιαν.

Diopieithes wrote the decree that those who did not believe in divinities or gave lectures on the heavenly bodies should be impeached before the assembly, casting imputations on Pericles by means of Anaxagoras.¹⁴⁰

Plutarch interrupts his account of Anaxagoras’ trial with a discussion of Dracontides’ decree demanding that Pericles furnish accounts of his handling of Pheidias’ funds.¹⁴¹ In the aftermath, he continues, Pericles got Aspasia acquitted¹⁴² and removed Anaxagoras from Athens out of fear,¹⁴³ but was tripped up in Pheidias’ case. Plutarch follows Ephorus in deriving this crisis from Pericles’ refusal to revoke the Megarian decree and his willingness to involve the city in the dangers of war;¹⁴⁴ he goes on to speak of the curse of the Alcmeonidae, which the Spartans brought up at the outbreak of hostilities.¹⁴⁵ These began with the Peloponnesian invasion of Attica in 431 and, according to Plutarch, the plague¹⁴⁶ (he has dated the plague a year too early, since it began in the early summer of 430).¹⁴⁷ There follows his dramatic account of Pericles’ expedition against Epidaurus with 150 ships.¹⁴⁸ As he tells the story, when Pericles was leading the fleet in this expedition, there was an eclipse of the sun:

ἦδη δὲ πεπληρωμένων τῶν νεῶν καὶ τοῦ Περικλέους ἀναβεβηκότος ἐπὶ τὴν ἑαυτοῦ τριήρη, τὸν μὲν ἥλιον ἐκλιπεῖν συνέβη καὶ γενέσθαι κότος, ἐκπλαγῆναι δὲ πάντας ὡς πρὸς μέγα σημεῖον. ὄρων οὖν ὁ Περικλῆς περίφοβον τὸν κυβερνήτην καὶ διηπορημένον, ἀνέχεε τὴν γλαμύδα πρὸ τῆς ὄψεως αὐτοῦ, καὶ παρακαλύψας ἠρώτησε, μή τι δεινὸν ἢ δεινοῦ τινοῦ οἴεται σημεῖον· ὡς δ’ οὐκ ἔφη, “τί οὖν” εἶπεν “ἐκεῖνο τοῦτου διαφέρει, πλὴν ὅτι μεῖζόν τι τῆς γλαμύδος ἐστὶ τὸ πεποιηκὸς τὴν ἐπικότησιν;” ταῦτα μὲν οὖν ἐν ταῖς σχολαῖς λέγεται τῶν φιλοσόφων. ἐκπλεύσας δ’ οὖν ὁ Περικλῆς οὐτ’ ἄλλο τι δοκεῖ τῆς παρασκευῆς ἄξιον δρᾶσαι, πολιορκήσας τε τὴν ἱερὰν Ἐπίδαυρον ἐλπίδα παραχοῦσαν ὡς ἀλωσομένην, ἀπέτυχε διὰ τὴν νόσον. ἐπιγενομένη γὰρ οὐκ αὐτοῦς μόνον, ἀλλὰ καὶ τοὺς ὄπισσοῦν τῇ στρατιᾷ συμμείξαντας προσδιέφθειρεν ...

When the ships had already been manned and Pericles had ascended his own trireme, it came about that the sun was eclipsed, darkness fell and everyone was terrified as if confronted with a great sign. When Pericles saw that his helmsman was fearful and at a loss, he held out his cloak in front of the man’s face,

¹³⁹ *περὶ τοῦτον τὸν χρόνον* (*Per.* 32.1).

¹⁴⁰ *Plut. Per.* 32.2. Diodorus too implies that the decree was aimed at Pericles (*Diod. Sic.* 12.39.2).

¹⁴¹ *Plut. Per.* 32.3; *cf.* Stadter (1989) 300–01.

¹⁴² Aeschines the Socratic states that he even wept in court (*Ath.* 13, 589E = *fr.* 11 Krauss).

¹⁴³ At *Per.* 32.5 Flacelière is right to read φοβηθεὶς ἐξέπεμψεν and to omit, as in codex S, the subsequent phrase καὶ προὔπεμψεν, which must be a supralinear textual variant that has entered the text; Emperius’ conjecture φοβηθεὶς ἐξέκλεψε and Madvig’s insertion of τὸ δικάστηριον are both needless. *Cf.* Stadter (1989) 303–04.

¹⁴⁴ *Plut. Per.* 32.3–6. Raaflaub (2000) 101–04 holds

that this account of Pericles’ motive was based on Aristophanes’ jokes in *Ach.* 515–37 and *Plut.* 605–11, but the comedian must have based his jokes on a narrative that was current from the beginning (Bakola (2010) 309 n.12), as can be seen from the *hypothesis* of Cratinus’ *Dionysalexandros* (*P.Oxy.* 663) of spring 428, in which ‘Pericles is satirized very persuasively by innuendo as having brought the war upon the Athenians’ (Bakola (2010) 181–88, 320–23).

¹⁴⁵ *Plut. Per.* 33.1–2, citing *Thuc.* 1.127.

¹⁴⁶ *Plut. Per.* 33.3–34.

¹⁴⁷ *Thuc.* 2.47.

¹⁴⁸ *Plut. Per.* 35.

and when he had covered it asked him whether he thought it terrible or a sign of something terrible. When the man said no, he said 'how then does this differ from that, save that what caused the eclipse is something bigger than my cloak?' This, at any rate, is what is said in philosophers' lectures. Anyhow, Pericles sailed out but seems to have achieved nothing worthy of this outlay; in particular, when he had laid siege to holy Epidaurus, which was expected to be taken, he failed on account of the plague, which broke out and killed not only his men, but also those with whom they had come into any kind of contact.¹⁴⁹

