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Aëtiana IV

Towards an Edition of the Aëtian *Placita* :
Papers of the Melbourne Colloquium 1–3 December 2015

Edited by

J. Mansfeld and D. T. Runia

Leiden
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to be added

INTRODUCTION

The present volume is the fourth in a series devoted to the so-called *Placita*, a compendium of philosophical tenets compiled by an unknown author in about the middle of the first cent. CE. The series is called 'Aëtiana,' based on the name Aëtius, which Herman Diels gave the author in his epochal *Doxographi Graeci* in 1879 and it has been in general use ever since. In recent years there has been considerable discussion about this name, which can never be regarded as more than probable. The work containing the doxai of the philosophers (with a few scientists and doctors added in) has not come down to us in its full original form. Its exact title and the identity of its author remain uncertain, but that there was a single work and that it had a single author—though standing in a long tradition—is beyond all reasonable doubt. What can also not be doubted is that this important work has not received, since Diels, the scholarly attention that it deserves. This situation the authors of the *Aëtiana* have wished to remedy.

The project began in 1989 when the two of us, Jaap Mansfeld and David Runia, who at that time were living in close proximity to each other in the Netherlands and were both working on various strands of the doxographical tradition, decided to pool our resources and work together. Volume 1 was published in 1997.¹ In it we examined the full history of the Aëtius hypothesis, first tracking down the history of research on its history prior to Diels and then examining the decisive contribution of Diels himself. The greater part of the book, however, was devoted to an examination of the sources for the reconstruction of the lost compendium, focusing particularly on the evidence of the epitomator ps.Plutarch and his tradition, the anthologist Johannes Stobaeus and the Church father Theodoret of Cyrrhus. We concluded that a fresh examination of the evidence confirmed that Diels was basically on the right track. But the method he used for reconstructing and analysing the work could be improved upon, as could also the way he positioned it within the Greek philosophical tradition. Above all research on the tradition and the contents of the *Placita* could be made more accessible to scholarship on Greek philosophy. The veil of obscurity that hung over the subject, caused in large part by Diels' labyrinthine 'prolegomena,' needed to be lifted.

Volume 2 was published twelve years later in 2009. We gave it the sub-title 'Aëtius' Compendium' and it consisted of two parts, each occupying a separate book of its own.² Part one, entitled Macrostructure and Microcontext, subjected the contents of the work to a thorough analysis, explaining in detail the structure imposed on the material collected by the compiler and the various techniques used to order it, such as the use of diaeresis, the relation between

¹ Mansfeld–Runia (1997). All the volumes of the Aetiana have been published in the series *Philosophia Antiqua* by Brill. This first volume was reviewed by M. Frede, *Phronesis* 44 (1999) 135–149; M. L. Gemelli Marciano, *MH* 55 (1998) 252–253; A. Laks, *RMM* 102 (1997) 570–571; A. A. Long, *JHPh* 37 (1999) 523–524; I. Mueller, *CPh* 94 (1999) 111–114; S. Rubarth, *AncPhil* 19 (1999) 186–191; and D. Sider, *CW* 91 (1997–1998) 441–442.

² Mansfeld–Runia (2009). Reviewed by H. Bottler, *Gymnasium* 118 (2011) 285–287; A. Falcon, *BMCR* 2010.04.48; C. Louguet, *RPhL* 110 (2012) 161–164; R. McKirahan, *CR* 60 (2010) 409–411; P. Podolak, *Prometheus* 36 (2010) 94–96; R. W. Sharples, *Gnomon* 83 (2011) 682–685; and G. Journée, *Philosophie antique* 11 (2011) 247–250.

systematic and chronological sequence, the occurrences of direct authorial intervention and so on. This part also undertook to place the contents of the *Placita* firmly in their context in the history of philosophy from Plato and Aristotle through the Hellenistic period to the first cent. BCE. It was demonstrated that the work stood in a lengthy tradition of accretion and redaction, as illuminated by a wide range of other writings, some of which stood closer to the *Placita* than others. We denoted this range by distinguishing between a proximate and a wider general tradition, though of course it was really a spectrum. Part two, entitled *Specimen reconstructionis*, focused on the part of the *Placita* which has been best preserved, Book 2 on cosmology, and presented a reconstruction of the work in a single column, as opposed to the double columns of Diels' text. Explaining in every detail the steps taken, it demonstrated that it was possible to produce a text of the work which, if not fully certain in all of its details, certainly provided a text that scholars could work with. A year later in 2010 a third volume saw the light of day.³ It consisted of a collection of 19 selected studies between 1989 and 2009 which offered a rich palette of additional research into aspects of the *Placita* and their place within ancient philosophy,

An important decision had already been reached in 2004. Anticipating the results of the *specimen reconstructionis*, we resolved to work towards a text, translation and commentary of the work. This task required a wide range of skills, not all of which we sufficiently possessed, so we sought collaboration with other scholars: Oliver Primavesi (Munich) and his doctoral student Mareike Jas, who provided us with fresh insights on the tradition of ps.Plutarch (especially ps.Galen and the Arabic translation of Qusṭā ibn Lūqā) and the way that an apparatus criticus should be presented; Edward Jeremiah (Melbourne), who helped us with analyses of the language and structure of the work; and James Royse (Claremont), who assisted with the manuscript tradition of Stobaeus. A generous grant from the Australian Research Council and further assistance from the University of Utrecht and the Ludwig Maximilian University of Munich facilitated the organisation of a series of seven workshops held every summer, first in Bilthoven and then in Munich, during the years 2007 to 2013.⁴

All along we had planned, as part of the activities funded by the Australian research grant, to organise an international colloquium. It would be the first ever to be devoted to Aëtius and the doxographical tradition. The aim was to host discussions which would explore scholarly developments in research on the Aëtian *Placita* and demonstrate its importance for the understanding of the history of ancient philosophy. We also wished to receive feedback on the results of our research that we had already made public. For this reason, care was taken to extend invitations also to scholars who had indicated disagreement with some of the conclusions we had reached. Another exciting possibility was to make use of the provisional text and translation of the entire work that had been completed by the end of 2015. Fortunately, the Australian research grant

³ Mansfeld–Runia (2010). Reviewed by R. McKirahan, *CR* 61 (2011) 437–440; and K. Rudolph, *BMCR* 2011.01.13.

⁴ Jaap Mansfeld and David Runia attended all workshops, Oliver Primavesi all but the one in 2011. Edward Jeremiah participated from 2011 onwards, Mareike Jas from 2012, and James Royse in 2013 only.

had not yet been depleted and we were also able to gain additional support from other institutions who will be duly thanked below.

