

ARISTOTLE, THEOPHRASTUS, AND SIMPLICIUS ON ANAXIMANDER

1. The first time I learned of the famous «fragment» of Anaximander was as a very young student in the autumn of 1954. Cornelia de Vogel had started her cycle of courses on the whole of Greek philosophy again¹, and so began with the Presocratics. The only thing I remember (no lecture-notes survive) is the fact that she inveighed for weeks against the phantasmagoric interpretation of Heidegger, whose essay I then read for myself, and at the time admired². In later years I have often had occasion to return to this fragment, and have also tried to keep abreast of the literature concerned with Anaximander (which I shall not quote very much). Accordingly it is quite difficult, perhaps even impossible to look at the text, so to speak, with fresh eyes. Yet this is what I shall attempt here. What I shall try is to find out what sense the «fragment» makes when considered as an argument couched in Peripatetic terms³, an argument, moreover, which is quoted and/or paraphrased as well as further explained by Simplicius. So this is not a paper about Anaximander, though it will prove impossible to avoid him. Aristotle's *De generatione et corruptione* will

* This paper was received for publication in the year 2000.

1. C.J. DE VOGEL, *Greek Philosophy. A Collection of Texts*, 3 vols. (Leiden 1950-59 and later repr.) For her interpretation of the verbatim part (taken to be the whole of ἐξ ὧν [...] τὰ ζῆν, just as in DK) see vol. 1.6. Useful discussion of the secondary literature in D. L. COUPRIE, *De verordening van de Tijd*, diss. Amsterdam 1989, and M. CONCHE, *Anaximandre. Fragments et témoignages*, Paris 1991, pp. 157-90. Further bibliography at A.A. LONG ed., *The Cambridge Companion to Early Greek Philosophy*, Cambridge 1999, pp. 375-6.

2. M. HEIDEGGER, «Der Spruch des Anaximander», *Holzwege*, Frankfurt a. M. ²1951, pp. 296-343.

3. For Theophrastus' dependence on Aristotle see J.B. McDIARMID, «Theophrastus on the Presocratic causes», *HSCP* 61, 1953, pp. 85-156, repr. in D.J. FURLEY and R.E. ALLEN, eds., *Studies in Presocratic Philosophy* vol. I, London and New York 1970, pp. 78-238, who however fails to speak of Theophrastus' attempts to revise and correct. For the approach followed here cf. e.g. my paper «*Physikai doxai and problemata physika* from Aristotle to Aëtius (and beyond)», in W.W. FORTENBAUGH and D. GUTAS, eds., *Theophrastus: His Psychological, Doxographical and Scientific Writings*, RUSCH 5, New Brunswick N.J. and London 1992, pp. 63-111, and the paper cited below, n. 25. CH. H. KAHN, *Anaximander and the Origins of Greek Philosophy*, New York 1960, Philadelphia ³1985, pp. 11-71, U. HÖLSCHER, *Anfängliches Fragen. Studien zur frühgriechischen Philosophie*, Göttingen 1968, pp. 9-89, revised and expanded version of the article in *Hermes* 81, 1953, which is transl. in FURLEY and ALLEN, pp. 281-322, and C.-J. CLASSEN, *Ansätze. Beiträge zum Verständnis der frühgriechischen Philosophie*, Würzburg and Amsterdam 1986, pp. 47-129, proved most helpful.



function as a backdrop, since this is where he defines elemental change, elemental coming to be and elemental passing away, and criticizes his monist and pluralist predecessors⁴. But passages in other works of Aristotle are even more important.

First, the text (I have proleptically changed the punctuation)⁵:

τῶν δὲ ἐν καὶ κινούμενον καὶ ἄπειρον λεγόντων Ἀναξίμανδρος [...] ἀρχὴν τε καὶ στοιχεῖον εἶρηκε τῶν ὄντων τὸ ἄπειρον (πρῶτος τοῦτο τοῦνομα κομίσας τῆς ἀρχῆς). λέγει δ' αὐτὴν μήτε ὕδωρ μήτε ἄλλο τι τῶν καλουμένων εἶναι στοιχείων, ἀλλ' ἑτέραν τινὰ φύσιν, ἄπειρον, ἐξ ἧς ἀπαντας γίνεσθαι τοὺς οὐρανοὺς καὶ τοὺς ἐν αὐτοῖς κόσμους· ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι κατὰ τὸ χρεῶν· διδόναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας κατὰ τὴν τοῦ χρόνου τάξιν, ποιητικωτέροις οὕτως ὀνόμασιν αὐτὰ λέγων.

δῆλον δὲ ὅτι τὴν εἰς ἀλλήλα μεταβολὴν τῶν τεττάρων στοιχείων οὗτος θεασάμενος οὐκ ἠξίωσεν ἐν τι τούτων ὑποκείμενον ποιῆσαι, ἀλλὰ τι ἄλλο παρὰ ταῦτα. οὗτος δὲ οὐκ ἀλλοιούμενου τοῦ στοιχείου τὴν γένεσιν ποιεῖ, ἀλλ' ἀποκρινομένων τῶν ἐναντίων διὰ τῆς αἰδίου κινήσεως· διὸ καὶ τοῖς περὶ Ἀναξαγόραν τοῦτον ὁ Ἀριστοτέλης συνέταξεν.

I have cut this passage into two parts, since (just as many others)⁶ I believe that only the first part is to be attributed to Theophrastus, while the second is by Simplicius, who may be following an earlier commentary on the *Physics*. Naturally Simplicius and / or this earlier commentator may have been using something Theophrastus said. In what follows I shall for simplicity's sake only mention Simplicius in this connexion.

2. Let us first look at this Simplician section (δῆλον δὲ ὅτι⁷ ... συνέταξεν). Aristotle at *GC* 1.1 fails to mention Anaximander's name (actually, not a single one-principle-person is mentioned by name here). He briefly dismisses all the

4. See my paper «Aëtius, Aristotle and others on coming to be and passing away», forthc.

5. SIMP. in *Ph.* p. 24.13-25 (THPHR. *Ph. op.* fr. 2, fr. 226A FHS&G; KRS pp. 101 and 110; 12A9 and B1 DK).

6. E.g. KRS, p. 118.

7. HÖLSCHER (above, n. 3) 11 (transl. 283) suggests that the formula δῆλον δὲ ὅτι betrays Simplicius' hand («Theophrast scheint δῆλον ὥς zu schreiben»), and it is indeed often found in his works (133 instances, and nearly 800 of δῆλον ὅτι). However for δῆλον δὲ ὅτι cf. PL. *Th.* 185d1, *Phdr.* 235c2, *Euth.* 285b3, ARIST., *Cat.* 14a15, *Met.* 1025b3-4, *Poet.* 1448a7, 1456b2, THPHR. *CP* 5.12.11.4. There are more than 40 instances of δῆλον ὅτι in Theophrastus' major works and opuscula, and about 450 in Aristotle; δῆλον ὥς is far less frequent in both authors. δῆλον δὲ ὥς occurs only once, THPHR. *CP* 1.20.6.1. In Simplicius there are 9 instances of δῆλον δὲ ὥς, and 98 of δῆλον ὥς. So Hölscher's suggestion is not conclusive.

early monists in general, stating that they say the all is some one thing and make everything else come to be from this one thing and so can only assume that coming to be amounts to alteration of this one thing (*alloyōsis*; *GC* 314a6-11, cf. 314b1-4). Nonetheless, at *Ph.* 187a20-3 he says that according to Anaximander the opposites which are in it are separated out from this one thing (and so are *not* alterations of the primal stuff)⁸, and that Anaxagoras and Empedocles too «separate out the other things from the mixture». At *Met.* 1069b20-4⁹ (a passage badly cut up by Diels and Kranz) he mentions even more names, putting Anaxagoras' ὁμοῦ πάντα¹⁰, Empedocles' «mixture» (viz. the elements as blended in the Sphere)¹¹, and that of Anaximander¹², and the way Democritus formulates this (viz. the *panspermia* from which a cosmos is formed)¹³ on a par, and arguing that it would have been better if these people had said that «all things were potentially together» in the primordial mixture rather than actually. This interpretation of Anaximander's principle as an elemental mixture is consistent with the view that the ingredients of this mixture must be separated out from it, as stated at *Ph.* 187a20-3 (see above). Also compare Arist. *Cael.* 297a8-b18 (not in DK), commented upon by Simp. in *Ph.* 542.14-45.27. Aristotle here argues that the earth must be spherical. As is his custom he also refers to the view of some of his predecessors (no names here), which he emends but does not accept. The emended version is that the ingredients (which are separated off to form the earth) should be so from a mixture which is a state of potentiality¹⁴, i.e. in which the ingredients are potentially, not actually, present.

These passages from the *Physics* and *Metaphysics* explain the final clause of the Simplician text quoted above. This phrase tells us that Aristotle placed Anaximander in the company of Anaxagoras (διὸ καὶ τοῖς περὶ Ἀναξαγόραν τοῦτον ὁ Ἀριστοτέλης συνέταξεν). This in spite of the fact that Simplicius will shortly be quoting *Theophrastus*, who also argued that Anaximander's view of the material cause, or original mixture, comes close to that of

8. οἱ δ' ἐκ τοῦ ἑνὸς ἐνούσας τὰς ἐναντιότητας ἐκκρίνεσθαι, ὥσπερ Ἀναξίμανδρός φησι (12A16 DK; KRS 104).

9. καὶ τοῦτ' (scil. ὄντος [from which] γίγνεται πάντα, δυνάμει μέντοι ὄντος) ἔστι τὸ Ἀναξαγόρου ἐν βέλτιον γὰρ ἢ «ὁμοῦ πάντα» – καὶ Ἐμπεδοκλέους τὸ μῖγμα καὶ Ἀναξίμανδρου, καὶ ὡς Δημόκριτός φησιν – «ἦν ὁμοῦ πάντα δυνάμει, ἐνεργείᾳ δ' οὐ». ὥστε τῆς ὕλης ἂν εἶεν ἡμμένοι κτλ.