When Pericles tried to prove to his helmsman that the eclipse was only a natural event, Plutarch comments that this is a philosophers' argument; that Pericles was referring specifically to Anaxagoras' theory is proved by the fact that he refers to the relative *sizes* of two bodies, his cloak and the moon. During his lifetime, Anaxagoras would have observed two other solar eclipses in the Aegean: the annular eclipse of 17 February 478, from which he deduced that the sun is larger than the moon, and the total eclipse of 30 April 463.¹⁵⁰ One source associates him with the latter eclipse,¹⁵¹ which was visible at Lampsacus¹⁵² when, according to my reconstruction, he was living there. Elsewhere Plutarch tells us that Anaxagoras was first to make a diagram about the illumination of the moon and its shadow.¹⁵³ Pericles certainly knew his teachings on eclipses, which influenced his behaviour on the present occasion. The expedition sailed despite the omen, even though solar eclipses had deterred other commanders,¹⁵⁴ and the lunar eclipse of 28 August 413¹⁵⁵ would have disastrous consequences when the superstitious Nicias insisted on delaying the Athenians' escape from the Great Harbour of Syracuse.¹⁵⁶ However, Plutarch tells us that the arrival of the even more terrifying plague seemed like a divine punishment; Pericles was subsequently prosecuted, condemned, fined and deposed from office, albeit temporarily.¹⁵⁷

The problem with Plutarch's story is that, as we know from astronomy, the eclipse happened on 3 August 431,¹⁵⁸ whereas the failed attack on Epidaurus and the plague occurred in summer 430.¹⁵⁹ His chronology is impossible. As we might expect, Thucydides duly records this eclipse (which was annular and relatively minor as observed at Athens) in his account of 431, noting that it occurred at the new moon, which 'seems to be' the only time when this can happen;¹⁶⁰ this is indeed so, and was Anaxagoras' doctrine.¹⁶¹ Typically, Thucydides ignores the religious dimension of this event.¹⁶²

¹⁴⁹ Plut. *Per.* 35.2–3.

¹⁵⁰ Graham and Hintz (2007). Cf. NASA's inventory at <https://eclipse.gsfc.nasa.gov/5MCSEmap/-0499--0400/-462-04-30.gif>, no. 03186; the authors do not discuss the eclipse of 431.

¹⁵¹ Euseb. *Chron.* under Olympiad 79, third year (462/1), in the Armenian version, gives a solar eclipse and the death of Anaxagoras (= A18 DK).

¹⁵² Graham and Hintz (2007) 324, fig. 1.

¹⁵³ Plut. *Nic.* 23 (Anaxag. A18 DK).

¹⁵⁴ Thus Cleombrotus refused to lead his army past the Isthmus of Corinth because of the partial solar eclipse of 2 October 480 (Hdt. 9.10.3), which is no. 03645 at <https://eclipse.gsfc.nasa.gov/SEcat5/SE-0499--0400.html>.

¹⁵⁵ No. 03842 in NASA's inventory of lunar eclipses at <https://eclipse.gsfc.nasa.gov/LEcat5/LE-0499--0400.html>.

¹⁵⁶ Thuc. 7.50.4.

¹⁵⁷ Plut. *Per.* 35.4–5. His accuser is named by Idomeneus (*FGrH* 338 F9) as Cleon, by Theophrastus

(*fr.* 616 Fortenbaugh) as Simmias and by Heraclides Ponticus (*fr.* 47 Wehrli = *fr.* 27 Schütrumpf) as Lacratides. All three could of course have prosecuted him jointly.

¹⁵⁸ Stephenson (1997) 346; it is no. 03764 in NASA's website, had a central width of only 102km and a duration of only one minute. Moreover, it was not total at Athens, but only over the western Euxine. Cf. <https://eclipse.gsfc.nasa.gov/5MCSEmap/-0499--0400/-430-08-03.gif>.

¹⁵⁹ Thuc. 2.56–57; he notes the presence of plague among the troops. On the problems in Plutarch's account, see Stadter (1989) 284–89.

¹⁶⁰ Thuc. 2.28: τοῦ δ' αὐτοῦ θέρους νομηνία κατὰ σελήνην, ὥσπερ καὶ μόνον δοκεῖ εἶναι γίγνεσθαι δυνατόν, ὁ ἥλιος ἐξέλιπε μετὰ μεσημβρίαν καὶ πάλιν ἀνεπληρώθη, γενόμενος μηνοειδῆς καὶ ἀκτέρων τινῶν ἐκφανέντων. Thucydides' claim is astronomically correct; he would have been present.

¹⁶¹ Hippol. *Haer.* 1.8.9 (Anaxag. A42 DK).

¹⁶² Gomme (1956) 88–89.

P.A. Stadter has offered a complex explanation for Plutarch's confusion, based on elaborate hypotheses about his method of work.¹⁶³ In fact, Plutarch or his sources have simply conflated two expeditions against the Peloponnese, just as he misdates the plague, rather in the way in which elements of each expedition are mingled in Diodorus.¹⁶⁴ We know from Thucydides that there were two such expeditions, the first in 431, led by Carcinus, Proteas and Socrates son of Antigenes, and the second in 430, led by Pericles.¹⁶⁵ Only the first expedition can have coincided with the eclipse, and only the second involved an attack on Epidaurus and was affected by the plague.¹⁶⁶ Both expeditions consisted of 100 Athenian triremes (Plutarch's extra 50 were supplied by Chios and Lesbos).¹⁶⁷ However, we may not deduce from the fact that Carcinus and others were in charge in 431 that Plutarch or anyone else invented the story, since Pericles as a trierarch would have been obliged – and eager – to take part in the first expedition also. The story is neatly tidied up, since it makes the 'fulfilment' of the 'evil omen' occur a year sooner than in reality. Once it was clear that the failure at Epidaurus could be laid at the door of the expedition's leader, it could readily be interpreted as a divine punishment for his 'impious' remark on the previous occasion.

The tale that Plutarch reports is not good history, but is devastatingly potent as populist religious propaganda. No doubt Diopeithes presented it thus when he argued for making astronomy illegal, since he believed that Anaxagoras' 'atheistic' teaching had prompted Pericles not just to ignore dangerous signs of divine wrath, but actually to provoke it. The procedure of impeachment before the whole popular assembly (*eisangelia*) was the most intimidating form of trial that existed in Athens, as most such cases led to the death penalty.¹⁶⁸ Diopeithes' decree was the first legislation against astronomy at Athens and the first challenge to freedom of thought and academic freedom there; never before had 'legislation ... sought to govern people's intellectual beliefs about the nature of the world'.¹⁶⁹ Since Meton and Euctemon famously observed the summer solstice on 27 June 432, when Apseudes was archon,¹⁷⁰ and Meton set up a sundial on the hill of the Pnyx in that same year,¹⁷¹ but we never hear that prosecutions resulted, Diopeithes' decree must be later. If the decree was voted not in wartime, when we might expect things to be worse, but during the apogee of Athens under Pericles' leadership, it is puzzling that it was passed. Thus the logical context for the passage of Diopeithes' decree is not *ca.* 437, as is usually thought,¹⁷² nor 431, after the eclipse, but later in 430, after the failure of the second expedition against the Peloponnese under Pericles' personal leadership.¹⁷³ Pericles' supremacy was not seriously challenged until then.¹⁷⁴ That was the only occasion when he was put on trial, resulting in a fine and his deposition from the generalship.¹⁷⁵ A.W. Gomme put the attacks on Aspasia and Anaxagoras in 430, 'when hostility to Perikles was at its height and superstition excited by the terrors of the pestilence'. His enemies exploited religion to attack him,¹⁷⁶ but could only do so in the context of the terror induced by the plague. Even the ostracism of Damon fits best late in the year 430.¹⁷⁷

¹⁶³ Stadter (1989) 320. He does not mention the expedition of 431.