The colloquium took place under ideal circumstances at the University of Melbourne on 2–4 December 2015. For three days a group of 18 participants ranging from senior scholars to young researchers met together in the Stafford Council Room of Queen's College, where they listened to 13 papers and discussed their contents in a true spirit of scholarly cooperation and friendship. Regrettably one of the original workshop members, Oliver Primavesi, was unable to attend, but the remainder were all present. Other scholars who joined us were Keimpe Algra (Utrecht), Han Baltussen (Adelaide), Dirk Baltzly (Hobart), Michael Champion (Melbourne), Jean-Baptiste Gourinat (Paris), Gérard Journée (Lille), Andrei Lebedev (Crete), Mark Lim (Adelaide), Anthony Long (Berkeley), Brennan McDavid (Melbourne), Richard McKirahan (Claremont), Teun Tieleman (Utrecht) and Sonya Wurster (Melbourne).

As project leaders we, Jaap Mansfeld and David Runia, enjoyed and benefited from both the papers and the discussion. Indeed, it did not take us long to decide that the papers deserved a wider dissemination, so we are now presenting them as Volume 4 of the *Aëtiana* series. Of the original papers, three are not included in this volume. Andrei Lebedev decided to publish his paper elsewhere,⁵ while Han Baltussen has been prevented by a very full programme of work from finalising his paper on 'Simplicius, Theophrastus and the *Placita*' for publication. Jaap Mansfeld has not developed further the introductory paper that he gave at the colloquium, but instead is publishing two papers that focus on issues that are highly relevant to the reconstruction of the Aëtian *Placita*. Finally, Oliver Primavesi has agreed to the inclusion of a paper that was composed some time ago and discussed at one of the early workshops. There are thus thirteen papers in all.

We now give a summary of the contents of the volume. The papers have been divided into three parts, of which the first is entitled 'Reconstructing and Editing the *Placita*'. This part begins with two papers that from different angles examine questions relating the identity of the author and the interrelationship of the main sources on which the reconstruction of his work is based.

In the first paper Jean-Baptiste Gourinat returns to the evidence in Theodoret regarding the identity of the author and the scope of his work. Though it is beyond any doubt that Theodoret, like Stobaeus, had access to a longer version of the *Placita*, one may have some doubts about Diels' depiction of the way Theodoret relied on the longer *Placita* and to the identification of the author as Aëtius. Diels thought that Aëtius was Theodoret's main source and that he added the name of Porphyry and Plutarch because of their fame among the Greek philosophers. A careful examination of the three mentions of Aëtius, together with Plutarch and Porphyry, shows that Theodoret used the longer version of the *Placita* as an additional source for material missing in Eusebius. Three of Eusebius' authorities were Plutarch, Porphyry and Arius Didymus. It seems that Theodoret substituted Aëtius' name for that of Arius. He may have done that on purpose or he may

⁵ Lebedev (2016).

have done it by mistake, not actually having a copy of a book by an author named Aëtius. Though Diels' hypothesis cannot be refuted, an alternative possibility is that two versions of the *Placita* circulated under the name of Plutarch.

The second paper, by Keimpe Algra, moves away from the three witnesses to Aëtius and examines the evidence relating to the figure of Arius Didymus, often identified with the court philosopher of Augustus, whose writings were excerpted by Stobaeus together with the *Placita*, and by other authors as well, notably Eusebius. Algra notes that various aspects of these attributions, previously canonized in Diels' *Doxographi Graeci*, have been challenged by scholars in the past few decades. The first part of his paper takes critical stock of these developments: to what extent can we be sure of the attributions to Arius, of the identity and date of the author, and of the title(s), nature, and purpose of his work(s)? The second part then focuses on the material on Stoic physics and ethics. How was it structured, what can be said about the sources used and about the degree of authorial intervention on the part of the doxographer? What does this tell us about the value of Arius as a source? And to what extent does this type of doxography (belonging to the *περὶ ἀρίεσεων* tradition) differ from the *placita* tradition that is central to the rest of this volume? Algra's paper amounts to an authoritative *status quaestionis* on this figure who is so important for our knowledge of Hellenistic philosophy.

The next paper by Oliver Primavesi focuses on a single excerpt in Stobaeus which Diels included in its entirety as the final doxa in Aëtius' chapter on the void, 1.18. He proves that its second half from καὶ ἐν ἄλλοις λέγει onwards is in fact a compilation of excerpts, most probably by Arius Didymus from Aristotle's *Physics* Book 4 dealing with void, place and the infinite. The attribution had already been suggested by Diels in his apparatus and was also accepted by Mansfeld and Runia in their analysis of Stobaeus' use of Aëtius. Detailed analysis of this compilation reveals subtle modifications of the original Aristotelian account. Primavesi further proposes to combine the quotation from Aristotle's *On the philosophy of Pythagoras* in the earlier part of Stob. 1.18.1c with the final phrase of the Aristotle lemma in ps.Plutarch, thus providing a new Aëtian text of Aristotle fr. 201 R³.

In our forthcoming edition of Aëtius's *Placita* we will be offering a text with a critical apparatus based on existing editions of the writings that bear witness to the work. In a number of respects the available texts are not as good as one would wish. There have been two fairly recent editions of ps.Plutarch's epitome by Mau and Lachenaud respectively.⁶ But it can be demonstrated that they have basically produced texts based on the Byzantine manuscripts only (with some assistance from Eusebius). The value of their editions is seriously compromised by the fact that they virtually ignored the significant evidence of ps.Galen's epitome and the Arabic translation of Quṣṭā ibn Lūqā.⁷ In her paper Mareike Jas takes as her starting-point Diels' edition of the *Historia*

⁶ Mau (1971); Lachenaud (1993).

⁷ Daiber (1980) was not yet available to Mau, but the dissertation on which it is based was completed in 1968 and he mentions it in the preface of his edition.

philosophia of ps.Galen in the *Doxographi Graeci*.⁸ She argues that a closer examination of the tradition of this work reveals that Diels underestimated the significance of Nicolaus of Rhegium's Latin translation for the task of editing the text. This translation often preserves readings that are superior to those of the extant Greek manuscripts, from which it can be inferred that the lost Greek manuscript used by Nicolaus must be independent of the extant Greek manuscripts, especially when the readings preserved in the translation match readings transmitted by Qusṭā ibn Lūqā or Eusebius. In her paper she presents two examples of how a comparison of a chapter in Galen with the Arabic translation gives access to a superior text in comparison with the extant Byzantine manuscripts. In her Munich dissertation Jas has already edited 45 of the 109 chapters based on ps.Plutarch.⁹ We will be making grateful use of her research in preparation our own edition of Aëtius.

Once Jas's edition of ps.Galen is completed, the oldest edition we have to use for our edition is the text of Stobaeus' *Eclogae physicae et ethicae*, published by Curt Wachsmuth in 1884.¹⁰ In his paper James Royse examines two aspects of Wachsmuth's edition. It consists of two parts. In the first he examines the manuscripts, with particular attention given to the manuscript Laurentianus Pluteus 8.22. Every scholar who wishes to understand the sources for the incomplete text of Book 1 of the *Eclogae* (containing the material from the *Placita*), including additional material not present in the two main manuscripts, the Neapolitanus and the Parisinus, must confront the complexities of this manuscript. Taking his cue from Wachsmuth's researches in the 19th century, Royse sets out this material and explains how it is taken up in Wachsmuth's edition. In the second part he examines the text as published in Wachsmuth's critical edition, using a number of chapters as text cases and checking the text against all three manuscripts. He concludes that Wachsmuth's work is very accurate, but does contain some errors in his readings and some failures to record readings of some significance. These shortcomings are not such that they will materially affect the edition of the *Placita* that is under preparation.