10. 59A61 DK.

11. Not in the Empedocles ch. in DK, but cf. 59A61.

12. Not in the Anaximander ch. in DK, but cf. 59A61.

13. 68A57 DK.

14. *Cael.* 279a12-9, esp. ἐν δυνάμει οὖν ὄντος τοῦ μίγματος τὰ διακρινόμενα ἐφέρετο (words which need not have troubled MORAUX *ad. loc.*: he should have referred to *Met.* 1069b20-4).

Anaxagoras¹⁵. Theophrastus (in what is extant of his output) never mentions his master's name even in places where he clearly has Aristotle in mind, or implicitly refers to one of his works¹⁶, so the name must have been put in by Simplicius who knew his Aristotle very well. It is indeed generally believed that the last philosopher discussed in Theophrastus' historical overview of the principles *qua* principles (i.e. as principles of what follows)¹⁷ is Plato not Aristotle¹⁸. The overview in the first book of Aristotle's *Metaphysics* is the model, and for Theophrastus Aristotle's philosophy does not belong with the past¹⁹.

The first clause of the concluding section, «he does not explain coming to be by means of the *alteration* of the element, but by means of the separating off of the opposites» is also clearly based on *Ph.* 187a20-1 (cited above), and bypasses the view found in the *De generatione et corruptione*. Also compare in *Ph.* 149.5-150.4, where Simplicius discusses the interpretation of Arist. *Ph.* 187a12-6. Aristotle here says that one group of physicists posited a single element, viz. either «one of the three» or something «denser than Fire but less dense than Air», from which they generate everything else by means of rarefaction and condensation²⁰. According to Simplicius Alexander (of Aphrodisias) argued that Anaximander is meant and that it is he who posited this substance as the principle besides the common elements (149.12, παρὰ τὰ στοιχεῖα). Porphyry and Nicolaus (of Damascus)²¹ basically agreed with this interpretation, which is rejected by Simplicius because, as he says, Aristotle ascribed rarefaction and condensation to Anaximenes and separating out to Anaximander (149.24-5, referring to *Ph.* 187a20-1): καίτοι τοῦ Ἀναξίμανδρου, ὡς αὐτός [scil. Aristotle] φησι, μὴ οὕτως γεννῶντος, ἀλλὰ κατὰ ἔκκρισιν τὴν ἀπὸ τοῦ ἀπείρου).

Simplicius moreover could find yet another precedent in Aristotle, who at *Ph.*

15. *Ph. op.* fr. 4 (228 FHS&G, containing a verbatim quotation of Theophrastus) *ap. SIMP. in Ph.* 27.11-23, in part repeated *ibid.* 154.14-23 (228B FHS&G). Cf. KRS p. 365 n. 1.

16. THEM. *in An.* p. 108.18-9 ~ THPHR. fr. 320A FHS&G ἀψάμενος δὲ καὶ τῶν περὶ τοῦ ποιητικοῦ νοῦ διωρισμένων Ἀριστοτέλει is merely a correct inference of Themistius. Cf. further below, n. 38, and text to to n. 77.

17. Cf. ARIST. *Ph.* 185.4-5, ἡ γὰρ ἀρχὴ τινὸς ἢ τινῶν.

18. See THPHR. *Ph. op.* fr. 8 DIELS. 230 FHS & SIMP. *in Ph.* 26.7-8: ὁ μέντοι Θεόφραστος τοὺς ἄλλους προῖστορήσας «τούτοις», φησὶν, «ἐπιγενόμενος Πλάτων» κτλ. Plato also is the last philosopher discussed in the extract from «Aristotle» by *Anonymus Londinensis*; see now D. MANETTI, «Aristotle and the role of doxography in the *Anonymus Londinensis* (Pbrlibr inv. 137)», in Ph. J. VAN DER EUIK, ed., *Ancient Histories of Medicine: Essays in Medical Doxography and Historiography in Classical Antiquity*, *Studies in Ancient Medicine* 20, Leiden 1999, pp. 95-151, esp. pp. 118 ff.

19. If this is correct, the lemma on Aristotle at AET. 1.3.22 DIELS (like those, of course, on Epicurus, Zeno of Citium, and Strato in this chapter) cannot derive from Theophrastus.

20. 12A15 DK, 105 KRS.

21. Perhaps in the *Περὶ θεῶν* cited SIMP. *in Ph.* 23.14-6, 151.22-3.

204b22-35²² argues that, though «some» hold this to be the case, there really can be no such thing as «a single simple infinite body apart from the elements (τὸ παρὰ τὰ στοιχεῖα), from which they make these [scil. the elements] come to be. There are namely people who posit the Infinite as this [scil. as such a generative principle], and not Air or Water [...]'. All things are dissolved into that where they came from²³, and no such infinite body exists that we can perceive, Aristotle continues; if it did, it would be here with us, together with the elements. Simp. in *Ph.* 479.30 ff., commenting on this passage believes that Anaximander is meant, and it is hard to find another candidate. We may note Simplicius' formula τὸ παρὰ τὰ στοιχεῖα (479.33, 480.4, 23, 25). So the formula παρὰ ταῦτα (scil. next to the four elements mentioned before) found in the last section of the Simplician passage concerned with the «fragment» of Anaximander echoes the words τὸ παρὰ τὰ στοιχεῖα at Arist. *Ph.* 204b23-4, words which are subsequently used again by Simplicius himself. Theophrastus' formula at the beginning of the passage (λέγει δ' αὐτὴν [scil., τὴν ἀρχὴν] μήτε ὕδωρ μήτε ἄλλο τι τῶν καλουμένων εἶναι στοιχείων, ἀλλ' ἑτέραν τινὰ φύσιν, ἄπειρον) is a bit farther from Aristotle's wording. He does not say that Anaximander's principle is something «apart from the elements», but only «that it is neither Water [here he clearly thinks of Thales and Hippo] nor any other of the so-called elements [here he has Anaximenes and Hippasus and Heraclitus in mind], but a different substance, undetermined»²⁴.

Although such intimate knowledge of disparate passages in Aristotle pertaining to the same issue seems to be no less typical of Theophrastus²⁵ than of Simplicius, what we have here will be by Simplicius. In principle, as already said, I see no objection against assuming that to some extent this section too goes back to Theophrastus (the sentence quoted at the end of the previous paragraph is a good candidate), but Simplicius will presumably have modified what he found there.

3. We should, however, revert to the section of our passage which I believe to be by Theophrastus (τῶν δὲ ἓν ... αὐτὰ λέγων). This tells us that Anaximander is to be classified with those who posited a single, mobile, and infinite entity. He held that «the Infinite is the principle-and-element of the things that are, being the first to introduce this term [scil., infinite] in relation to the principle (*arché*), or alternatively, «... being the first to introduce the term principle (*arché*)». It is notoriously difficult to decide between these alternatives.

22. 12A16DK (in part).

23. Cf. below, n. 70 and text thereto.

24. For this interpretation of ἄπειρον see below, text to n. 39.

25. See my paper «Aristote et la structure du *De sensibus* de Théophraste», *Phronesis* 41, 1996, pp. 158-188.

Scholarly opinion is divided.

Theophrastus *ap. Simplicium* provides a revision²⁶ of Aristotle's famous diaeresis of the principles of his predecessors in the second chapter of the first book of his *Physics* (184b15-25;²⁷ Anaximander is not mentioned there). Like Aristotle he uses the term *arché* right from the start, that is to say not only with regard to the Eleatics but also of Thales' principle «Water»²⁸. In his division Aristotle assigns the attribute «infinite» to the principles of some of the pluralists only (*Ph.* 184b18-21). According to Theophrastus, however, Anaximander the monist said that his one principle and element is *infinite*. For this revision he could find precedent in Aristotle, who (in his discussion of the ἄπειρον as ἀρχή at *Ph.* 203a1 ff., see next paragraph) at 204b22-35²⁹ argues that some people went astray in positing a single *infinite* generative body apart from and next to the elements, and at 203b14 mentions Anaximander's view that the ἄπειρον is immortal and indestructible. This presumably enabled Theophrastus to add such a single and infinite principle to Aristotle's diaeresis and to ascribe it to Anaximander. Theophrastus *ap. Simplicium ad init.* moreover tells us that Anaximander is to be distinguished from the other early monists, who had said the single element is Water (or Air, or Fire)³⁰. It is this remark which is further elucidated by Simplicius at the end of the passage quoted at the beginning of the present paper.

For Anaximander's Infinite as the *single* principle (*arché*) Theophrastus could moreover appeal to the whole of *Ph.* 203a1-b15³¹, where Aristotle discusses and criticizes the philosophers who are really deserving to be called thus, all of whom regarded the Infinite «as a sort of principle of the things that are» (203a1-4, πάντες γὰρ οἱ δοκοῦντες ἀξιολόγως ἡφθαι τῆς τοιαύτης φιλοσοφίας πεποιήνται λόγον περὶ τοῦ ἀπείρου, καὶ πάντες ὡς ἀρχὴν τινα τιθέασι τῶν ὄντων). The order of discussion of the philosophers involved is not chronological³². Aristotle begins with the Pythagoreans and Plato, who

26. See J. WIESNER, «Theophrast und der Beginn des Archereferats von Simplicios Physikkommentar», *Hermes* 117, 1989, pp. 288 ff., and my paper «Gibt es Spuren von Theophrasts *Ph. op.* bei Cicero?» in W.W. FORTENBAUGH and P. STEINMETZ, eds., *Cicero's Knowledge of the Peripatos*, RUSCH 4, New Brunswick and London 1989, pp. 138-48, repr. in my *Studies in the Historiography of Greek Philosophy*, Assen and Maastricht, 1990. Compare below, text to n. 29.