¹⁶⁴ Diod. Sic. 12.42.7–44; with Gomme (1956) 85.

¹⁶⁵ Thuc. 2.23.2, 25–26, 2.56–57; Diod. Sic. 12.42.7, 12.45.3.

¹⁶⁶ Thuc. 2.56–57.

¹⁶⁷ Thuc. 2.56.2.

¹⁶⁸ Whitmarsh (2015) 117.

¹⁶⁹ Whitmarsh (2015) 118.

¹⁷⁰ Ptol. *Alm.* 1.205.15–21 Heiberg. Was this connected with Meton's proof of the Metonic cycle, which Diodorus 12.36.2 records under the archonship of Apseudes?

¹⁷¹ Philoch. *FGrH* 328 F122 = schol. *Ar. Av.* 997.

¹⁷² Mansfeld (1979) 39–65; (1980) 84–89.

¹⁷³ So Rubel (2014) 37–40 (= (2000) 104–09), who, however, argues for this date only on the basis of general probability. Whitmarsh (2015) 117 opts simply for the 430s.

¹⁷⁴ Gomme (1956) 185.

¹⁷⁵ Thuc. 2.65.4.

¹⁷⁶ Dodds (1951) 189–91, 201; Finley (1964) 64–65.

¹⁷⁷ Gomme (1956) 186–88, referring to Plut. *Per.* 32.3 and Pl. *Alc.* I.118c, where Alcibiades says that Pericles still associates with Damon 'even though he is so old' (καὶ τηλικούτος ὄν).

The language of Diopieithes' decree proves that it was aimed specifically at Anaxagoras and his Ionian followers, for Plutarch gives its wording as εἰσαγγέλλεσθαι τοὺς τὰ θεῖα μὴ νομίζοντας ἢ λόγους περὶ τῶν μεταρσίων διδάσκοντας, i.e. 'those who do not believe in the gods or teach arguments about the heavens are to be tried before the people'.¹⁷⁸ The expression 'atheists and teachers of astronomy' is a hendiadys for 'atheistic astronomers'. μετάρσια is not the Attic word for 'things in the sky', which is μετέωρα: as Stadter says, 'the use of the form is puzzling, as it reflects neither Attic prose usage nor Plutarch's own'¹⁷⁹ – except precisely where Plutarch says that, because of Anaxagoras, Pericles 'was stuffed with so-called μετεωρολογία and μεταρσιολεχία'.¹⁸⁰ Otherwise μετάρσιος is a poetic and Ionic word, used by Hecataeus, Herodotus and Hippocrates.¹⁸¹ Gábor Bolonyai alleges that its use proves that the decree is unhistorical,¹⁸² but it shows exactly the reverse:¹⁸³ Diopieithes himself deliberately chose μετάρσια in order to evoke Ionian natural scientists, notably Anaxagoras.¹⁸⁴ In addition, a neologism μεταρσιολεχεῖν (fitting nicely into anapaests) was evidently coined in the atmosphere surrounding this decree, since a scholium to Aristophanes' *Clouds* says that Aristophanes based a related word on it,¹⁸⁵ and the pseudo-platonic *Sisyphus* uses μεταρσιολέχειν as a sobriquet for Anaxagoras and other natural scientists.¹⁸⁶ The word sounds like a comic poet's invention: Plutarch modifies it only slightly when he uses μετεωρολέχειν in the famous passage where he talks about the Athenians' anti-intellectual reaction.¹⁸⁷

Diopieithes was an oracle-monger (*chrēsmologos*),¹⁸⁸ politician¹⁸⁹ and associate of the disastrously superstitious Nicias.¹⁹⁰ He was the author of a decree about the privileges of Methone in Macedonia in, precisely, the year 430.¹⁹¹ Comic poets writing during the Archidamian War describe him as rather crazy,¹⁹² which befits religious fanaticism,¹⁹³ as M.P. Nilsson notes,¹⁹⁴ a diviner would have had a motive to attack Anaxagoras, since the latter had competed with the seer Lampon to interpret the portent of the one-horned ram,¹⁹⁵ and the whole profession might feel that its standing was under threat. Aristophanes mentions Diopieithes together with Lampon and then Meton in the *Birds* of 414.¹⁹⁶ The Diopieithes who produced an Apolline oracle to support Leotyichidas' claim to the throne of Sparta as late as 397 was probably the same man.¹⁹⁷

The decree's immediate effect was to outlaw the teaching of astronomy by equating it with impiety or atheism.¹⁹⁸ It implies a twofold accusation – that Anaxagoras did not believe in the gods and that by teaching astronomy he had corrupted others. The fact that Daímachus of Plataea in his

¹⁷⁸ Plut. *Per.* 32.1; cf. *Mor.* 169E; Diod. Sic. 12.39.2; Diog. Laert. 2.12.

¹⁷⁹ Stadter (1989) 300.

¹⁸⁰ Plut. *Per.* 5.1.

¹⁸¹ LSJ⁹ s.v. μετάρσιος.

¹⁸² Bolonyai (2007) 250 n.13. Dover rejected the decree entirely ((1975) 39–40 = (1988) 146–47); *contra* Whitmarsh (2015) 117–18.

¹⁸³ Flacelière and Chambry ((1964) 235) note that the words εἰσαγγέλλεσθαι and τὰ θεῖα (instead of τοὺς θεοὺς) are also drawn from the decree's original text.