Jaap Mansfeld in his first paper also focuses on the contribution of Theodoret to our knowledge of the original work. The role of Theodoret as a source for Aëtius has been questioned, or even denied, by Lebedev, Frede, Gourinat and Bottler. No one of course doubts that there must be a source P/S shared by ps.Plutarch and Stobaeus. But one can also prove in two steps that there must be a source T/S shared by Theodoret and Stobaeus. There are in fact 20 lemmata which Theodoret shares with Stobaeus, but are absent in ps.Plutarch, out of a total of about 100 lemmata which he records, i.e. about 20% of the whole. As a next step one can prove that the P/S source and the T/S source cannot be distinguished from each other so must be identical. This has not been done before. He thus concludes that Diels' critics are refuted, his original intuition vindicated, and that all three witnesses should be used to reconstruct a text of the *Placita* in a single column.

⁸ Diels (1879)

⁹ Jas (2015).

¹⁰ Wachsmuth (1884).

Mansfeld ends his paper with reflections on the name of the author. The fact that no one but Theodoret mentions him is due to the popularity of ps.Plutarch's epitome. It is perhaps a pity that the work was not attached to a famous name as in the case of the other work and the epitome by ps.Galen. It might then even have survived unscathed. Giving the author another name is rather futile and there are good grounds for adhering to the scholarly tradition initiated by Diels.

The next two papers turn the volume's attention to one of the work's longest and most significant chapters, 1.3 entitled *Περὶ ἀρχῶν τί εἰσιν* (on principles, what they are). Gérard Journée zooms in on a brief doxa assigned to the Presocratics Hippiasus and Heraclitus in Theodoret GAC 4.12, which appears to discuss the first principle but differs quite markedly from a longer view attributed to the same philosophers in ps.Plutarch and Stobaeus. Diels' attempt to place it in 1.5 on the subject of the universe whether it is one, must be considered a failure. Journée surveys the possible solutions for this lemma, noting as a starting-point that it shares elements in common with a fragment of Theophrastus on the first principle and a doxa of Hippiasus preserved in Diogenes Laertius. He concludes that Theodoret must have used a source for this doxa that differs from the one used by ps.Plutarch and Stobaeus. This other source must have been Aëtius, but he may have been just one stage in a transmission of doxographical material going back to Theophrastus and ending with ps.Plutarch, the only version that has been transmitted down to us in a complete form.

In his second contribution to the volume, Jaap Mansfeld also focuses on the chapter on first principles (1.3), but in contrast to the previous paper, he examines its total contents as transmitted in all three witnesses to the *Placita*. In so doing he distills the results of the conclusions that he reached in preparing the text and commentary on this complex and difficult collection of doxai (or rather three collections largely going back to a common source). Mansfeld notes that Theodoret's contribution to the reconstruction of the chapter has been overestimated by Hermann Diels and denied by others. Comparison of the lists of principles in ps.Plutarch, Stobaeus and Theodoret (who has two such lists), as well as in the *Stromateis* of another ps.Plutarch, shows both these views to be partly mistaken. A number of doxai recorded by Theodoret in his list of archai in Book 4 should be associated with Aët. 1.3. But other doxai, including 4.12 on Hippiasus and Heraclitus are probably derived from a different source shared with the *Stromateis*. As for Theodoret's other list in Book 2, it appears to derive in part from another standard source that is close to the Early Peripatos, and has been supplemented with further lemmata that summarize more substantial doxai in the other list. In the final analysis, the backbone of the chapter is formed by doxai which can be ordered in the same sequence as that posited by Diels, but the placement of at least eight lemmata in 1.3 cannot be determined with certainty.

The second part of the volume is entitled 'Exploring the *Placita*'. It consists of only a single but very extensive study by Edward Jeremiah, which is without doubt a highlight of the collection of papers. Jeremiah has made a highly important and original discovery. Because of the unique textual history, structure and style of the *Placita*, and especially because the work consists of a

large number units of information that are almost always composed in repetitive and formulaic ways (c. 135 chapters and 750 doxai), its contents are open to statistical exploration using methods that have been developed by humanities scholars in recent years. Jeremiah is able to probe the text—as reconstructed by Mansfeld and Runia in a provisional version—using a variety of quantitative techniques that help solve some important problems and unanswered questions regarding its history, nature, status, and significance. Questions that he addresses include: how much of Aëtius’ original work is likely to be present in the reconstruction? how many individual philosophers not found in the reconstruction were likely included in the complete work, and how much of the total philosophical population up to its time does the *Placita* likely sample? how do chronology and the logic of diaeresis affect a chapter’s ordering of tenets, and how did this arrangement change in time? who in the *Placita*’s universe are the most important philosophers, and what does this tell us about philosophical history and scientific progress? how philosophically diverse are different books and topics in *Placita*, and how does this reflect the contemporary philosophical landscape and contemporary interests? To give one example of the results reached, Jeremiah concludes that for those 87 chapters for which we have multiple witnesses it is probable that there are in the order of 42 lemmata missing, while for the remaining chapters for which we have only the evidence of ps.Plutarch the missing number is likely to be a further 81. This means we have approximately 86% of the original lemmata. This is a remarkable and highly important result. The mathematics used to reach these and other results is challenging, but Jeremiah’s approach and method have been checked by statistical experts and are in the view of the editors valid. The paper is in fact a case study in how traditional philology can, given a suitable text, be enriched by appropriately designed mathematical and statistical tools.

In the third part of the volume, entitled ‘The *Placita* and Greek Philosophy’, we include four papers which explore the significance of the work for our knowledge of Greek philosophy and the philosophers that developed its tradition up to the beginning of the common era.