27. See e.g. my paper, «Aristotle, Plato and the Preplatonic doxography and chronography», 1986, repr. *Studies Historiography* (above n. 26), p. 29.

28. *Ph. op.* fr. 1~225 FSH&G, 11A13 DK *ap. SIMP. in Ph.* 23.21.-3: Thales and Hippo ὕδωρ ἔλεγον τὴν ἀρχήν (same terminology at ARIST. *Met.* 983b18-22).

29. Quoted above, text to n. 22.

30. Quoted above, text to n. 24.

31. 12A15 DK, 108 KRS. For a rejection in general terms of the ἄπειρον as *arché* see GC 318a 19-25.

32. As is often the case, cf. e.g. *Cael.* 298b12-299a2.

according to him regarded the Infinite «not as an attribute of something else, but as a substance» (203a5-6, οὐχ ὡς συμβεβηκός τινι ἑτέρῳ ἀλλ' οὐσίαν αὐτὸ ὄν τὸ ἄπειρον). We need not comment on this section. Later on Aristotle points out that those who «like Anaximander and the majority of the natural philosophers» posit a *single* infinite principle and fail to introduce other causes such as Intellect or Love (i.e., efficient causes), assume «that this [single principle] surrounds all things and steers all things» (περιέχειν ἅπαντα καὶ πάντα κυβερνᾶν, 206b 6-15)³³. Which of course means that he was convinced that these early thinkers fail to distinguish between the material and the moving cause, or rather that they attribute the functions of the moving cause to the material cause, a point of view that also colours his treatment of the earliest philosophers in the first book of the *Metaphysics*: Aristotle adds that Anaximander and his colleagues made their material-and-moving cause divine, for they held it to be «immortal and imperishable» (ἀθάνατον γὰρ καὶ ἀνώλεθρον)³⁴.

But what did Theophrastus, who had already used the term *arché* in relation to Thales, actually mean when he said of Anaximander: πρῶτος τοῦτο τοῦνομα κομίσας τῆς ἀρχῆς? In his dialectical account of the philosophers who regarded the Infinite as an *arché* Aristotle had omitted to single out the πρῶτος εὐρετής, though to be sure Anaximander, who virtually comes last in his overview, is the earliest philosopher to be mentioned by name there. Theophrastus however at this juncture is explicitly concerned with who made what discovery, just as Aristotle is elsewhere³⁵. One may compare his not entirely original characterization of Anaxagoras, who as he tells us «was the first to modify the views about the principles and supply the cause that was lacking [viz. the efficient cause]»³⁶. One may also adduce his rider to Aristotle's stipulation³⁷ that Thales was the first philosopher of nature. According to Theophrastus (who does not mention Aristotle's name but only says that Thales is «the first person

33. 12A15 DK, 108 KRS. For the hymnic language see D. FEHLING, *Die Wiederholungsfiguren und ihr Gebrauch bei den Griechen vor Gorgias*, Berlin 1969, pp. 201-2, who *inter alia* aptly quotes the beginning of Diog. Apoll. 64B5 DK ~ 605 KRS, 9 LAKS. ARIST. *Ph.* 207a18-21, τὴν σεμνότητα κατὰ τοῦ ἀπείρου, τὸ πάντα περιέχειν καὶ τὸ πᾶν ἐν ἑαυτῷ ἔχειν, may also be an allusion to Anaximander's view.

34. 12B3DK, 108 KRS. Note that this too is a sort of *Wiederholungsfigur* (assonance and synonyms), cf. previous note and text thereto.

35. E.g. *Met.* 983b20-1, Thales as the first natural philosopher; 984b15-32, problem of deciding who was the first to introduce the efficient and/or final cause, Anaxagoras, Parmenides or Hesiod, esp. 31-2, τούτους μὲν οὖν πῶς χρή διανεῖμαι περὶ τοῦ τίς πρῶτος ἐξέστω κρίνειν ὕστερον. See my paper (above n. 27), pp. 26-7, 35.

36. *Phys. op.* fr. 4 ~ 228A FHS&G ap. SIMP. in *Ph.* 27.3-4, πρῶτος μετέστησε τὰς περὶ τῶν ἀρχῶν δόξας καὶ τὴν ἐλλείπουσαν αἰτίαν ἀνεπλήρωσε. See already ARIST. *Met.* 984b15 ff., whose view is to some extent modified by Theophrastus.

37. Above, n. 35.

on record») Thales had many predecessors we know nothing about and who were eclipsed by him³⁸.

The first alternative therefore is that by stating that Anaximander was «the first to introduce this term of the principle», Theophrastus informs us that he was the first philosopher to call the principle «infinite». This receives some support from what he tells us about Anaximenes. This «associate of Anaximander *too* says that the underlying substance is single and *unlimited*, just as he [Anaximander] does, but not *indefinite*, as Anaximander, but *definite* (οὐκ ἄοριστον δὲ ὥσπερ ἐκεῖνος, ἀλλὰ ὠρισμένην), saying that it is Air»³⁹. According to Theophrastus, then, Anaximenes was the *second* philosopher of nature to state that the principle is unlimited (viz., presumably, as to quantity and extension, so «inexhaustible»). But Anaximenes went less far than his master who according to Theophrastus had refused to attribute any (elemental) qualities at all to the *arché*. (What Anaximander himself may have meant is another matter).

But these considerations are not decisive. One should acknowledge that of Theophrastus' three remarks about who was the first to come up with what, two are concerned with pivotal moments in the development of philosophy. The first remark is about when natural philosophy began, the third about an absolutely decisive turning-point. The introduction of the term ἄπειρον can hardly be believed to have the same significance, while that of the all-important notion-and-term ἀρχή undoubtedly is of major importance. One may further argue that the formula λέγει δ' αὐτὴν κτλ., which picks up the immediately preceding τῆς ἀρχῆς and is itself followed once again by an explanation of the meaning of ἄπειρον, is in favour of the focus' being on ἀρχή. So the second alternative is equally defensible⁴⁰. Consequently it is to be preferred, at least in my view, to resign oneself to a *non liquet*.

Some doubts as to the second alternative however linger. Theophrastus, for instance, may have provided a hyper-interpretation of a term Anaximander may have used rather innocuously (ἀρχή in the sense of a «beginning» which determines the course events are to take)⁴¹. And one should not forget that in earlier diaereses of the number and attributes of what Aristotle called the principles of things we do not find the term ἀρχαί, but ὄντα. The earliest

38. *Ph. op. fr. 1 ap. SIMP. in Ph. 23.29-32* (~ 225 FHS&G; the part with this information not at 11A13 DK), πολλῶν μὲν καὶ ἄλλων προγεγονότων, ὡς καὶ τῷ Θεοφράστῳ δοκεῖ κτλ.

39. *Ph. op. fr. 2-226A FHS&G ap. SIMP. in Ph. 24.26-9* (~ 13A5 DK). Aristotle does not ascribe an infinite principle to Anaximenes: according to him (*Met.* 984a5-7) Air is one of the simple bodies, i.e. of the common elements.

40. SIMP. *In. Ph.* 150.18 ff. is not decisive, *pace* M. C. STOKES, *One and Many in Presocratic Philosophy*, Cambridge MA 1971, p. 28 with 274 n. 23, because this may be no more than Simplicius' interpretation of what Theophrastus said.

41. For this meaning of ἀρχή see C.-J. CLASSEN, «APXH - its earliest use», *SCI* 15, 1996, pp. 20-4.

instance thereof is provided by Gorgias, who is followed in various ways by Isocrates, Xenophon, and Plato. Aristotle himself, at the beginning of the *Physics*, quotes this division of ὄντα (without attributing it to anyone in particular) after his own division according to ἀρχαί and affirms that it is equivalent to it⁴². Admittedly, this fails to prove that Anaximander did not use the term ἀρχή, for the term ὄντα here belongs to the author of the division. But it does not support the assumption that he spoke of ἀρχή in the required Aristotelian sense either.

4. In what follows in Theophrastus *ap. Simplicium* one would perhaps expect a reference to the separating out of the opposites from this (infinite) principle, as at Arist. *Ph.* 187a20-1 quoted above⁴³, but what we get is something else (translation continued): «from which (substance and/or principle) all the heavens come to be as well as the *cosmoi* in them». Our source (unlike Aristotle at *Ph.* 187a20-3) is not concerned with the opposites; it switches to cosmogony. Which throws doubt upon Aristotle's reportage, maybe a hyper-interpretation in his own terms⁴⁴. Compare *Ph.* 204b22-35 (a passage already cited above, pp. 2-3) where Aristotle, criticizing the earliest philosophers, speaks of those who introduce the Infinite, or Air, or Water as the *arché*, and adds that the standard elements are opposed to each other: «Air is cold, Water wet, Fire warm». The qualifying opposites are *added* by Aristotle. In the first book of the *Metaphysics* Aristotle does not say that Thales and Hippo made the Wet the principle, or Anaximenes and Diogenes of Apollonia the Cold, or Hippasus and Heraclitus the Hot. He mentions Water, Air, and Fire, which are closer to everyday experience and common language than the opposites. I do not claim that the assumption that the opposites play a part is incompatible with Anaximander's cosmogony, but it is not to be precluded that Anaximander did not explicitly mention them but started with a description of the formation of the main masses that eventually come to constitute our world. But one cannot be sure: Simplicius

42. GORG. *ap.* [ARIST.] *MXG* 979a 14-8; ISOCR. *Hel.* 3 and *Antid.* 268; PL. *Sph.* 242c-e; ARIST. *Ph.* 184b22-5. Full treatment in my paper cited above, n. 27; also cf. my chapter «Sources» in Long (above, n.1), pp. 26-8.

43. n. 8 and text thereto.