¹⁸⁴ Similarly, Socrates' Thinkery is called a φροντιστήριον because φροντίζειν has the sense 'think' in Ionic, whereas it means 'worry' in Attic (Burnet (1924) on Pl. *Ap.* 18b7); for the same reason, Ameipsias' *Connus* of 423 had a chorus of φροντισταί, i.e. intellectuals, which may have included Socrates, unless they rejected him as too disgusting (test. ii in Ath. 5.218c, with *fr.* 9.2 *PCG*). The satire of Ionian science is evident.

¹⁸⁵ Schol. Ar. *Nub.* 320e, cf. 331a, 333g; arg. *Ran.* 4,13.

¹⁸⁶ [Pl.] *Sis.* 389a: περὶ τοῦ ἀέρος Ἀναξαγόραν τε καὶ Ἐμπεδοκλέα καὶ τοὺς ἄλλους τοὺς "μεταρσιολέχειν" ἅπαντας οἶσθα ζητοῦντας. This work, which has connec-

tions with Thessaly, is dated to the mid-fourth century BC (Müller (1975) 94–104).

¹⁸⁷ Plut. *Nic.* 23. 4.

¹⁸⁸ Flower (2008) 124, citing Plut. *Per.* 32. 2; Connor (1963); Ostwald (1986) 528–32; Dover (1988) 146–47; Yunis (1988) 68–70.

¹⁸⁹ ῥήτωρ (schol. Ar. *Av.* 988).

¹⁹⁰ Schol. Ar. *Eq.* 1085.

¹⁹¹ *IG* I³ 61 (no. 65 in Meiggs and Lewis (1969)).

¹⁹² ὑπομανιώδης (Telecleides, *Amphictyones fr.* 7 *PCG*, paraphrase?); Διοπείθει τῷ παραμαινόμενῳ (Ameipsias, *Connus fr.* 10, performed at the same City Dionysia of 423 where the *Clouds* was staged, again a phrase suited to anapaests).

¹⁹³ Dunbar (1995) 550, on Ar. *Av.* 988.

¹⁹⁴ Nilsson (1967) 1.767–68.

¹⁹⁵ Plut. *Per.* 6 (Anaxag. A16 DK).

¹⁹⁶ Ar. *Av.* 988, 992–1020: so Derenne (1930) 19–20; Nilsson (1967) 1.767–68; Schachermeyr (1968) 61–62; *contra* Mansfeld (1980) 36 n.147; Dunbar (1995) 550, on Ar. *Av.* 988.

¹⁹⁷ Xen. *Hell.* 3.3.3; with Dillery (2005) 186.

¹⁹⁸ Rubel (2014) 30 (= (2000) 82–84); Whitmarsh (2015) 64–66.

book *On Piety* discussed the fall of the meteorite at Aegospotami and Anaxagoras' interpretation of it¹⁹⁹ confirms that the view that heavenly bodies were material was widely considered impious; although Anaxagoras held that divine *Nous* was the guiding principle of the universe, it was obviously hard to see how *Nous* was actually involved in his mechanistic account of the cosmos, as Plato makes Socrates observe.²⁰⁰ Also, although in 399 Socrates was not tried by *eisangelia* as he would have been under the decree of Diopieithes,²⁰¹ and it was hard to accuse him of teaching astronomy specifically, the wording of Meletus' *graphē* against him is, minus the reference to astronomy, a reprise of that decree, since it combines a modified accusation of 'atheism' with a charge of corrupting others by his teaching.²⁰²

By getting his decree passed, Diopieithes was free to denounce Anaxagoras to the people himself, but we are not told that he did so. The confusion as to whether Cleon (so Sotion)²⁰³ or Thucydides son of Melesias (so Satyrus)²⁰⁴ brought the prosecution may result from later speculation or invention, as has often been assumed. However, rather than jettison what evidence we have, we may do better to save the phenomena by positing a joint prosecution by both politicians, in which Diopieithes could also have taken part. Thucydides had already returned from his exile²⁰⁵ and Cleon was already active by 430.²⁰⁶ The superannuated aristocrat could well have lent his name to the younger populist's bid to topple Pericles, whom both hated.

The details of the chronology are complex, and the various trials evidently overlapped. As Plutarch put it, 'with Pheidias out of the way, Aspasia about to be tried and Diopieithes' decree carried, so now a decree is ratified, moved by Dracontides' (οὕτως ἤδη ψήφισμα κυροῦται, Δρακοντίδου γράψαντος);²⁰⁷ Dracontides' motion led directly to the trial of Pericles. The trials of Pericles' associates were already causing the statesman some difficulty; Plutarch makes clear that the case against Pheidias was making Pericles look guilty of peculation. The decree of Dracontides ordered Pericles to submit accounts; this decree was surely related to the case of Pheidias, since it stipulated that the *prytaneis* would use ballots taken from the altar of Athena on the acropolis, as if this were a sacred case.²⁰⁸ Thus, according to Plutarch, both Anaxagoras and Pericles were in peril from trials before the entire assembly, i.e. *eisangelia*,²⁰⁹ until Pericles' supporter Hagnon passed a motion that Pericles should undergo trial by jury, albeit an extraordinarily large one.²¹⁰ Historians have disputed whether the accounting required by Dracontides was the same as that recorded by Thucydides in the late summer of the year 430, after Hagnon had returned from an expedition to Chalcidice,²¹¹ when Pericles was removed from office and fined.²¹² It surely was; for, as Gomme notes, 'Pericles' own return from a not very successful expedition will have encouraged his enemies.'²¹³ Meanwhile, Plutarch continues, Pericles was afraid and spirited Anaxagoras out of Athens;²¹⁴ he then recounts how Pericles

¹⁹⁹ Daimachus *FGrH* 65 F8, in Plut. *Lys.* 12.4–5 = Anaxag. 59 A12 DK (quoted above).

²⁰⁰ Pl. *Phd.* 97b–99d.

²⁰¹ Rubel (2014) 255 n.11 (= (2000) 345 n.9). On whether the decree was still in force in 399, see Whitmarsh (2015) 263 n.3, correcting Brickhouse and Smith (1989) 32–33.