In the first paper in this part of the volume David Runia observes that the *Placita* focus primarily on the views of philosophers on the natural world organised by topics and questions and thus does not have as their main focus the thought of the philosophers themselves. Nevertheless, he argues that there is nothing wrong with looking at the doxai of a particular philosopher in the collection and investigating what these can tell us about his thought. His paper focuses on the doxai of Epicurus. This philosopher is not selected at random. In fact, he represents a unique case, because aside from often being named as the holder of an opinion there is also evidence that he himself made use of an early version of the *Placita* in his own writings. The first part of the paper treats Epicurus in the *Placita*, examining a large number of aspects of his doxai in the collection. In terms of the total number of doxai contained in the collection as we have it he is ranked seventh, though he is often named together with other members of the atomist tradition. His doxai are positioned in accordance with the structural and generally diaeretic method of the *Placita*, but it is striking how often they bring up the rear in a chapter because they represent a distinctive point of

view. In the second part Runia turns to the subject of Epicurus on the *Placita*. In cosmology it appears that he made use of early doxographical material which may have been derived primarily from the writings of Theophrastus, particularly for the purpose of presenting multiple explanations. In the treatment of meteorological subjects this usage is less easy to demonstrate but still remains likely. By means of this example the paper demonstrates that the prospective edition of the *Placita* will also be useful for the study of individual philosophers.¹¹

The next paper in this part turns our attention to the natural philosophy of the Stoa with a particular focus on its founder Zeno. The purpose of Anthony Long's paper is to present a comparative assessment of Aëtius's treatment of Stoic physics, concentrating on a selection of his lemmata concerning central doctrines of the school. After outlining the general scope of his Stoic doxography and comparing it with material in Diogenes Laertius and Arius Didymus, Long turns to Aëtius's accounts of Stoic cosmology and theology. The accuracy of his detailed report on the attributes of Stoic god is confirmed by its replication in all our main sources, including Cicero, who is the earliest of such authors. He proposes that this congruity of testimony may be explained by the hypothesis that Zeno's work *On the Universe* underlay the doxographical tradition on Stoic theology. The paper concludes with a brief study of Aëtius's reports on Zeno's doctrines of soul and seed.

In his paper Teun Tieleman moves to the second century CE and the voluminous writings of the doctor and part-time philosopher Galen. There are a considerable number of passages in Galen's writings that appear to depend on the formulations that he has drawn from the doxographical tradition. Indeed, there are occasions when he has material that seems fuller than what we find in Aëtius. The main aim of the paper is to determine the purposes for which Galen uses this material. Firstly, according to Tieleman, he uses the *Placita* to distinguish between issues that are insoluble and useless and those that may lead to true or at least plausible conclusions. Secondly, in regard to the latter group of issues, Galen derives from the *Placita* diaeretic schemas of options that form the starting point for correct methodical inquiry in natural philosophy and medicine. In addition, he develops his own schemas modelled on those of the *Placita*. These doxographical schemas are integrated with a conceptual toolkit that derives from the exegetical tradition concerned with the Platonic *Timaeus* which has taken on board Academic input, most notably the notion of the plausible. Tieleman concludes with an overall evaluation of the epistemology-cum-methodology which Galen developed in the manner outlined in the paper.

The final paper of the third part, and also of the collection as a whole, goes in a different direction. The three papers outlined so far have assumed that using of the material provided by the *Placita* is a positive thing to do and can lead to an enrichment of our knowledge of Greek philosophy. Richard McKirahan does not disagree with this practice but he wishes to sound a note of caution, as is plain from the title of his paper, 'The Downside of Doxography'. Focusing on the Presocratics, he states that the immense importance of doxographical materials for our knowledge

¹¹ Similarly Mansfeld (2014) for the case of Parmenides.

of their writings and thought is unquestioned, but the nature and content of these materials, in cases where they are the only information we possess, impose severe limitations on our ability to pursue the history of philosophy in a satisfactory manner. McKirahan illustrates his point with examples from Thales' views on the natural world and the soul.¹² He ends his paper by giving practical advice on what we should do when we interpret the information that we have, both when there is other (and often earlier) material to help us determine its origin and when there is not.

In sum, we are confident that this volume of papers will be of value to scholars conducting research on various epochs in the history of Greek philosophy. It will also be of assistance to us as we prepare the final version of our edition, translation and commentary on Aëtius' compendium and, by publishing it as volume 5 of the *Aëtiana*, complete our project.¹³ In order to forestall any possible misunderstanding, we emphasize that the present collection does not aim to present an introduction to the subject of ancient doxography in general. For this we refer the reader to other readily accessible publications that we have prepared in recent years.¹⁴

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¹² In so doing he makes use of the exhaustive collection of reports on Thales' doctrines in Wöhrle (2014). The series in which this work is published, *Traditio Praesocratica*, uses a quite different methodology for dealing with the doxai of the *Placita* tradition than that used in the volumes of *Aëtiana*.

¹³ We anticipate that volume 5 of the *Aëtiana* will be published in about two years.

¹⁴ See for example Mansfeld (2013); Runia (2016).

during the time of his Mastership of the College in the years 2002 to 2016. The School of Historical and Philosophical Studies of the University of Melbourne offered moral and organisational support and also hosted the guest lecture of Professor Anthony Long during the colloquium, for which it too is thanked.

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David T Runia, Melbourne

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Part One

Reconstructing and Editing the *Placita*

Diels' Whodunit:

The Reliability of the Three Mentions of Aëtius in Theodoret

Jean-Baptiste Gourinat

Abstract. Diels' hypothesis that Aëtius was the author of a version of the *Placita* more complete than the version transmitted to us in the manuscript tradition and known by Eusebius relies on three mentions of Aëtius by Theodoret in his *Therapy of Greek Diseases*, alongside Porphyry and Plutarch, to the latter of whom the shorter version of the *Placita* was attributed. Though it is beyond any doubt that Theodoret, like Stobaeus, had access to a longer version of the *Placita*, one may have some doubts about Diels' depiction of the way Theodoret relied on the longer *Placita* and to the identification of the author as Aëtius. Diels thought that Aëtius was Theodoret's main source and that he added the name of Porphyry and Plutarch because of their fame among the Greek philosophers. A careful examination of the three mentions of Aëtius, together with Plutarch and Porphyry, shows that Theodoret's primary source was Eusebius, and that he used the longer version of the *Placita* as an additional source for some material missing in Eusebius. Three of Eusebius' authorities were Plutarch, Porphyry and Arius Didymus. It seems that Theodoret, voluntarily or not, substituted Aëtius' name for that of Arius. He may have done that on purpose or by mistake, and not had any copy of a book by an author named Aëtius. Though Diels' hypothesis remains plausible, an alternative possibility is that the two versions of the *Placita* circulated under the name of Plutarch.

Keywords: doxography, Aëtius, Arius Didymus, Plutarch, ps.Plutarch, Eusebius, Porphyry, Theodoret, Hermann Diels,

Diels identified an otherwise unknown 'Aëtius' as the author of a longer version of the *Placita*, of which an abridged version was transmitted to us under the name of Plutarch, and of which Diels himself reconstructed the longer version with the help of Stobaeus, Theodoret and some other

ancient authors.¹ This was one of the boldest statements of the *Doxographi Graeci*, based on three mentions of this Aëtius, alongside Plutarch and Porphyry, as a source the bishop Theodoret claims to have used in his *Therapy of Greek Diseases*. It is treated by Diels as something rather obvious, which he does not need to prove, but which is a proof of what he wants to demonstrate, namely that there is a common source for ps.Plutarch's *Placita*, Stobaeus and Theodoret, who all three are witnesses of the now lost longer version of the *Placita*.