44. Though to explain coming to be, perishing and alteration (one of the principal aims of the treatise) ARISTOTLE at *GC* 330a30-b7 defines each of the four sublunary elements as being characterized by a combination of *two* of the four elemental qualities and appeals to this dual nature throughout, he *ibid.* 331a3-6 states that each of the four may «in general terms» be described by means of a single attribute: «earth is something dry rather than cold, water something cold rather than wet, air something wet rather than hot, and fire something hot rather than dry». At *Mete.* 382a3-4 water, as one would expect, is defined as the *wettest* of the simple bodies (authenticity of the treatise disputed, but it is beyond doubt early Peripatetic). So elements may be characterized in terms of single opposites.

may have left out a (Theophrastean) sentence that in one way or another was concerned with the opposites. Such a sentence is found in the doxographical report of ps. Plu. *Strom.* 2 (quoted below, p. 36). But what we find in ps. Plutarch, again, is not fully consistent with the separating *out* of the opposites from the Infinite, as at Arist. *Ph.* 187a20-3 (see above): he mentions an *intermediate* stage between the Infinite and the cosmogonical process, viz. the coming to be out of the Infinite of «that which is productive from the eternal [i.e. the Infinite] of both hot and cold».

However this may be, a presentation which fails to mention the opposites is not without parallels. Compare, first, *Ph.* 250b15-8, where Aristotle insists that all philosophers of nature should admit that motion exists, for «all of them are concerned with the *generation of the cosmos* and the *genesis* and *phthora* of things, which cannot occur unless motion exists». We should further note that Theophrastus elsewhere too in his account of the principles of the philosophers in his *Physics* is concerned with cosmogony, not with the opposites. See his remark about Anaxagoras: «but as the cause of motion (*kinêsis*) and coming to be (*genesis*) he introduced Intellect, for it is through separation by this that he explains the *coming to be of the cosmoi* and of the other natural things»⁴⁵; note the plural «*cosmoi*». See also *ibid.* on Archelaus⁴⁶, «who tried to say something original in his account of the *genesis of the cosmos*». Indeed no reference to the opposites here, neither in Anaxagoras' case nor in that of Archelaus. We may also adduce his general judgement (in a work which cannot be identified beyond doubt) on the majority of the Presocratics: «Theophrastus says that those who speak of the *genesis and phthora of the cosmos* were led astray by four considerations [...]»⁴⁷. And it is the details of cosmogony and cosmology and of the formation of things in general based on the principles assumed that are on his mind also in other fragments of his overview of the *archai* of the early philosophers.

Nevertheless the clause «from which all the heavens [plural] come to be as well as the *cosmoi* [plural] in them»⁴⁸ is difficult. It appears to be undeniable that

45. *Ph. op.* fr. 4 (~ 228A FHS&G) *ap. SIMP. in Ph.* 27.15-7 ~ 59A41 DK.

46. Same fragment, *ap. SIMP. in Ph.* 27.24-5 ~ 60A5 DK.

47. The first sentence of *Ph. op.* fr. 12~184 FHS&G (where it is not in the section «Doxography on Nature») *ap. PH. Aet.* 117. See the overview of the *status quaestionis* at R.W. SHARPLES, *Theophrastus of Eresus. Sources for his Life, Writings, Thought & Influence*. Commentary: Vol. 3.1, *Sources on Physics*, Philos. Ant. 79, Leiden etc. 1998, pp. 131-6, and D.S. SEDLEY, *Lucretius and the Transformation of Greek Wisdom*, Cambridge 1998, pp. 179-85.

48. Paralleled at Hipp. *Haer.* 1.6.1 (~ 12A11 DK), οὗτος ἀρχὴν ἔφη τῶν ὄντων φύσιν τινὰ τοῦ ἀπείρου, ἐξ ἧς γίνεσθαι τοὺς οὐρανούς καὶ τὸν ἐν αὐτοῖς κόσμον. The editors of Hippolytus (DIELS in the *Doxographi Graeci*; WENDLAND; MARCOVICH) accept RITTER's emendation τοὺς ἐν αὐτοῖς κόσμους (plural as in Theophrastus' text, as at ps. PLU. *Strom.* 2 ~ 12A10 DK, and at AET. 1.3.3 DIELS (Ps. Plutarch only) ~ 12A14 DK), although the mss. of Hippolytus and his excerptor

Theophrastus – rightly or wrongly – attributed a plurality of world-systems to Anaximander, just as – presumably correctly – he did attribute such a plurality to Anaxagoras (see above)⁴⁹. Whether we have to believe that according to Theophrastus' reading there is a succession of single world-systems, as for instance posited by Empedocles, or a vast number of such systems as posited by (Anaxagoras and) the early Atomists⁵⁰ is unclear. What Anaximander himself may have meant remains even more unclear, and I prefer to leave this question open⁵¹.

What one should do in the first place is to try and interpret this difficult clause «from which all the heavens come to be as well as the *cosmoi* in them». A quite common and in itself not implausible assumption is that «heaven» here stands for «world-system», and «*cosmos*» for the orderly arrangement of such a system⁵². Then the heavens and the *cosmoi* would be strictly contemporaneous. But this is to ignore that Theophrastus speaks of a *coming to be* of the heavens and of the *cosmoi* in them. I suggest that what is at issue is a process of generation in two phases. The preposition «in» (ἐν), I believe, is short for «being in» (ἐνόντας)⁵³, i.e. being contained in. The heavens which – according to Theophrastus' interpretation of this principle – were in some way or other (potentially, a Peripatetic would argue) contained in the Infinite, *come to be* out of it⁵⁴, and they contain the *cosmoi* in the same sort of way as they themselves were contained in the Infinite. The *cosmoi* *come to be* from and in, that is to say eventually evolve from and in, the heavens. The heavens and their contents in the sense of proto-world-systems evolve into full-blown world-systems. This is

Cedrenus (1.276.16-7 Bekker) all have the singular. At 12A11 DK, on the other hand, the singular is read and questionably explained in the apparatus as meaning «die innerhalb ihrer herrschende Ordnung». But *ad sententiam* there is no difference between the plural κόσμους and the singular κόσμον, because if there is a plurality of «heavens» and if each of these contains a «*cosmos*», there will be a plurality of «*cosmoi*».

49. See further M. SCHOFIELD, «Anaxagoras' other world revisited», in K.A. ALGRA, P.W. VAN DER HORST and D.T. RUNIA, eds., *Polyhistor. Studies in the History and Historiography of Ancient Philosophy*, Phil. Ant. 72, Leiden etc. 1996, pp. 3-19.

50. See e.g. KRS, pp. 124-6.

51. Though in view of Anaximander's use of what came to be called the principle of sufficient reason in order to explain the suspension of the earth in mid-space, the point of symmetry of the earth-cylinder coinciding with that of the heavens (ARIST. *Cael.* 295b10-16 ~ 12A26 DK, 123 KRS), one could argue that there is no sufficient reason why there should not be a plurality of worlds, simultaneously, in succession, or both simultaneously and in succession. [Cf. now R. MCKIRAHAN, «Anaximander's Infinite Worlds», in A. PREUS (ed.), *Before Plato*, Albany 2001, pp. 49-65].

52. Cf. above, n. 48.

53. Cf. Aristotle on the opposites as contained in (ἐνούσας) the Infinite, above n. 8.

54. Presumably the Infinite still surrounds the heavens, just as the heavens surround the *cosmoi*; cf. *Ph.* 203b6-15, quoted above, text to n. 33. We may compare the report at AET. 5.19.4 DIELS (PS. PLUTARCH only; ~ 12A30 DK, 133 KRS), according to which the first animals were «surrounded by thorny barks» (φλοιοῖς περιεχόμενα ἀκανθώδεσι).

a view of a full-blown world-system as bipartite: the heavens on one side, the sublunary world on the other⁵⁵.

This interpretation is to some extent consistent (but so is the traditional one, which does not read a development in different phases in Theophrastus' report) with the description in rather more stages of Anaximander's cosmogony reported at ps. Plu.⁵⁶ *Strom.* 2:⁵⁷

He says that at the generation of this world⁵⁸ that which is productive from the eternal [i.e. the Infinite] of both hot and cold separated off and from it a ball of flame (φλογὸς σφαῖραν) grew round the air about the [cylindrical] earth, like bark⁵⁹ on a tree. When the ball burst and [the flames] were enclosed in certain rings, the sun and the moon and the stars came into being.

Ps.Plutarch, unlike Theophrastus *ap.* Simplicium, is explicit about the elemental opposites: from the Infinite a generative something is separated out which next produces the opposites Hot and Cold; through separating out again, I presume. Such a process of separation is indeed described, but the opposites are no longer mentioned. In their stead Ps.Plutarch mentions «the actual phenomena as we experience them»:⁶⁰ a ball of flame comes to be, enclosing the air about the earth, both of which have clearly also come into being. That is to say, both the bark-like ball of flame and the enclosed air and earth must have come into being from Ps.Plutarch's generative something. Such an enclosing ball may in my view certainly be called, proleptically, by the name of «heaven», because by a further process of separation it develops into the heavenly bodies we know from experience. A world-system of heavens and *cosmos* is then in place as to its main outlines.

I believe it is this violent process of interaction between flame on the one hand and air and earth on the other which, in a shorter form, is described in the

55. Quite Aristotelian. For parallels see my *The Pseudo-Hippocratic Tract. ΠΕΡΙ ΕΒΔΟΜΑΔΩΝ and Greek Philosophy*, Assen 1971, pp. 42-5; add ARIST. *Cael.* 280a21-2, ἡ δὲ τοῦ ὅλου σύστασις ἐστὶ κόσμος καὶ οὐρανός, *Mete.* 339a 19-21 (with the comments of ALEX. in *Mete.* 5.15-2), 339b 4, 339b 17-18, 340b 10-12 (with the comments of ALEX. in *Mete.* 13.17-8), 344a 9, 344b 12, 346b 10-11, 355a 23.