²⁰² With εἰσαγγέλλεσθαι τοὺς τὰ θεῖα μὴ νομίζοντας ἢ λόγους περὶ τῶν μεταρσιῶν διδάσκοντας ('those who do not believe in the gods or teach arguments about the heavens are to be tried before the people', Plut. *Per.* 32.2) cf. ἀδικεῖ Σωκράτης, οὗς μὲν ἡ πόλις νομίζει θεοὺς οὐ νομίζων ... καὶ τοὺς νέους διαφθείρων ('Socrates is guilty of not believing in the gods in whom the city believes ... and of corrupting the youth', Diog. Laert. 2.40).

²⁰³ Diog. Laert. 2.12, quoting Sotion's *Succession of the Philosophers* (fr. 3 Wehrli).

²⁰⁴ Diog. Laert. 2.12 = Satyrus F16 Schorn.

²⁰⁵ Above, section III.

²⁰⁶ Plut. *Per.* 33.8, quoting Hermippus fr. 47 *PCG*, probably from the *Moirai* of 430; the passage satirizes Pericles' refusal to fight the Spartans, which suits the first half of 430.

²⁰⁷ Plut. *Per.* 32.2.

²⁰⁸ Plut. *Per.* 32.3; with Stadter (1989) 301.

²⁰⁹ For arguments that Pericles was to be prosecuted by *eisangelia*, see Bakola (2010) 217 n.78.

²¹⁰ Plut. *Per.* 32.4.

²¹¹ So Bakola (2010) 217 with n.79.

²¹² Thuc. 2.59–65.3. Stadter (1989) 301, 323–24, thinks they are different; but Gomme (1956) 187, Dodds (1959) on Pl. *Grg.* 516a and others equate them (Bakola (2010) 216 n.73). Hagnon was then tried for financial impropriety; his trial was parodied in Cratinus' *Ploutoi* of early in 429 (Bakola (2010) 214–18).

²¹³ Gomme (1956) 166, on Thuc. 2.59.1.

²¹⁴ Plut. *Per.* 35.5, Ἀναξαγόραν δὲ φοβηθεὶς ἐξέπεμψεν ἐκ τῆς πόλεως.

was deposed and fined.²¹⁵ Plutarch even adds that, at the same time, Pericles' eldest son Xanthippus quarrelled with his father and exposed to public mockery his father's conversations with intellectuals (*sophistai*) such as Protagoras;²¹⁶ this cannot have aided Anaxagoras' prospects. Plutarch certainly implies that the trials of Aspasia, Pheidias, Anaxagoras and Pericles all happened at the same time, and the onus should fall on the sceptics to prove that his relative chronology is wrong, despite his confusion over the two naval expeditions against the Peloponnese.

Hermippus states that Anaxagoras was imprisoned awaiting execution;²¹⁷ 'awaiting trial' must be meant, in a case in which Pericles had to represent him as his *προστάτης* ('patron'), but everyone clearly expected him to be condemned. He did not fare well in jail. One anecdote says that, while there, he worked on squaring the circle.²¹⁸ But a story in Plutarch that Pericles found him lying neglected, old and close to death may date from his time in prison.²¹⁹ Hieronymus says that Pericles led him in to the trial, exhausted and wasted by illness (or plague?).²²⁰ In a newly restored passage, Philodemus states that his pitiful state when he was brought into the trial was a result of torture:

καὶ κυκοφάνται]c καὶ δυσμενέσιν ἄ[πασιν εὐάλλ]ωτο[ι] γείνοντα[ι (sc. οἱ φιλόσοφοι), ὡς] Ἀναξαγόραc, ὃc μ[αc]τιγῶθεῖc τοὺc μῶλωπαc ἐπεδείκνυεν τοῖc δικασταῖc, καὶ Πυθαγόραc, ᾧ Κύλων ὁ Κροτωνιάταc (*sic*) ἐπαγαγὼν πρ[άγ]ματα τῆc πόλεωc ἐξέβαλε, τοὺc] δὲ μαθητὰc ἀθρόουc ἐνέ[πρη]ce, καὶ Cω[κρά]τηc, ᾧ τὸ μὲν πρό[τερον] ...

(Philosophers) are easily caught by false accusers and all their enemies, like Anaxagoras, who after his flogging showed his welts to the jurors, Pythagoras, whom Cylon of Croton persecuted and expelled from the city, and burned his followers alive *en masse*, and Socrates, for whom at first ...²²¹

The torture of citizens was forbidden,²²² but Anaxagoras' alien status as a metic meant that he could be tortured more readily.²²³

Satyrus adds the peculiar detail that, while Anaxagoras was languishing in jail, he was told of his condemnation to death and of the deaths of his sons (plural) at the same time:

ὅτε καὶ ἀμφοτέρων αὐτῷ προσαγγελέντων, τῆc τε καταδίκηc καὶ τῆc τῶν παίδων τελευτῆc, εἰπεῖν περὶ μὲν τῆc καταδίκηc, ὅτι “ἄρα κάκεινων κάμου πάλαι ἢ φύcιc κατεψηφίσατο,” περὶ δὲ τῶν παίδων, ὅτι “ἦδεν αὐτοὺc θνητοὺc γεννήcαc”.

When both pieces of news had been brought to him, that of his condemnation and that of the deaths of his sons, he said regarding his condemnation 'after all nature long ago condemned both them and me', and regarding his sons 'I knew I had begotten them as mortals'.²²⁴

²¹⁵ Plut. *Per.* 35.4.

²¹⁶ Plut. *Per.* 36.4–5.

²¹⁷ Diog. Laert. 2.13, quoting Hermippus' *Lives* (fr. 30 Wehrli).

²¹⁸ Plut. *Mor.* 607F = 59 A24 DK.

²¹⁹ Plut. *Per.* 16.8–9: τὸν Ἀναξαγόρα αὐτὸν λέγουσιν, ἀσχολουμένου Περικλέουc ἀμελούμενον κείcθαι συγκεκαλυμμένον ἤδη γηραιὸν ἀποκαρτεροῦντα, προσπεόντοc δὲ τῷ Περικλεῖ τοῦ πράγματοc, ἐκπλαγέντα θεῖν εὐθὺc ἐπὶ τὸν ἀνδρα καὶ δεῖcθαι πάcαν δέηcιν, ὀλοφυρόμενον οὐκ ἐκεῖνον, ἀλλ' ἑαυτόν, εἰ τοιοῦτον ἀπολεῖ τῆc πολιτείαc σύμβουλον. ἐκκαλυψάμενον οὖν τὸν Ἀναξαγόρα εἰπεῖν πρὸc αὐτόν: “ὦ Περικλεῖc, καὶ οἱ τοῦ λόγου χρεῖαν ἔχοντεc ἔλαιον ἐπιχέουσιν.” (‘They say that, when Pericles was preoccupied, Anaxagoras lay neglected under a cloak, already old and starving himself to death; when the matter came to Pericles' attention, in

horror he ran straight to him and begged him abjectly for forgiveness, pitying not him, but himself, were he to lose such a fine political adviser. So Anaxagoras showed his face and said to him “Pericles, even those who need a lamp put oil in it.”) If this story does pertain to his imprisonment, it may reflect the role of family or *prostatai* in caring for prisoners (cf. Hunter (1997) 12).