There is no doubt that Diels was right to argue that there was a version of the *Placita* longer than the shorter one transmitted to us under the name of Plutarch and also known under the name of Plutarch by Eusebius and, so it might seem, by Theodoret, since both quote the *Placita* of 'Plutarch'.² Diels also established, beyond any doubt to my mind (though his arguments are sometimes tortuous and not so rigorous as they could have been³), that Stobaeus extracted a good deal of material from this longer version, and that this longer version was different from the *Compendium* of Arius Didymus that both Stobaeus and Eusebius also excerpted in their works, another lost work that Diels also reconstructed in the *Doxographi Graeci*.⁴ Finally, Diels was certainly right in arguing that Theodoret was a source for reconstructing the longer version of the *Placita*, since one can find in his *Therapy* both parallels to Stobaeus absent from Ps.Plutarch and additional doxographical material absent from Ps.Plutarch and Stobaeus.⁵ Once one is convinced that (1) there

¹ Diels (1879) 47–49.

² This is clearly proved by the reconstruction Diels made of Aëtius in the *Doxographi Graeci* by setting out in two parallel columns what he extracted from Plutarch and what he extracted from Stobaeus, with additional sources in the *apparatus fontium*. See Diels (1879) 267–444. See also my tabular comparison in Gourinat (2011) 191–201.

³ On this see Gourinat (2011) 157–159.

⁴ This in fact was Diels' most innovative step, since, before his work Meineke advocated with some hesitation the view that Arius Didymus was the common source of Stobaeus and the ps.Plutarch. See Meineke (1859) 565. The reason why I think that Diels was right in distinguishing the *Placita* he attributes to Aëtius from Arius Didymus' *Compendium* is that there are obvious incompatibilities between what may be found in ps.Plutarch's *Placita* and what comes from another source, which may be identified with Arius. Sometimes Diels begs the question, but there are enough cases where he does not: see Gourinat (2011) 159–168. For Diels' reconstruction of Arius' *Compendium*, see Diels (1879) 445–472. Lebedev's views in Lebedev (1988) seem quite similar to Meineke's views, but he now (2016) advocates a different view, according to which there existed two works by Arius, some diaeretic handbooks of *Physics* (the source of the *Placita*) and another doxographical handbook arranged by schools (the source of the continuous ethical doxographies in Stobaeus 2.7 and of the fragments of the physical doxographies identified by Diels). See in particular Lebedev (2016) 618–619. It seems that there is a *consensus* among scholars that the *Placita* and the doxographies of Arius Didymus arranged by schools were two different works—the object of the dissension is whether these two different works were by Arius Didymus or by two different authors. [See now the article by K. Algra in this volume, ch. 2. Editors]

⁵ See now Mansfeld (2016) on Theodoret's role as a source for the reconstruction of the longer version; for a slightly revised version see now below ch. 6. Mansfeld (2016) 158–161 (= below pp. 000), lists all the parallels between Theodoret and Aëtius, including some that I failed to include in my tabular presentation of (2011). More importantly, he shows that there is sufficient evidence from these parallel texts that Theodoret had access to the same longer version than Stobaeus,

used to be a longer version of the *Placita* than the one preserved under the name of Plutarch; (2) that this version was known to Stobaeus; (3) that Stobaeus and Eusebius also knew the work of Arius Didymus and that it was another book than the *Placita*; (4) that Theodoret claimed to have used three sources, Aëtius, Plutarch's *Placita* and Porphyry, then one may conclude (5) that Aëtius is the missing link, namely the author of the longer version, the man who did it.

The name 'Aëtius' fills a gap and it is obviously a convenient name for a missing link in the history of doxography. But is it so obvious? And is it really an advantage to have identified this 'Aëtius' as the author of the longer version of the *Placita*, as if one was to be sure that there existed only two versions of the *Placita*? Tracking the missing link and giving a name to it was one of the favourite hobbies of 19th century's scholars. It is also what makes a crime story exciting, and of course in a good crime novel, you know who did it in the end—but *in reality*, no one knows who Jack the Ripper was. Diels seems to have jumped to the conclusion, disregarding some elements of reasonable doubt, including the following: (6) Aëtius is certainly not mentioned by anyone else than Theodoret; (7) Stobaeus knew the work of Arius Didymus as a work different from the longer version of the *Placita* while Eusebius knew the work of Arius Didymus as a work different from ps.Plutarch's version of *Placita*, but neither of them knew all three works; (8) Theodoret seems to know two versions of the *Placita*, one attributed to Plutarch and the other to Aëtius, but he never says that one (ps.Plutarch) is a shorter version of the other (Aëtius). In fact, not only does Theodoret never say that one work is a shorter version of the other but he always presents them as two different works by two different authors, a fact which may give rise to the suspicion that he did not have access to both. The alternative possibility is of course that he knows that one book is a longer version of the other but avoids mentioning this fact to his reader—in other words, he wants to impress his reader and thinks his reader is ignorant and will never have read both books. This seems a very hazardous step on the part of Theodoret, though of course writers do take very hazardous steps. Whatever may be the case, one knows that Diels fills more than one gap and that he has three missing links, because (i) Stobaeus had access to the long version of the *Placita* and Eusebius to ps.Plutarch's version of the *Placita* and both had access to Arius Didymus, while Theodoret *alone* seems to claim that he had access to both versions of the *Placita*; but (ii) Theodoret is apparently unaware of Arius Didymus,

and in addition that the common source of Stobaeus and Theodoret is identical with the common source of Stobaeus and Plutarch (see Mansfeld (2016) 162–164, = below pp. 000).

and in addition he behaves as if he was unaware of what he should have known as a fact, namely that Aëtius' *Placita* and Ps.Plutarch's *Placita* are basically the same book; (iii) the claim by Theodoret that he used Aëtius' *Placita* and 'Plutarch's' *Placita* does not prove that, when Ps.Plutarch's *Placita* is not his source, then Aëtius' *Placita* is necessarily his source, and not any one else. Because of (8) and (ii), it was a great advantage for Diels to be in a position to argue that Theodoret knew Aëtius directly but did not know ps.Plutarch directly, but knew his work only through Eusebius. In any case, Diels admits that Theodoret, in some way, is bluffing when he quotes the name of 'Plutarch' as a source, because, according to him, Theodoret in fact quotes 'Plutarch' through Eusebius. And, if this were true, this would in fact be a weakness of Diels' case in favour of the attribution of the longer *Placita* to Aëtius. For it is adventurous to build a case on a witness that may have seen only part of the facts he claims to have seen. Conversely, even if we admit that Theodoret knew ps.Plutarch's *Placita* indirectly through Eusebius and Aëtius' *Placita* directly, is it possible that he did not realize that both texts were up to some point the same work? Presumably it is possible and it is plausible. But I must confess that it does not seem *highly* plausible to me. As we shall see, it is in fact not certain that Theodoret knows ps.Plutarch's *Placita* only through Eusebius and not directly. Whatever may be the case, it remains a fact that Theodoret never says that the *Placita* of ps.Plutarch are a shorter version of Aëtius. Therefore, even if Theodoret was a direct witness of the two works, this witness never declares what he is supposed to have witnessed, namely that one of the works is a shorter version of the other, but *he rather appears to state the contrary*, namely that these are two *similar but different books*.⁶

Hence the question I want to address in the present contribution is the following: what was it exactly that Theodoret saw, read, knew and compiled, and how reliable is he?