56. According to Diels' well-known thesis this ps.Plutarch depends for the most part on Theophrastus. The emphasis on astronomy however suggests that Eudemus' *History of Astronomy* (frs. 143-149 WEHRLI) may also have contributed something. For Aristotle see below, n. 60.

57. 12A10 DK. I quote the transl. of J. BARNES, *Early Greek Philosophy*, Penguin Classics Harmondsworth 1987, pp. 72-3, slightly modified; additions between square brackets are mine.

58. Note the restriction to a single world-system. But Ps.PLU. *Strom.* 2 too, a little earlier, speaks of an infinite plurality of such systems, just as Hippolytus and Theophrastus.

59. Cf. above, n. 54 *ad fin.*

60. Thus C.-J. CLASSEN, «Anaximander and Anaximenes: the earliest Greek theories of change?», *Phronesis* 22, 1977, p. 91. Perhaps Ps.Plutarch's opposites derive from Aristotle (retrograde contamination of the doxography).

Theophrastean passage as the generation of the heavens and of the *cosmoi* which are «in» them and develop out of them⁶¹.

The sea (note that somewhat further on in this passage this is replaced by Aristotle's Wet, but next enjoys a come-back) is mentioned Arist. *Mete.* 353b6-11:⁶²

Others, wiser in human knowledge, give an account of its [scil. the sea's] origin. At first, they say, the whole area round the earth was wet. Then the sun began to dry it up, part of it evaporated and is the cause of winds and the turnings back of the sun and moon, while the remainder forms the sea. So the sea is growing less by being dried up, and will end by being some day entirely dry. [Rev. Oxf. Transl., modified].

Alexander tells us that *according to Theophrastus* Aristotle here has Anaximander in mind⁶³. Whether or not Theophrastus was right is not to the point now. What is important is that in this indirect way his view of the details of Anaximander's cosmogony and cosmology is further attested and elucidated.

5. We now come to the most difficult section of the Anaximander «fragment». I quote again the passage at issue:

ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι κατὰ τὸ χρεών· δίδοναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας κατὰ τὴν τοῦ χρόνου τάξιν, ποιητικωτέροις οὕτως ὀνόμασιν αὐτὰ λέγων.

The first problem is: to what does the formula τοῖς οὖσι refer, i.e. what are these «existing things»? If we take the same formula when found in different places in the same passage to have the same meaning each time, they will be the «existing things» of which according to the first sentence at *in Ph.* 24.13 f. the Infinite is the element-and-principle (ἀρχὴν τε καὶ στοιχεῖον εἴρηκε τῶν ὄντων τὸ ἄπειρον). But it is not immediately clear what these existing things are. It is obvious that all the things which exist *now* are included: the cosmos and its parts, individual living beings, individual objects. This makes sense in the phrase ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι, which we may translate as follows: «from which things coming to be occurs for the things that exist, to these their perishing too comes about». But one should add that this holds at all times: one cannot exclude the heavens and the *cosmoi*

61. Cf. above, n. 56 *ad. init.*

62. 12A27 DK, in part; 132 KRS.

63. ALEX. APHR. in *Metaph.* 66.23.67.12 (THPHR. *Ph. op.* fr. 23 (in part) ~ FHS&G 221 – not in the «Doxography on Nature» section —; 12A27 DK, 132 KRS) paraphrases Aristotle and adds ταύτης τῆς δόξης ἐγένετο, ὡς ἱστορεῖ Θεόφραστος, Ἀναξίμανδρος τε καὶ Διογένης. See SHARPLES (above, n. 47) *ad loc.*, pp. 219-20, who attributes this passage to THEOPHRASTUS' *On Waters*.

from the ὄντα, from the things that come into being and perish⁶⁴. But in the present context, notwithstanding the meaning of ὄν we are used to, the Infinite is not one of these ὄντα, for *qua* principle it does not come into being and does not perish. And it should, at least in my view, be obvious that Theophrastus' opening phrase Ἀναξίμανδρος [...] ἀρχὴν τε καὶ στοιχείον⁶⁵ εἶρηκε τῶν ὄντων τὸ ἄπειρον is modelled after Aristotle's phrase at the beginning of his overview of those who regarded the *Infinite* as a, or the, principle (*Ph.* 3.4, quoted and discussed more fully above)⁶⁶ πάντες... πεποιήνται λόγον περὶ τοῦ ἀπείρου καὶ πάντες ὡς ἀρχὴν τινα τιθέασιν τῶν ὄντων. Here too the ὄντα are all things at all times, except the principle itself, of course.

The coming to be or the past, the being there or the present, and the perishing or the future. *Pace* Heidegger⁶⁷, we should avoid attributing a profound sense to the formulas γένεσις ἐστι and φθορὰν [...] γίνεσθαι, and *pace* Kahn there is nothing special about the dative τοῖς οὐσι⁶⁸. For ἐξ ὧν ... εἰς ταῦτα compare

64. Compare Theophrastus on Hippasus and Heraclitus, *Ph. op. fr.* 1 (~ 225 FHS&G, 18A7 and 25A5 DK) *ap. SIMP. in Ph.* 23.33-24, who «made the principle Fire» and held «that the things that are are from Fire ... and are resolved again into Fire» (24.2-3, πῦρ ἐποίησαν τὴν ἀρχὴν καὶ ἐκ πυρὸς ποιοῦσι τὰ ὄντα πυκνῶσει καὶ μανῶσει καὶ διαλύουσι πάλιν εἰς πῦρ).

65. For the formula «principle and element» see ARIST. *Met.* 938b8¹¹, «that of which all the things that are (ἅπαντα τὰ ὄντα) consist, and from which they first come to be, and into which they are finally resolved – the substance remaining, but altering as to its qualities – this, they say, is the element and principle of things» (τοῦτο στοιχείον καὶ αὐτὴν ἀρχὴν φασιν εἶναι τῶν ὄντων). This passage is entirely compatible with the view of the early monists cited (and criticized) in the first chapter of the *De generatione et corruptione* (see above, section 2 *ad init.*). Cf. *Ph.* 184b25, *Met.* 1080b31-2, 1091b12 and 23-4.

66. Text to n. 31.

67. *O.c.* (above, n.2) p. 315.

68. KAHN (above n. 3) p. 173. For the dative with γένεσις ἐστι see e.g. ARIST. *HA* 555a22, ἡ δὲ γένεσις ἐστι τούτοις τοῦ ἕαρος, *GA* 777a28, ἐπὶ κεφαλὴν δ' ἡ γένεσις ἐστι τοῖς ζώοις, *GAL. Simp. med.* 12.254.18-9 K., ἐκ γὰρ τοιούτου αἵματος ἡ τε πρώτη γένεσις ἐστι καὶ ἡ μετὰ ταῦτα τροφή ταῖς σαρκίν, and *SIMP. in Cael.* 176.11-2, τοῖς τοιούτοις δηλονότι τοῖς περὶ ἐν ὑποκείμενον μαχομένοις ἡ γένεσις ἐστι καὶ ἡ φθορά. For γένεσις ἐστι «from something» *GAL. Simp. med.* 12.254.18-9 K., *De trem.* 7.630.15-7 K., ὅθεν τε ἡ γένεσις ἐστι τῇ τοιαύτῃ χολῇ, τηκομένης γὰρ ἔφη γίνεσθαι σαρκὸς αὐτήν, *SEXT. M.* 10.266, ἐπὶ μὲν γὰρ τῶν ἐναντίων ἡ τοῦ ἐτέρου φθορά γένεσις ἐστι τοῦ ἐτέρου (cf. e.g. *SIMP. in Ph.* 1330.36, ἐνθα γὰρ ἡ ἄλλου φθορά ἄλλου γένεσις ἐστι κτλ.), *PS. JUST. Res.* 591D MOREL, καὶ τὸ τὰ στοιχεῖα ἀφθαρτα ὑπάρχειν, ἐξ ὧν ἡ ἐκάστου πράγματος γένεσις ἐστι, *SIMP. in Cael.* 98.26-7, ὥστε καὶ ἡ ἄλλου φθορά ἄλλου γένεσις ἐστι καὶ ἡ ἄλλου γένεσις ἄλλου φθορά. The formula γένεσις ἐστὶ is at ARIST. *GC* 317a25 and 317b24, *Met.* 1082b30, [ARIST.] *Col.* 792b21; for the infinitive e.g. ARIST. *GC* 318a22-5, ἄρ' οὖν διὰ τὸ τὴν τοῦδε φθορὰν ἄλλου εἶναι γένεσιν καὶ τὴν τοῦδε γένεσιν ἄλλου εἶναι φθορὰν κτλ.

For φθορὰν [...] γίνεσθαι cf. e.g. ARIST. *GC* 336b23-4, ὥστε συμβαίνει διὰ τὴν τούτων γένεσιν ἄλλοις γίνεσθαι φθορὰν, *Resp.* 427b8-9, τότε συμβαίνει γίνεσθαι τὴν φθορὰν τοῖς ἀναπνεύουσιν, *THPHR. CP* 2.11.8, καὶ γὰρ τὰς ῥίζας ἀσθενεῖς φησιν εἶναι τῶν εὐθέων ἐξ ὧν ἀμφοτέρων γίνεσθαι τὴν φθορὰν. For φθορά γίνεσθαι e.g. ARIST. *Juv.* 469b26, φθορά γίνεσθαι τοῦ πυρός, *Resp.* 487b31-2, πᾶσι μὲν οὖν ἡ φθορά γίνεσθαι διὰ θερμῶς τινος ἐκλείψιν, and *GAL. Comp. med.* 13.194.14-5 K., καθάπερ ἐν τῇ γαστρὶ πολυειδὲς ἡ φθορά γίνεσθαι τῶν ἀπεπτηθέντων.

not only Aristotle's «comes from x-perishes to x» formula mentioning the principle in the singular⁶⁹, but also *Ph.* 231b10-1, εἴπερ ἐξ ὧν ἐστὶν ἐκάτερον, εἰς ταῦτα διαιρεῖται and *GC* 316b14-5, ἀλλὰ πῶς εἰς ταῦτα διαλύεται καὶ γίνεται ἐκ τούτων. Here plural forms are found⁷⁰. Accordingly, agreeing with many scholars who have dealt with this issue, I believe that the clause ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι, in spite of its chiasmic symmetry (which as we have seen can be sufficiently paralleled) belongs in the first place to Theophrastus. That it may be a paraphrase of something Anaximander said is not, of course, to be precluded. See further below, end of this section.