²²⁰ Diog. Laert. 2.14 (διερρημένον καὶ λεπτόν ὑπὸ νόου), quoting book 2 of his *Miscellaneous notes* (fr. 41 Wehrli).

²²¹ Phld. *Rhet.* 4, in *P.Herc.* 245 fr. 7 ~ 224 fr. 15 (ii.175, ii.180 Sudhaus) = Anaxag. A 20 DK, but with the text improved by Blank from autopsy of the papyrus (Blank (2019) 82).

²²² And. *Myst.* 43; with MacDowell (1962) 92–93.

²²³ Kamen (2013) 49, citing Lys. 13.27, 54, 59.

²²⁴ Diog. Laert. 12.13; with Mansfeld (1980) 20.

The extraordinary circumstance that more than one of his sons died at the same time suggests that they died of plague in Athens in the year of its greatest virulence, i.e. 430, just as Pericles' own sons died, and that Anaxagoras heard this news together with that of his condemnation from Pericles, who had come to the prison personally to arrange his removal from Athens. This story proves decisively that Anaxagoras was tried in 430. Plutarch's anecdote that Pericles found him close to death as a result of neglect²²⁵ would also suit the time of the plague; perhaps his jailers were ill or caring for others. Demetrius of Phalerum points to the same conclusion by recording that in his old age he buried his sons with his own hands.²²⁶ Satyrus' story implies that Anaxagoras had brought his family to Athens; perhaps some members of it accompanied him to Lampsacus into exile, or indeed his pupil Archelaus, who, according to Eusebius, succeeded him there.²²⁷

Our sources disagree about the outcome of the trial. Hieronymus says that Anaxagoras was released more from pity than judgement.²²⁸ Hermippus says that Pericles came forward and asked whether they (presumably the jurors) had anything to reproach him with in his life (i.e. Anaxagoras was accused of corrupting others); when they said no, he said 'I am this man's pupil; so do not rely on slander and execute the man, but take my advice and let him go', and he was released.²²⁹ Sotion reports that he was fined five talents (a huge sum) and exiled.²³⁰ Josephus says that he was condemned to death by a margin of a few votes because he said the sun was a stone.²³¹ Satyrus states that he was condemned to death *in absentia*;²³² this may mean that he was evacuated from Athens after the verdict but before sentencing. The contradictory reports of Anaxagoras' punishment may reflect a confusion between the penalty that the prosecutors demanded (death) and Pericles' counter-proposal after the jurors' verdict but before they determined the penalty by a further vote. Whatever the decision, it was rendered moot, since Anaxagoras had already left Athens.

Pericles' rescue of Anaxagoras proves that he expected that the jury would condemn the philosopher to death. Why should it have seemed so to him? The reason must be that Pericles was himself in trouble at the time, not only because of the distress of the rural Athenians who were cooped up inside the walls while the Spartans burned their farms, but above all because the plague had broken out both within the confines of the crowded city and in the fleet and army. Only the disastrous effect of the plague on the city's morale²³³ and a concomitant outbreak of religious hysteria could have induced the Athenians so greatly to fear astronomy that they, alone among the Greeks so far as we know, voted for legal measures against it, while at the same time deposing their long-trusted leader Pericles, whose fall was satirized in Cratinus' *Ploutoi* of early in 429.²³⁴ Tim Whitmarsh is right that Sophocles' *Oedipus the King* would have evoked his fall to contemporary audiences,²³⁵ however scandalous and tasteless such an interpretation may seem to those of us who revere both Pericles and Sophocles equally. However, both here and in the *Antigone*, Sophocles is unforgiving towards apparently 'enlightened' rulers who disrespect the gods and challenge seers, as Anaxagoras (and through him Pericles) had challenged Lampon. Hence I would date the *Oedipus* too to 429 or thereabouts.²³⁶

²²⁵ Plut. *Per.* 16.8–9, quoted above in n.219.

²²⁶ Demetr. *On Old Age*, fr. 150 Wehrli = fr. 84 Schütrumpf, in Diog. Laert. 2.13.

²²⁷ Mansfeld (1980) 86–87.

²²⁸ Diog. Laert. 2.14 (ἄπονηται καὶ λεπτὸν ὑπὸ νόσου, 'exhausted and wasted by illness'), quoting book 2 of his *Miscellaneous notes* (fr. 41 Wehrli).

²²⁹ Diog. Laert. 2.13, quoting Hermippus' *Lives* (fr. 30 Wehrli).

²³⁰ Diog. Laert. 2.12, quoting Sotion's *Succession of the Philosophers* (fr. 3 Wehrli).

²³¹ Joseph. *Ap.* 2.265, where Hudson proposed to

emend μύλον, 'millstone', to μόδρον, 'pig of molten iron'. Is the reference to a few votes based on the case of Socrates' condemnation?

²³² ἀπόντα καταδικασθῆναι θανάτου, in Diog. Laert. 2.12 = F16 Schorn.

²³³ Thuc. 2.53–54.

²³⁴ Bakola (2010) 213–20.

²³⁵ Whitmarsh (2015) 102–06.

²³⁶ In the latest major edition of the play, Finglass ((2018) 3–6) agrees with others precisely in excluding such a date, on the ground that the impact of the plague was too traumatic for it to have been mentioned.