⁶ In *Therapy* 2.95, Theodoret says that Plutarch and Aëtius have 'taught the opinions of the philosophers' and nothing else, while Porphyry 'added' a biography to the opinions. If this means that Plutarch's work and Aëtius' work are the same book, then this also means that Porphyry's book is an expansion of the same work, with biographies added. But if this does not mean that Porphyry has expanded Aëtius' work, then it does not mean that 'Plutarch' and Aëtius have published the same work, but only that both works had similar methods and purpose.

1. Which versions of the *Placita* did Theodoret know and to what extent?

Did Theodoret have access to ps.Plutarch's version of the *Placita* independently from Eusebius? Diels maintained that he had not: according to him, Theodoret did not have ps.Plutarch's version of the *Placita* at hand but he quoted it from Eusebius.⁷ The reason is that when, in 2.112 and 3.4, Theodoret explicitly quotes 'Plutarch' and attributes to him some opinion of the atheist Diagoras, he calls him 'Diagoras the Milesian' (ὁ Μιλήσιος) while he actually was 'Diagoras the Melian' (ὁ Μήλιος). Now, the misspelling is repeated twice, and twice it is attributed to Plutarch, but Diels notices (or thinks to notice) that this error derives from Eusebius, since the manuscripts of ps.Plutarch have the correct reading 'the Melian' (ὁ Μήλιος) and not the incorrect reading of Eusebius, 'the Milesian' (ὁ Μιλήσιος): *furtum reddit manifestum*.⁸ But, in fact, as noted by Frede,⁹ 'it turns out, though, that the last editor of P, Mau, does not know any manuscript which read 'Melian', and that the Arabic version, too, supports the reading 'Milesian'.' As is confirmed by Lachenaud's edition of the *Placita*, all the manuscripts of ps.Plutarch have Μιλήσιος, so that it is an error common to Eusebius and our tradition of ps.Plutarch. Nonetheless, given that Μήλιος is the reading of Ps.-Galen's *Historia Philosopha*, this 'must derive from his better text' of ps.Plutarch, so that, in the long run, the correct reading of ps.Plutarch may well have been the correct Μήλιος, as Diels thought it was.¹⁰ However, even if Theodoret and Eusebius read the incorrect version that is also the one of our manuscripts of ps.Plutarch, we cannot know whether Theodoret had access to this manuscript tradition directly or through Eusebius—if he had access to the same tradition than ps.-Galen, then he quotes this passage through Eusebius, but if he had access to the same tradition than Eusebius and us, then nothing can be concluded.¹¹ This is why Frede argues as follows:¹² 'Given this, it is, of course, still possible that P wrote 'Melian' but it now seems hazardous to conclude on the basis of this assumption that T only knew P from Eusebius, rather than P itself. [...] So Diels' argument that T only knew P through Eusebius breaks down'. In other words, nothing proves that Theodoret knew ps.Plutarch's version of the *Placita* directly and independently from Eusebius, but conversely there

⁷ Diels (1879) 48.

⁸ Diels (1879) 10.

⁹ Frede (1999) 142.

¹⁰ Mansfeld (2016) 153–154; already Frede (1999) 142.

¹¹ See Frede (1999) 142.

¹² Ibid.

is no certain evidence that Theodoret knew ps.Plutarch's *Placita* only *through* Eusebius, contrary to what Diels thought. We are only sure that in the two passages on the atheists, Theodoret is quoting 'Plutarch', directly or indirectly, and not Aëtius.¹³

Now, Theodoret had access to a longer version of the *Placita*, and, as demonstrated by Mansfeld, it seems to be the same as the one Stobaeus had access to.¹⁴ Does this prove that this longer version of the *Placita* is the work by Aëtius which Theodoret mentions three times? Strictly speaking, I do not think it does. It is a natural and plausible hypothesis, but there is no constraining evidence.

One of the problems with our testimonies on Aëtius, 'Plutarch' and Arius Didymus is that the only work we know directly is Ps.Plutarch's *Placita* and none of the three authors who knew at least two of these three sources (Eusebius, Theodoret and Stobaeus) seems to have had access to all three sources, namely the two versions of the *Placita* and Arius. Instead Eusebius had access to one version of the *Placita* and to Arius, Theodoret to both *Placita* (so he claims) but apparently not to Arius, and Stobaeus to the longer version of the *Placita* and to Arius. So where is the reasonable doubt? It lies in the fact that Theodoret is the only one who mentions Aëtius, and that he does not seem aware of the fact that Ps.Plutarch's *Placita* and Aëtius' *Placita* are basically the same book, and that Ps.Plutarch's *Placita* is only a shorter version of Aëtius' *Placita*. To my mind, this is a motive for a reasonable doubt concerning Diels' hypothesis, since the author who should have known that for a fact, Theodoret, namely the only author who mentions both Plutarch and Aëtius, does not seem aware of that fact. This does not mean that I disbelieve that Theodoret had access to a longer version of the *Placita*, it just means that I find it not very plausible that someone who had access to both versions of basically the same book does not acknowledge the link between the two books. This was not a problem for Diels, since he was persuaded that Theodoret had access to 'Plutarch' only through Eusebius. However, if this evidence collapses, then what Theodoret knew becomes more problematic, and Diels' hypothesis is not so evident.

We cannot disregard the possibility that Theodoret was stupid or far from cautious and did not realize that Plutarch's book was a shorter version of Aëtius' book. This sort of thing happens. In France, in 1957, a respected French scholar, Jean Brun, Professor at the University of Dijon, published

¹³ See Mansfeld (2016) 153–154, who argues that the fact that Theodoret here used Plutarch and not Aëtius does not prove that Theodoret did not use Aëtius elsewhere. It is not his concern to refute Frede's argument that Diels' theory, according to which Theodoret quotes 'Plutarch' only through Eusebius, 'breaks down'.