I moreover think that a further chiasmic symmetry is at issue. Theophrastus, as we have seen, writes ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι κατὰ τὸ χρεών· διδόναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας κατὰ τὴν τοῦ χρόνου τάξιν, ποιητικωτέροις οὕτως ὀνόμασιν αὐτὰ λέγων. The formula κατὰ τὸ χρεών is generally seen as a quotation, or mezzo-quotation, of Anaximander's own words. What I believe is that it is explained by Theophrastus' formula κατὰ τὴν τοῦ χρόνου τάξιν⁷¹, which follows a section of this sentence in which, on good grounds, he is generally believed to quote (perhaps in abridged form) Anaximander's own phraseology:

69. *Met.* 983b9-1 quoted above, n. 65, 1066b36-7, *EN* 1173b5-6, *Phys.* 204b33-4, 254a11-4, and *GC* 317b24-5 (on οὐσία). A Theophrastean variety of the formula in the singular is at *CP* 6.7.6, συμβαίνει <δὲ> τῷ οἴνῳ τὴν ἐκστατικὴν ταύτην ποιεῖσθαι φθορὰν ἐξ οὐπερ καὶ ἡ φυσικὴ γένεσις· ἐκ γὰρ τοῦ ὀξέος καὶ εἰς τὸ ὀξύ καθάπερ εἰς τὴν ὕλην ἀναλυόμενον μεταβάλλει. See further McDIARMID at FURLEY and ALLEN (above, n. 3) 191-3. FEHLING (above n. 33) 217 points out that this balanced formula must have been quite common; apart from ARISTOTLE he cites XENOPH. 21B27 and the final sentence of DIOG. AP. 64B2 DK ~ 4 LAKS.

70. Cf. ARIST. *Met.*, 1035a24-5, διὰ γὰρ τοῦτο ἓνα μὲν ἐκ τούτων ὡς ἀρχῶν ἐστὶν εἰς ἃ φθίρονται, ἓνα δὲ οὐκ ἐστὶν, CHRYSIPPUS ap. STOB. 1.10.16c (~ AR. DID. fr. 21, SVF 2.413), τέτταρα λέγων εἶναι στοιχεῖα*** [HEEREN followed by USENER, DIELS and WACHSMUTH fills the lacuna with <πῦρ, ἀέρα, ὕδωρ, γῆν, ἐξ ὧν συνίστασθαι πάντα καὶ ζῶα>] καὶ φυτὰ καὶ τὸν ὅλον κόσμον καὶ τὰ ἐν αὐτῷ περιεχόμενα καὶ εἰς ταῦτα διαλύεσθαι, M. ANT. 7.2, ἄλλως τε καὶ τῆς διαλύσεως εἰς ταῦτα γινομένης, ἐξ ὧν ἕκαστον συνίσταται, and PS. ALEX. APHR. *Quaest.* 109.24-5, γίνεται γὰρ τῶν σηπομένων τέλος τὸ εἰς ταῦτα διαλυθῆναι, ἐξ ὧν ἐγένετό τε καὶ συνέστη.

71. Cf. ARIST. *GC.* 336b12-6, πάντων γὰρ ἐστὶ τάξις, καὶ πᾶς βίος καὶ χρόνος μετρεῖται περιόδῳ, πλὴν οὐ τῇ αὐτῇ πάντες, ἀλλ' οἱ μὲν ἐλάττωσι οἱ δὲ πλείονι· τοῖς μὲν γὰρ ἐνιαυτός, τοῖς δὲ μείζων, τοῖς δὲ ἐλάττων ἡ περίοδος ἐστὶ τὸ μέτρον, THPHR. *Ph. op.* fr. 4 ap. SIMP. in *Ph.* 24.4-6 (~ 225 FHS&G, HERACLIT. 22A5 DK), ποιεῖ δὲ καὶ τάξιν τινὰ καὶ χρόνον ὠρισμένον τῆς τοῦ κόσμου μεταβολῆς κατὰ τινὰ εἰμαρμένην ἀνάγκην, PH. *Ebr.* 48, οὗτος μὲν γὰρ τὴν ἐν χρόνοις τάξιν φυλάττειν οἶεται δεῖν, τὰ πρεσβύτερα πρότερον καὶ τὰ νεώτερα αὐθις εἰς κοινωνίαν ἄγεσθαι δικαίων, PLU. *Qu. con.* 639B, σκόπει δὲ μὴ μᾶλλον ἔφη τὴν κατὰ χρόνον τάξιν Ὀμηρος ἀποδείκνυσιν· πρῶτον γὰρ αἰὲς πυγμὴ παρ' αὐτῷ, δεύτερον πάλῃ, καὶ τελευταῖον ὁ δρόμος τῶν γυμνικῶν αἰὲς τέτακται, *Mul. virt.* 253E, οὐδὲν οἰόμενοι τῆς κατὰ χρόνον τάξεως δεῖσθαι τὴν ὑποκειμένην ἱστορίαν, [GAL.] *Foet. form.* 2.663.12-3 K., καὶ περὶ τῆς κατὰ τὸν χρόνον τάξεως ἕκαστου τῶν μορίων.

δίδοναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας. The structure of this medley of quotation and exegetic paraphrase would then be as follows: (a) Theophrastus, ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι + (b) Anaximander, κατὰ τὸ χρεῶν – (α'), Anaximander, δίδοναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας + (β'), Theophrastus, κατὰ τὴν τοῦ χρόνου τάξιν. In other words, (a), ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι proleptically helps to explain the opaque (α'), δίδοναι γὰρ [γὰρ being epxegetive] αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας, and (β'), κατὰ τὴν τοῦ χρόνου τάξιν, conversely explains the preceding opaque formula κατὰ τὸ χρεῶν.

So, supposing Theophrastus' formula «according to the order of time» indeed explains Anaximander's «according to what must be», the above suggestion that Theophrastus «from which things coming to be is for the things that exist, to these their perishing too comes about» pertains at all times to the past, present, and future of the ὄντα in general is confirmed.

Before we attempt to interpret the phrase «for they make just redress and pay the penalty to each other for the injustice» (this is a bit clumsy attempt to render the *Wiederholungs*-relation between δίκην and ἀδικίας), we should be clear about the meaning of the phrase ποιητικωτέροις οὕτως ὀνόμασιν αὐτὰ λέγων. The word αὐτὰ («this») here takes up the previous αὐτὰ and so refers to the ὄντα and what is affirmed of them. The word οὕτως not only qualifies the formula ποιητικωτέροις ὀνόμασιν, but belongs with the phrase as a whole, and goes more specifically with λέγων, thus marking a quotation⁷². The formula ποιητικώτερα ὀνόματα meaning «somewhat poetical words» cannot be exactly paralleled in either Aristotle⁷³ or the remains of Theophrastus, but compare Plato at the end of the myth of the soul at *Phdr.* 257a, τοῖς ὀνόμασιν [...] ποιητικοῖς τισιν⁷⁴, and e.g. Arist. *Po.* 1457b1-2, where he distinguishes between a κύριον ὄνομα and (*inter alia*) one that is a μεταφορά⁷⁵. What Theophrastus

72. Cf. ARIST. *GC* 199b14-5, ὅλως δ' ἀναιρεῖ ὁ οὕτως λέγων [discussed in what comes before] τὰ φύσει τε φύσιν, SIMP. in *Cael.* 77.4-5. Referring to a quotation which follows: Erot. *Voc. hipp.* 49.11 KLEIN, ATH. 3.64.17 KAIBEL, HIPPOCR. *Haer.* 9.10.6 (HERACLIT. 21B63 DK); to one which precedes: PHLP. *Aet.* 107.22. Also to what precedes ARIST. *HA* 512b12, Συνένεσις μὲν οὖν καὶ Διογένης οὕτως εἰρήκασιν, THPHR. *Sens.* 61, οὕτως εἴρηκεν; to what follows Arist. *Sens.* 443a23, Ἡράκλειτος οὕτως εἴρηκεν.

73. ποιητικώτερος occurs twice in the *Corpus Aristotelicum*, viz. at *PA* 648a2 and *Prbl.* 958b21, where it means «stronger».

74. See K.J. DOVER, *The Evolution of Greek Prose Style*, Oxford 1997, pp. 103-6.

75. Also cf. *Rh.* 1406a5 ff., DOVER, *o.c.* (previous n.) 86-7, and A. LAKS, «Substitution et connaissance: une interprétation unitaire (ou presque) de la théorie aristotélécienne de la métaphore», in D.J. FURLEY and A. NEHAMAS, eds., *Aristotle's Rhetoric. Philosophical Essays*, Princeton 1994, pp. 283-305. At *Met.* 991a21-3 (μεταφορὰς ... ποιητικὰς) and *Mete.* 357a24-7 (πρὸς ποίησιν μὲν γὰρ οὕτως εἰπὼν ἴσως εἴρηκεν ἱκανῶς, ἡ γὰρ μεταφορὰ ποιητικόν) Aristotle criticizes, respectively, Plato and Empedocles.

means, of course, is that Anaximander's turn of phrase is metaphorical. In his view the ὄντα in general (think of the cosmogony and cosmology) are not *agents* so this form of speech is not really appropriate in a physicalist context⁷⁶. One should compare his criticism (without mentioning the name) of Aristotle's explanation of the motion of the heavens⁷⁷ at *Met.* 5a14b16. The butt of his critique in this other passage is what he calls the ἔφεσις of the heavenly bodies: to be consistent, one should attribute a soul to them, otherwise the use of ἔφεσις to explain what happens would be a mere «similitude and metaphor» (*Met.* 5b1-2, εἰ μὴ τις λέγοι καθ' ὁμοιότητα καὶ μεταφοράν).