After the trial Pericles had Anaxagoras conveyed to Lampsacus, because, as I hold, the philosopher had lived and taught there before; perhaps he even owned a house in the city, which as a metic he could not do in Athens (he had passed his agricultural land in Clazomenae to his family).²³⁷ At Lampsacus Anaxagoras would have found his pupils Metrodorus²³⁸ and, according to Eusebius, Archelaus.²³⁹ The latter's activity in Lampsacus belongs to the period after Anaxagoras' exile, but suggests that Anaxagoras had founded a school there before he moved to Athens. Several reports indicate that Anaxagoras did not live long at Lampsacus, and indeed ended his own life. He died there²⁴⁰ at most two and a half years later, in part because of the mental and physical weakness and illness that resulted from his imprisonment and torture in Athens.²⁴¹ Hermippus says that he did not endure the outrage and made away with himself,²⁴² and the *Suda* makes the same point.²⁴³ This confirms that he was tried only shortly before his death, which suits a trial in 430 better than one earlier in that decade.²⁴⁴ Alternative reconstructions of his life, like that of Russell Meiggs,²⁴⁵ require their proponents to posit that Anaxagoras did not stay continuously in Athens, so that he could establish a school in Lampsacus at the same time.

Thus we may deduce that the Lampsacenes honoured Anaxagoras after his death because of his decades-long association with their city. The high reputation that he had there cannot have been earned by a broken man: the state funeral and posthumous honours that he received from the citizens, which perhaps were recorded by Charon of Lampsacus²⁴⁶ and certainly by Alcidamas of Elaea,²⁴⁷ confirm that his relation with the city was of long standing, and imply an earlier sojourn and the kind of lasting contribution to civic life that a dying philosopher could not have made.

V. Conclusions

To recapitulate Anaxagoras' life, he began to study astronomy at the age of 20 in 480 BC, but in Ionia, not in Athens. The annular eclipse of 478, which obscured the whole Peloponnese, led him to deduce (probably from talking to Peloponnesian sailors that summer) that the sun was a body larger than the Peloponnese and state this fact in his book, along with the claim that the heavenly bodies were fiery stones held in place by a vortex and might fall from their orbits if its motion slackened. A year or two later, the latter claim seemed to be vindicated by the fall of the meteorite at Aegospotami near Lampsacus in *ca.* 466. He became famous, and Themistocles invited him to his court; he probably lived at Lampsacus until 460, when his patron died. He then moved to Athens, where Pericles, the successor to Themistocles' policies, became his patron. He stayed for 30 years, until the autumn of 430, when the plague had just broken out. Many Athenians blamed its terrifying outbreak on Pericles' acceptance of his 'atheistic' explanations of eclipses and other phenomena. Following Diopieithes' decree against 'atheists' who taught astronomy, Anaxagoras was condemned, and Pericles fell from power with him. The philosopher went into exile in Lampsacus, because he had lived there earlier and was popular there, but died two years later.

²³⁷ Diog. Laert. 2.6–7 (Anaxag. A1 DK); Pl. *Hipp. mai.* 283a; Plut. *Per.* 16 (Anaxag. A13 DK); Val. Max. 8.7.6 (Anaxag. A31 DK).

²³⁸ Sider (1997) 137.

²³⁹ Mansfeld (1980) 86–87.

²⁴⁰ He was asked whether he wanted to be taken back to Clazomenae to die, but declined (Cic. *Tusc.* 1.43.104).

²⁴¹ Cf. *Suda s.v.* (Anaxag. A3 DK): καταστρέφει τὸν βίον ἀποκαρτερήσας, 'he ended his life by starving himself' (for this sense, see Phot. *Lex. s.v.* ἀποκαρτερήσαντα, α 2506 Theodoridis). Plutarch's anecdote about how Pericles found him close to death in Athens (*Per.* 16 = A32 DK) uses the similar phrase ἀμελούμενον κείσθαι συγκαλυμμένον ἤδη γηραιὸν ἀποκαρτερήσας, 'neglected under a cloak, already old

and starving himself to death'.

²⁴² Diog. Laert. 2.13, quoting Hermipp. *Hist. fr.* 30 Wehrli; Hermippus is fond of the motif of suicide, as Mansfeld notes ((1980) 21).

²⁴³ *Suda s.v.*

²⁴⁴ Pace Mansfeld (1980) 21 n.98.

²⁴⁵ Meiggs (1972) 283–84, 435–36.

²⁴⁶ Woodbury (1981) 312 n.48.

²⁴⁷ Diog. Laert. 2.14–15 (Anaxag. A1 DK); Alcid. *fr.* 10 Avezzù (presumably from his *Mouseion*) in Arist. *Rh.* 2.23, 1398b15 (Anaxag. A23 DK): Λαμψακηνοὶ Ἀναξαγόραν ξένον ὄντα ἔθαψαν καὶ τιμῶσιν ἔτι καὶ νῦν, 'the Lampsacenes gave Anaxagoras a funeral, although he was a foreigner, and honour him even now'.

Anaxagoras' condemnation leads to further thoughts about the populist side of Athenian democracy. We might suppose that a democracy would protect freedom of thought and expression, enabling a tiny group of scientists and free-thinkers like Anaxagoras to continue to advance the sum of human knowledge by studying astronomy and similar topics. But Athenian democracy had no statutory protection for freedom of speech or freedom of thought: both slander and impiety were crimes for which extreme penalties could be inflicted if the majority on an Athenian jury saw fit. As, under the extraordinary pressures of the war and the plague, their leaders metamorphosed from leading the people to being led by them, the worse arguments tended to oust the better and the Athenians' real commitment to the rule of law was gradually undermined, beginning with the trials of intellectuals, until the democracy itself collapsed in the oligarchic revolutions of 411 and 404.²⁴⁸ Following Kenneth Dover,²⁴⁹ recent historians have assumed that the trial of Socrates in 399 was an aberration that occurred mainly for political reasons.²⁵⁰ The political reasons were real; amid the heated atmosphere of the war and the plague, the religious views of men like Diopeithes and Meletus could be exploited by ambitious politicians like Cleon and Anytus in order to settle scores with opponents, i.e., respectively, Pericles and the Thirty. For the last three decades of the fifth century impiety trials were frequent in 'the school of Hellas', with real and drastic effects on intellectual endeavour, as E.R. Dodds eloquently documents and cogently explains in a few unsurpassed pages of *The Greeks and the Irrational*.²⁵¹ For reasons of space, I will mention only a few salient examples, which are as well known as they are controversial (again, we must keep in mind that fifth-century Athenian democracy lacked the checks and balances that have proved vital to the longevity of modern democracies).