¹⁴ Mansfeld (2016) 162–164. See above n. 5 and text thereto.

an anthology of Stoic texts in French translation that was used as a handbook by generations of French students before the French translation of Long and Sedley appeared. On p.18 of his anthology, Brun had no problem in reproducing the same passage of 'Plutarch (?)' (sic) and 'Aëtius' as two different texts.¹⁵ For the first text, he used (without mentioning it) Amyot's French translation of Plutarch and for the second text, he translated it himself from Arnim's *SVF*, so that the two texts look quite different. So, can you use two different versions of the same text without being aware that they are two 'versions' of the same text? If you are a little hasty, yes, you obviously can. So Theodoret could have used two versions of the *Placita* without realizing that they were two versions of the same book. However this is somehow unlikely in the long run—this can easily happen for a short passage of a few lines, but less easily for a work in 5 books, and this is certainly one of the reasons why Diels argued that Theodoret did not have access to both sources: if Theodoret knew Aëtius directly and knew ps.Plutarch only through Eusebius, then he need not have realized that one was an epitomisation of the other. The question whether or not Theodoret had direct access to ps.Plutarch may be impossible to solve, but, in *any case*, the fact that he mentions the work by Plutarch and the work by Aëtius as two similar but different works, and not one as the epitomisation of the other may lead us in another direction: Theodoret is bluffing, he has not seen the two versions of the *Placita*, and he is showing off by mentioning two books by two different authors, while he has only seen one. This is basically what Diels maintains, since he thinks that Theodoret knows Aëtius directly and ps.Plutarch through Eusebius: thus, Theodoret's bluff is, according to him, to make his reader believe that he has a copy of Plutarch, while he has none and relies on Eusebius. But obviously, Diels has no proof that Theodoret had no copy of ps.Plutarch. This turns out to be nothing more than a convenient hypothesis.

To sum up, two things seem quite clear: Theodoret had access to many passages of ps.Plutarch through Eusebius, and also had access to many passages of the *Placita* that may not be found in Eusebius, and even to some passages that may even not be found in Stobaeus. And he mentions both 'Plutarch' and Aëtius as his sources, so that it seems plausible that the other source is Aëtius. However, this seems less plausible if ps.Plutarch's treatise is supposed to be a shorter version of 'Aëtius', because in that case one cannot see why he never acknowledges that 'Plutarch's' treatise is a shorter version of 'Aëtius', but repeatedly treats them as two different works with a

¹⁵ Brun (1957) 18.

similar methodology. Therefore, it seems more plausible, as Diels thought, that he had access to one (our ps.Plutarch) through Eusebius, and to the other (the longer *Placita*) directly.

2. Theodoret's three mentions of 'Aëtius' and the decisive (?) mention in 5.16

Theodoret drops the name of Aëtius three times in his *Therapy of Greek Diseases* (Ἑλληνικῶν θεραπευτικῇ παθημάτων), in 2.95, 4.31 and 5.16. It is clear that one can be suspicious about these three mentions for at least three reasons. One is that Theodoret is the only ancient writer who mentions the man and his work. Another reason is that, unfortunately, he never gives any direct quotation of Aëtius but only mentions his name. On the contrary, and this is the third reason, in all three passages, Theodoret mentions Aëtius along with two other names, Plutarch and Porphyry, and does not make any direct quotation of any of them at that moment.

The first point is not a problem in itself: there are many ancient lost authors and thinkers who are just mentioned in one ancient source, and who are not mentioned elsewhere. And there is some plausibility that the 'popularity' of Plutarch's epitome eclipsed and 'replaced' Aëtius, while Theodoret and Stobaeus found the original surviving in some 'provincial library'.¹⁶ But it tends to be more of a problem, given that Aëtius is coupled with two very well-known authors. Of course, we are virtually certain that Plutarch is not the author of the version of the *Placita* still published under his name, but there was apparently no doubt in Antiquity that the work had to be attributed to him: one of the manuscripts bears his name, the work is no. 61 in Lamprias' catalogue, and, in addition to Theodoret, two others ancient authors attribute it to Plutarch, namely Eusebius and Cyril of Alexandria. Therefore, it is quite surprising that Theodoret quotes an otherwise unknown author together with two of the most famous philosophers of Antiquity, Plutarch and Porphyry. And one may be quite suspicious of the reasons why Theodoret does so. The more natural hypothesis is that Theodoret is copying and pasting, and that he found it convenient to use this triad three times, even if he modifies the order (three times three names—Theodoret certainly loves triads). But why so? It

¹⁶ Mansfeld (2016) 167 and n. 59. Note that Lebedev (2016) 579 argues for the opposite plausibility: 'Isn't it a bit surprising that Theodoret was fortunate enough to find in such solitary place in the middle of nowhere a precious complete copy of the original SP-*Placita* that was unknown both to Hellenic philosophers and Christian apologists far surpassing him in learning, a copy that could not be found in the greatest libraries of the ancient world?'

is, I think, necessary to have a closer look at the three mentions to try to give an answer to that question. But let me say for the moment that it was one of Diels' smartest moves to turn these three mentions into a solution rather than to see them as a problem: he did not see them as a reason to be suspicious about Theodoret's mention of Aëtius, but quite the contrary as an argument in favour of the reliability of Theodoret. Diels' explanation is that in fact Theodoret uses Aëtius as his main source, but, since it is an obscure writer, he also mentions Plutarch and Porphyry, because they have a great authority among the Greeks, and Porphyry is one of the Christians' most prominent adversaries. In other words, Theodoret's source is Aëtius, but he is not an authority, and, for that reason, he mentions Plutarch and Porphyry along with his real source:¹⁷

Ubi cur Aëtium tanta vi (καὶ μέντοι καὶ) aliis postposuerit, nullo modo dispicias, nisi hoc excerpsit, illos splendoris gratia nominavit. Nam Aëtio soli non cito Graeci credidissent, crediderunt illorum patrocinio commendato et sustentato. Plutarchus quidem *omnis philosophiae venus et lyra* [Eunap. Praef. p. 3 Boiss.] quanta tunc auctoritate floruerit, constat. Idem de Porphyrio ex Christianorum et ipsius Theodoreti internecivo odio satis elucet.

Why he added Aëtius to the others with so much strength (καὶ μέντοι καὶ), this is something you would not be able to see distinctly, unless he extracted that one but named the other two because of their fame. The Greeks would have not easily trusted Aëtius alone, but they trusted the patronage of these authors, which is recommended and supported. In fact, Plutarch enjoyed such an authority that he was the 'ornament and the lyre of all philosophy' [Eunap. Praef. p. 3 Boiss.]. Similarly, among Christians and Theodoret himself, it is quite apparent that Porphyry was an object of mortal hate.

This is very plausible, and actually in *Therapy* 10.42, Theodoret himself says very clearly that he has 'mentioned' Oenomaus, Porphyry, Plutarch and Diogenianus 'because of you all, since you think they are faithful, because they speak of what is yours'. Hence it is very clear that the reason why Theodoret mentions Plutarch and Porphyry is his dialectical strategy, comparable to that of a lawyer who produces in favour of his cause witnesses who are respected by his adversaries. Diels is perfectly right in that respect. However, what does not seem to be accurate in Diels' depiction of Theodoret's strategy is the contention that Theodoret added 'Plutarch' and Porphyry as authorities to add more weight to Aëtius. For if one takes a close look at what Theodoret did in book V for instance, he seems

¹⁷ Diels (1879) 48.