The emphatic combination δίκην + τίσιν practically amounts to saying the same thing twice over. It cannot be paralleled. The only formulas I have found which come close are, first, *Pl. R.* 616a, where Plato puts δίκας τε καὶ τιμωρίας [τιμωρία being about synonymous with τίσις] on a par (but this is in the myth, and the style of Plato's myths is poetic)⁷⁸. The second is in a poem to be dated to the imperial period, viz. a *Hymnus in Dionysum*⁷⁹, where τίσις is a consequence of the δίκη Zeus has established for those who fight the gods. Anaximander's διδόναι [...] δίκην [...] τῆς ἀδικίας is certainly emphatic, a sort of polyptoton⁸⁰. Whether in Anaximander's own day and place this would have been considered poetic remains to be seen: there is no evidence one way or the other. Even so, Theophrastus' point may well be anachronistic. As to the formula κατὰ τὸ χρεών, Theophrastus – who himself never uses the word χρεών – will not only have regarded the quasi-personification by means of the article (suggesting «Fate») as poetic, but also have been reminded of χρεών as euphemistically signifying

76. Compare, on the other hand, GOETHE'S «Selbstanzeige» of his novel *Die Wahlverwandtschaften*: «Er [scil., der Verfasser] mochte bemerkt haben, daß man in der Naturlehre sich sehr oft ethischer Gleichnisse bedient, um etwas von dem Kreise menschlichen Wissens weit Entfernte näher heranzubringen [...]» In: *Werke*. Hamburger Ausgabe Bd. 6, München 101962, p. 639.

77. The divine First Mover (a final cause) acts by «causing motion the way an object of love causes motion» (*Met.* 1072b3).

78. DOVER, *l.c.* above n. 74.

79. P. Ross. *Georg.* 1.11.55-6, τοίτην [οὖν] ἐρίδουπος ἐπεκράανε Κρονίων / ἀνδράσι θειομάχοισι δίκην, ἵνα τίσις [ἐπ]ητ[αι]. PROCL. In *R.* 2.184.14 ff., wilfully explaining *Pl. R.* 616a by referral to *Grg.* 525b-c and *Lg.* 728c (where Plato in fact states the difference), distinguishes between δίκη and τίσις. So does OLYMP. In *Grg.* 47.7.1 ff., the latter arguing that ἡ μὲν γὰρ δίκη καθολικωτέρα ἐστίν and ἡ δὲ τίσις μερική.

80. See FEHLING (above, n. 33) p. 164, on «Wiederholungen stammverwandter Wörter», and J. D. DENNISTON, *Greek Prose Style*, Oxford 1952, p. 124 ff., on assonance. Some parallels found: *Pl. Grg.* a-b (a quite rhetorical passage: note the polyptoton in Socrates' first and the *parailellismus membrorum* in his second clause), ΣΩ. ἄρ, οὖν οὐ δικαιοσύνην τινὶ χρώμενοι κολάζουσιν οἱ ὀρθῶς κολάζοντες; ΠΩΛ. δῆλον δὲ. – ΣΩ. χρηματιστική μὲν ἄρα πενίας ἀπαλλάττει, ἱατρική δὲ νόσου, δίκη δὲ ἀκολασίας καὶ ἀδικίας; D.CHR. *Or.* 59.7.6-7, τούτων δὲ τῆς ἀδικίας αὐτίκα μάλα ὑφέξεις δίκην (rhetorical); J.CHR. in *Matth.* MPG 57.472.6-7, οὐ καταβοᾷ δὲ μόνον, ἀλλὰ καὶ ἀμυνομένη τῆς ἀδικίας τὴν ἐσχάτην ὑμᾶς ἀπαιτεῖ δίκην (highly emphatic); SYNES. *Ep.* 121.50-2, εὐχομαι καὶ οἶκοι καὶ ἐπὶ τῶν κοινῶν ἱερῶν ὑπερσχεῖν τῆς ἀδικίας τὴν δίκην καὶ πο-

«death», a meaning that is not appropriate to what is inanimate. Furthermore, there exists only one parallel for the formula κατὰ τὸ χρεών (but without τό) in the whole of extant Greek literature, viz. Heracl. 22B80 DK, εἰδέναι δὲ χρὴ τὸν πόλεμον ἔόντα ξυνόν, καὶ δίκην ἔριν, καὶ γινόμενα πάντα κατ' ἔριν καὶ χρεών. Here χρεών is Diels' generally accepted emendation of χρεώμενα, the conjecture itself being inspired by Anaximander's κατὰ τὸ χρεών. If this is correct (no better alternative having been proposed), Heraclitus' use of the formula – also note its context – confirms its poetic character. In poetry and prose one finds the expression χρεών (ἔστι etc.), simply meaning «(it) must», or «should», or «is necessary»; no article here⁸¹. And there is only one further parallel for τὸ χρεών in the sense one needs in Theophrastus' quotation, viz. Chrysippus' explanation of the various appellations of Fate according to Diogenianus' summary⁸².

On the other hand, neither the phrase ἐξ ὧν δὲ ἡ γένεσις ἔστι τοῖς οὐσι καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι nor the formula κατὰ τὴν τοῦ χρόνου τάξιν can be said to be poetic in the sense required by Theophrastus' observation. This, I believe, is decisive with regard to the difficult question of the extent of the verbatim quote from Anaximander⁸³.

6. I have argued above that the Infinite which *qua* principle does not come to be, cannot be one of the ὄντα which «make just redress and pay the penalty to each other for the injustice». The ὄντα, moreover, like parties in a trial, make just redress and pay the penalty to *each other*, not to the Infinite. If what is going on is compared to the injustice which leads to a lawsuit, to the lawsuit itself, and to its outcome, one needs a judge (or umpire). This judge, one surmizes, is the divine Infinite which according to Aristotle «steers and surrounds all things»⁸⁴. Parties in a (civil) lawsuit do not make just redress and pay the penalty to the judge. But we may also think of a law which has become ingrained in nature in general, just as the unwritten laws – sometimes, as in Sophocles' *Antigone*, said to be of divine origin – of humanity, or of the Greeks⁸⁵, have or should have

81. Already PARM. 28B2.11, 8.11 and 8.54 DK. Frequent in tragedy (esp. Euripides) and comedy. 8 instances in Democritus (e.g. 68B39 DK), often in Thucydides and Plato, 6 instances in Aristotle (e.g. EN 1094a28).

82. Ap. EUS. PE 6.8.8-10, 323.13 MRAS (~ SVF 2.914). Here Χρεών (as well as πεπρωμένην and εἰμαρμένην) should be written with a capital, just as Μοίρας, Λάχεσιν, Ἀτροπον, and Κλωθώ. There is a single instance of τὸ χρεών in PLATO: *Phdr.* 255a7 (the myth; cf. DOVER, above, n. 74). For χρεών as «fate» (or «death») cf. LSJ s.v. II.1, KRS, p. 118; in archaic and classical literature this meaning is virtually restricted to poetry.

83. Accordingly I agree with F. DIRLMEIER, «Der Satz des Anaximandros von Milet», *RhM* 87, 1938, repr. in H.-G. GADAMER, ed., *Um die Begriffswelt des Vorsokratiker, Wege der Forschung*, p. 9, Darmstadt 1968.

84. Above, text to n. 33.

85. Cf. e.g. SOPH. *Ant.* 450-61, PL. *L.* 793a, XEN. *Mem.* 4.4.19, ARIST. *EN* 1162b22-3, ANAX. *Rh. Alex.* 1.7-8.

become interiorized (naturally they can be formulated).

We may recall that Aristotle argues that Anaximander and other natural philosophers attribute the function of the moving, or efficient, cause to their material principle, and that this is a mistake. Even so the mistake, according to him, was made. In what way the Infinite manages to direct (κυβερνᾶν - another metaphor) the coming to be and perishing that is going on remains unclear. Anaximander says κατὰ τὸ χρεών, «according to what has to be»⁸⁶. This is not very helpful. One understands why Theophrastus, appealing to a different register, explained this as «according to the order of time»⁸⁷. Apparently, and not unreasonably, Theophrastus thought of what we would call laws of nature, whereas Anaximander described what has to be in moral terms. Nonetheless, such unclarity is *de rigueur* when a divine being is concerned, whose ways are for the most part hidden from man. If an implicit argument is involved, it has to be the above one from analogy: where unjust behaviour has occurred and justice is done there will be a law that should be applied. The *comparatum* may be an unwritten law, recognized as fundamental for human behaviour. Most probably the kind Anaximander had in mind is indeed an unwritten law, this time pertaining to a world-system as a whole, just as the unwritten laws which pertain to humans alone do or should determine certain types of human behaviour. But if he thought of positive law one needs a lawgiver who has formulated it, and a judge who applies it. Then, in the present case law, lawgiver, and judge are one and the same divine entity.

For the verb κυβερνᾶν in relation to δίκη⁸⁸ compare Cleanthes' words in the

86. Cf. above, note 81 and text thereto.

87. Cp. THEOPHRASTUS on Heraclitus *ap. SIMP. in Ph.* 24.4-6 quoted above, n. 71, and the comments of DIRLMEIER (above n. 83) 91-2.