According to Diogenes Laertius, Protagoras was condemned for impiety, and copies of his book were burned in the agora; he had professed agnosticism, since he had dared to publish a book which declared that he did not know whether or not there were gods.²⁵² In 421 the comic poet Eupolis called him 'a sinner regarding heavenly matters', which is either a reference to his trial for impiety or an incitement to it;²⁵³ we do not know exactly when he was prosecuted, but it was surely in or after 421 (he was in Athens in that year).²⁵⁴ Two years earlier, Aristophanes had caricatured Socrates in the *Clouds* as another such sinner; just six years later, the Athenians, abolishing the ban on the torture of citizens, sentenced many people to death for parodying or defaming the Eleusinian Mysteries and vandalizing the Herms, and passed a death sentence on Diagoras of Melos for revealing the Mysteries and discouraging people from becoming initiated.²⁵⁵ Epicurus attests that Diagoras was an atheist intellectual like Prodicus and Critias, who explained away the gods by etymologizing their names: 'Epicurus criticized for their total insanity those who eliminate the divine from reality, as in Book 12 (sc. of *On Nature*) he criticizes Prodicus, Diagoras, Critias and others, saying that they are raving mad, and compares them to Bacchic revellers, telling them not to give us trouble or bother us. For they change the letters in the names of the gods.'²⁵⁶

²⁴⁸ For consideration of what the rule of law meant in Classical Athens, see Forsdyke (2018); for a different view, see Whitmarsh (2015) 119–20.

²⁴⁹ Dover (1975).

²⁵⁰ For example Parker (1996) 199–217.

²⁵¹ Dodds (1951) 189–93; see the epigraph to this article. This thesis is demonstrated at book-length by Rubel (2000); (2014). Scholars' scepticism about Athenian intolerance, both in the 19th century and since, results from a failure of imagination: as Dodds put it, with a delicate irony, 'nineteenth-century professors ... had not our advantage of familiarity with this kind of behaviour' (189).

²⁵² Diog. Laert. 9.51–2.

²⁵³ Eupolis, *Kolakes fr.* 157 PCG:

ἔνδον μὲν ἔστι Πρωταγόρας ὁ Τήτιος,
ὃς ἀλαζονεύεται μὲν ἀλιτήριος
περὶ τῶν μετεώρων, τὰ δὲ χαμᾶθεν ἐσθίει.

'Protagoras of Teos is within, a sinner who spouts nonsense about heavenly matters, but eats what grows on earth.'

²⁵⁴ Ath. 5.218 c.

²⁵⁵ Janko (2001) 6–15. Whitmarsh (2015) 123 dates his condemnation to 416/15, but the evidence of Diod. Sic. 13.6 (T17 Winiarczyk) and of Al-Mubaššir (T10) that it occurred when Charias was archon (415/14) is unequivocal.

²⁵⁶ The crucial evidence, missed by Winiarczyk (1979), (1980) and (2016) and by Whitmarsh (2015), is Epic. *Nat.* 12, quoted by Philodemus, *Piet.* col. 19, lines

Pericles' embrace of the intellectual and scientific Enlightenment led by Anaxagoras, when combined with the terrible effects of the war and the plague, was exploited by his political and cultural enemies as an excuse to unleash a fundamentalist reaction in Athens against philosophy and science, which began with the exile of Anaxagoras and culminated in the execution of Socrates. Only a tiny minority of freethinkers was prepared to question the apparent realities of our world – whether the earth is a flat disk shaped like a drum, whether the sun is a god who looks down upon mortals in his daily traverse across the sky and whether an eclipse is an omen sent by supernatural powers. Their willingness to question, and to think freely enough to do so, was an achievement profoundly important in the history of civilization and in the unmasking of the myths on which populist falsehoods feed. Their existence is an extraordinary testimony to the creativity that the Greek network of numerous, self-governing city-states made possible; but the variety of Greek political institutions also made possible the most extreme repression under the pressure of the plague, which seemed like a divine punishment for which scapegoats needed to be found. Anaxagoras was only the first such scapegoat. According to Plutarch, describing the situation in 413, the Athenians 'could not stand the natural scientists and those who were then called "astronomaniacs", on the ground that they reduced the divine to irrational causes, non-providential powers, and obligatory effects'. As evidence, he adds that 'Protagoras went into exile, Pericles only just saved Anaxagoras who had been imprisoned, and Socrates perished on account of philosophy, even though none of these things had anything to do with him.'²⁵⁷ We forget this history at our own peril.

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518–41 Obbink: [αὐ]τοῖς δὲ καὶ πᾶσαν μ[α]νίαν Ἐπίκουρος ἐμ[έ]ψατο τοῖς τὸ θεῖον ἐκ τῶν ὄντων [ἀ]νάιροῦσιν, ὡς κἀ[ν] τῶι δωδεκάτω[ι] Προ[δ]ίκωι καὶ Δια[γ]όρωι καὶ Κριτίαι κᾶ[λλοις] μέμ[φ]εται φᾶς πα[ρ]α[κ]όπτειν καὶ μ[α]ίνεσθαι, καὶ βακχεύουσιν αὐτοὺς [εἰ]κά[ζ]ει, κε[λε]ύσ[α]ς μὴ πράγμα(θ)' ἡμ[ε]ῖν παρέχειν μὴδ' (οὐδ' *N: correxi*) ἐνοχλεῖν. κα[ὶ] γὰρ παραγραμμίζ[ουσι] τὰ τ[ῶ]ν θεῶν [ὀ]νόματα. See further Obbink (1995) 352–53.

²⁵⁷ οὐ γὰρ ἠνείχοντο (sc. οἱ Ἀθηναῖοι) τοὺς φυσικοὺς καὶ "μετεωρολέσχας" τότε καλουμένους, ὡς εἰς αἰτίας ἀλόγους καὶ δυνάμεις ἀπρονοήτους καὶ κατηναγκασμένα πάθη διατρίβοντας τὸ θεῖον. ἀλλὰ καὶ Πρωταγόρας ἔφυγε, καὶ Ἀναξαγόραν εἰρχθέντα μόλις περιεποιήσατο Περικλῆς, καὶ Σωκράτης, οὐδὲν αὐτῶ τῶν γε τοιούτων προσῆκον, ὅμως ἀπώλετο διὰ φιλοσοφίαν (Plut. *Nic.* 23.4). Note his simplifying adaptation of the comic coinage μεταρσιολέσχης (above, with nn. 186–87).

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