88. *ap. STOB.* 1.1.12 (~ *SVF* 1.537), δὲς δὲ κυρῆσαι / γνώμης, ἣ πίσυνος σὺ δίκης μέτα πάντα κυβερνᾷς. Compare HESIOD's prayer to Zeus *Op.* 9, δίκη δ' ἔθνε θεμιστας. HEROD. *Mim.* 2.99-100 has his γραμματεὺς advise: πάντα τὴν δίκην ὀρθῇ / γνώμῃ κυβερνᾷτ', which according to Headlam *ad. loc.* is «one of the commonest metaphors». According to AET. 2.7.1 Diels (this part in *STOB.* 1.22.1a only; ~ 28A37 DK) Parmenides called the «cause of all movement and coming to be» (αἰτίαν πάσης κινήσεως καὶ γενέσεως) by the names of δαίμονα κυβερνήτην καὶ κληδοῦχον [...] δίκην τε καὶ ἀνάγκην. This presumably is an *interpretatio* of, *inter alia*, the δαίμων ἣ πάντα κυβερνᾷ (we are not told in what way she manages this) of 28B12.10 DK. CLEM.AL. *Protr.* 10.100.4 wants his sailor to «call in the help of the heavenly helmsman» (τὸν οὐράνιον κυβερνήτην παρακαλῶν). Also cf. *Pl. P.* 1.86-7 (also quoted *Stob.* 3.11.7), νόμα δίκαιον / περὶ δαλίων στρατόν - the scholia *ad. loc.* explain: νόμα [...] ἀντὶ τοῦ κυβερνᾶν. For the idea compare HERACL. 22B64 DK *ap. HIPPOCR.* 9.10.7, τὰ δὲ πάντα οἰακίζει Κεραινός (also *ap. PHLD. Piet.* 6a, p. 70, Gomperz, who adds καὶ Ζ[-scholars like to read Ζ[εύς]). οἰακίζει is explained by Hippolytus *loc. cit.* as κατευθύνει; see further G.S. KIRK, *Heraclitus. The Cosmic Fragments*, Cambridge, 1962, pp. 354-6, M. MARCOVICH, *Eraclito. Frammenti*, Florence 1978, pp. 295-8. Compare also GREG. NAZ. *Carm. seips.* MPG 37.1425.14, πῶς οἰακίζει κυβερνᾷ. *Pl.* (?) *Clit.* 408b speaks of the «art of steering human beings - this art which you often call political, Socrates»; see S.R. SLINGS, *Plato: Clitophon. Edited with introduction, translation and commentary*, CCTC 37, Cambridge 1999, p. 120, where he usefully compares *Euth.* 291d, and *ibid.* p. 295, for literature on this nautical metaphor.

hymn to his supreme divinity, Zeus, at lines 34-5: «allow me to attain the knowledge trusting which, with the help of what is just, you steer all things».

Accordingly, I believe that the phrase διδόναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας plus its elucidation ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι should be explained along the following lines. Some of the things that were at one time did commit injustice towards others, for (if we may trust ps. Plu. *Strom.* 2, quoted above, p. 36) the separation which resulted in the formation of the heavenly rings is a violent process. On the other hand, the penalty eventually paid by the sea when, as Theophrastus has it (cited above, p. 36) it is dried up by the action of the fire (in the rings, presumably) also is a result of violence on the part of this fire. Accordingly, their injustice toward each other is compensated for, but not (when we think of the history of a world-system) at the same time. When we think (as is usually done) of cosmic processes on a far smaller scale, such as the change from day to night and conversely, or seasonal change, we again have events that are not contemporaneous but sequential, i.e. κατὰ τὴν τοῦ χρόνου τάξιν.

The quite common interpretation of Theophrastus' Anaximander as the inventor of a stable cosmic equilibrium⁸⁹ and so as in a way anticipating the cosmogony and cosmology of Plato's *Timaeus* (but Plato, of course, has to invent a supernatural reason to prevent the destruction of the world), fails to fit such data as are available. Theophrastus' general formula ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι should apply to all ὄντα at all times. It is applicable to the world of our experience, where the day comes from the night into which it perishes. But it is also applicable to the past process of coming to be from the Infinite of whatever was around at the time, and to the coming into being of the main components which constitute our world during the cosmogonic process, as well as to their final disappearance. By eventually destroying each other the main ingredients (earth, sea, fire) of the world too give compensation to each other of the injustice they have been guilty of. This compensation is just and unjust at the same time (δίκην ἔσθαι, as Heraclitus says in the fragment where possibly he has Anaximander in mind, see above, p. 42): for instance, by being destroyed into fire the sea presumably is punished, pays compensation to fire for what happened at the time of the cosmogonic explosion, but fire is guilty of injustice in getting this compensation viz. by

89. Thus G. VLASTOS, «Equality and justice in early Greek cosmologies», *CP* 42, 1947, pp. 156-78, repr. in FURLEY and ALLEN (above, n. 3) 56-91, though admitting that an Anaximandrian world-system must come to an end, and most eloquently and influentially KAHN (above, n. 3) 166-96. Contra: G. FREUDENTHAL, «The theory of the opposites and an ordered universe: physics and metaphysics in Anaximander», *Phronesis* 31, 1986, pp. 197-228, and J. ENGMANN, «Cosmic justice in Anaximander», *Phronesis* 36, 1991, pp. 1-26.

destroying the sea in the end. For this, again, it presumably pays the penalty to the sea by being slowly extinguished. Explosion is counterbalanced by implosion. This *lex talionis* leaves no survivors. These entities pay the penalty to each other for the injustice committed against each other not only during the cosmogony and the existence of the world as we know it, but also by vanishing into the Infinite, in successive stages and by proxy, i.e. via transmutation into something else. The heavens, or rather what is left of them, eventually have to obey the general law according to which perishing must occur into what things have come from.

Because a variety of different and subsequent process are *summarized* by the formula ἐξ ὧν δὲ ἡ γένεσις ἐστὶ τοῖς οὖσι καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι, «that from which they come to be and into which they perish» is expressed by means of a relative pronoun in the plural. So this plural should no longer present a problem. The plurality ἐξ ὧν – εἰς ταῦτα at issue comprizes the Infinite (itself exempt from birth and death) as first beginning and ultimate end, and in between this beginning and end those of the main cosmic masses, and of the individual objects and living beings. According to Theophrastus' interpretation, of course.

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ΑΡΙΣΤΟΤΕΛΗΣ, ΘΕΟΦΡΑΣΤΟΣ ΚΑΙ ΣΙΜΠΛΙΚΙΟΣ ΠΕΡΙ ΑΝΑΞΙΜΑΝΔΡΟΥ

Π ε ρ ί λ η ψ η

Οἱ μόνες λέξεις πού προκύπτουν ἀπὸ τὴν πραγματεία τοῦ Ἀναξιμάνδρου, εὐρίσκονται στὴν παράθεση ἑνὸς χωρίου ἀπὸ τὸ ἔργο τοῦ Θεοφράστου, τὸ ὁποῖο ἔχει χαθεῖ (ἐκτὸς ἴσως ἀπὸ ὀρισμένες τέτοιου εἶδους παραθέσεις). Ἡ ἐρμηνεία τοῦ Ἀναξιμάνδρου ἀπὸ τὸν Θεόφραστο, ὀφείλεται σὲ ἐκείνην τοῦ Ἀριστοτέλους δὲν εἶναι ὁμῶς ταυτόσημη με αὐτήν, ὅπως ἡ τελευταία αὐτὴ διαμορφώνεται ἀπὸ διάφορα χωρία προερχόμενα ἀπὸ πραγματεῖες τοῦ. Φρονῶ ὅτι κανεῖς πρέπει νὰ ξεκινήσει τὴν προσπάθειά του, ἀπὸ τὸν διαχωρισμὸ τῶν χωρίων τοῦ Θεοφράστου μέσα ἀπὸ τὸ κείμενο τοῦ Σιμπλικίου καὶ κατόπιν νὰ προσπαθήσει νὰ κατανοήσῃ τὰ κείμενα αὐτὰ μὲ ὄρους Περιπατητικῆς Φιλοσοφίας. Οἱ διαφορὲς μεταξὺ Ἀριστοτέλους καὶ Θεοφράστου δύνανται νὰ ἐξηγηθοῦν. Τὸ δύσκολο ἐξηγητικὸ μοντέλο τοῦ Θεοφράστου πού συνοψίζεται στὴ φράση: «οἱ οὐρανοὶ καὶ οἱ κόσμοι πού ἐνυπάρχουν σ' αὐτούς» μπορεῖ νὰ ἐρμηνευθεῖ ὑπὸ τὴν ἔννοια μιᾶς κοσμογονίας σὲ δύο στάδια (ὅπως καὶ στὸ χωρίο ἀπὸ τοὺς Στρωματεῖς τοῦ Ψ/Πλουτάρχου). Μία ἐξαντλητικὴ ἐρευνα γιὰ παρόμοιες, παράλληλες ἐκφράσεις μὲ ἐκείνες πού χρησιμοποιοῦνται ἀπὸ τὸν Θεόφραστο καθιστᾷ προφανὲς ὅτι τὸ μόνον χωρίο πού ἔχει παρατεθεῖ αὐτολεξεῖ ἀπὸ τὸν Ἀναξί-

μανδρο (οἱ «ποιητικὲς λέξεις») εἶναι τὸ ἐξῆς: «Κατὰ τὸ χρεῶν διδόναι ... δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας». Κάποια περαιτέρω συμπεράσματα εἶναι ὅτι ὁ Ἀναξίμανδρος, ὅπως παραδίδεται ἀπὸ τὸν Θεόφραστο, ὄχι μόνον ἔκανε λόγο γιὰ κοσμογονία ἀλλὰ περιέγραψε ἀκόμα καὶ τὴν καταστροφή τοῦ κόσμου· ἐπιπλέον ὅτι δὲν ὑφίσταται κανένα ἐπιχείρημα κατὰ τῆς ὑπόθεσης ὅτι εἶναι πιθανὸν νὰ ἔχει ἀναφερθεῖ καὶ σὲ ἄπειρους κόσμους.

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