to have done things the other way round: he seems to have added Aëtius to a pre-existing list that contained Plutarch and Porphyry. That such a list of authorities existed among Christian authors, is what Diels acknowledged, since on p. 48 and earlier on p. 10 he quotes Cyril of Alexandria as referring to the joint authority of 'Plutarch' and Porphyry (*Adv. Iul.* 1.39, 545 B), at the end of his quotation of *Placita* 1.7. And it is one of his arguments to explain why Theodoret had added these two authorities among Christians to Aëtius. But (unless I am mistaken) Diels did not consider the possibility that Theodoret was relying on ps.-Plutarch and Porphyry and added Aëtius to the list. And, more importantly, Diels does not seem to have realized that in the crucial text of 5.15–16 where Theodoret claims to use 'Plutarch', Porphyry and Aëtius as his sources, he in fact uses ps.Plutarch and Porphyry *through Eusebius*. At some point, Diels acknowledges that Theodoret 'stole' a passage from the *Placita* from Eusebius.¹⁸ But Diels does not seem to have suspected that, in that context, Theodoret's mention of Plutarch *and* Porphyry was dependent on Eusebius, who actually quotes ps.Plutarch and Porphyry, though he admits that his quotation of 'Plutarch' here is dependent of Eusebius and Theodoret himself mentions Eusebius as a source in 2.97. In other words, Diels thought that Theodoret's quotation of ps.Plutarch in 2.212 and 3.4 were borrowed from Eusebius and that in general Theodoret had access to ps.Plutarch only through Eusebius, but he did not consider the possibility that Theodoret's main source was Eusebius and that 'Aëtius' was only an additional source. This possibility was mentioned for the first time by Lebedev in his 1988 paper and developed by Frede in his 1999 review of the 1st volume of *Aëtiana*.

Theodoret's mention of the three authorities in 5.16 is the following:

Φέρε πάλιν ἐπιδείξωμεν, τίνα περὶ ψυχῆς οἱ πολυθρύλητοι τῶν φιλοσόφων ἐδόξασαν, καὶ ὅπως αὐτοὺς ἡ
κενὴ δόξα, κατὰ τὸν Τίμαιον, ἔριδι ξυνέηκε μάχεσθαι. ἃ δὲ γε ξὺν Θεῷ λέξω, ἐκ τῶν Πλουτάρχῳ καὶ
Πορφυρίῳ καὶ μέντοι καὶ Ἀετίῳ συγγεγραμμένων ἐρῶ (Theodoret, *Therapy* 5.16.)

Let us expose with detail some of the opinions of the most famous philosophers on the soul, and how what Timaeus¹⁹ calls vainglory 'led them to fight against each other because of their discord'.²⁰

¹⁸ This is p. 10 of *DG* on the orthography of Diagoras of Melos: *furtum reddit manifestum*, though he happens to be wrong here

¹⁹ In fact, Timon. See Canivet (1958) 230–231 n. 5. Theodoret's lapsus in that very sentence is in favour of Lebedev's argument of the *lapsus*.

²⁰ Quotation from Timon.

What I shall now state with God's help, I shall borrow from the writings of Plutarch and Porphyry and of course Aëtius.

This is in fact the only passage in which Theodoret actually claims that he is going to use Plutarch, Porphyry and Aëtius as his sources.²¹ But is it what he does? Lebedev claims that he does not:²² 'after having promised to cite 'Plutarch, Porphyrius as well as Aetius' Theodoretus in fact cites Plutarch, Porphyry and Arius Didymus (from Eusebius: Cur. V,26 = Euseb. *PE* XV, 20, 6 = Ar. Did. fr. 39, 1 Diels²³), and he adds: 'it seems almost certain, that Theodoretus' AETIOΣ is nothing but a *lapsus calami* (or rather *lapsus memoriae*) for Eusebius' APEIOΣ.' This is a very compressed argument. Frede does not buy Lebedev's suggestion that Theodoret 'just garbled Arius' name', but he develops the rest of the argument, mainly stressing the dependency on Eusebius, though he argues that it is rather implausible that Theodoret really quotes Porphyry. As Frede notes, the scope of Theodoret's claim to use the three sources 'should not extend beyond V,47, since in V,48 T turns on the nature of man according to Christian doctrine'.²⁴ Mansfeld and Runia in their first volume reject the possibility 'of having derived the additional material from Porphyry' and conclude 'the argument that T does indeed cite Plutarch (i. e. P), Porphyry and then Aëtius (or rather Arius Didymus) cannot hold'.²⁵ But, if it is true that Theodoret does not use Porphyry, he does not seem to be a reliable source.

Now, Theodoret's development in 5.16–47 is an account of the discord of the Greek philosophers on the soul. How is this account composed? In the first paragraphs, §§17–24, it seems rather clear that he uses ps.Plutarch or Aëtius, as he claims to do. As Diels showed, these paragraphs have parallels in ps.Plutarch (4.2; 4.3; 4.5 and 4.7), and also in Stobaeus 1.49 (except 4.7). But, at the end of 5.18, he adds the doctrines of Empedocles and Critias, and there is nothing equivalent neither in Stobaeus nor in ps.Plutarch. From this, Diels concluded that Theodoret here is relying on Aëtius, as he says he does. Now, in 5.24–25, Theodoret uses Clement of Alexandria, *Stromata* 8.4.10.3–4 for Plato and Aristotle, and in 5.25–27, he derives his material from Eusebius, *Praeparatio Evangelica* 15.20–21, then switches to Platonists and Pythagoreans (with an unknown source for §28) and to Plato's *Laws* from §§29 to 32 and the *Republic* from §§33 to 36, and then again from §§ 37 to 43 to

²¹ See Frede (1999) 146 about 2.95: 'There is no suggestion here that Plutarch, Porphyry and Aetius are the actual sources of T's account.'

²² Lebedev (1988) 815.

²³ In fact fr. 39.6.

²⁴ Frede (1999) 144.

²⁵ Mansfeld-Runia (1997) 336–337.

the *Alcibiades* and the *Phaedo*. In fact, for all these quotations from Plato, Theodoret depends on Eusebius: the quotations from the *Laws* come from Eusebius, *PE* 12.27.2–4 and 12.52.26–27, the quotations of the *Republic* from Eusebius, *PE* 13.3.9–18, and then again the quotations of the *Alcibiades* and the *Phaedo* come from Eusebius, *PE* 11.27.5–8 and 16–17.²⁶ But there is more: if, with this in mind, we go backwards to §§17–22 where Theodoret seems to use material he derived from Plutarch and/or the longer version of the *Placita*, it is striking that in fact part of this material is also present in Eusebius: in §§ 19–22, he uses some *Placita* material which is present in Eusebius 15.60–61, namely the *Placita*, 4.4–5, but in §§19–21, though Eusebius *PE* 15.60 cites no more than Plutarch's 4.4, there is more material in Theodoret, as is clear in Diels' reconstruction on pp. 390–391 (in particular on Xenocrates, Aristotle, the Stoics and the successors of Pythagoras—note that Stobaeus himself is not extant for 4.4). So in fact, he seems that he uses material not dependent on Eusebius in §§17–18 and §§19–21 (precisely the passages where there is some material absent from Plutarch's *Placita* and from Stobaeus as well) and in §§23–24.

An important point is the one mentioned by Lebedev that in 5.25–26, when he uses Eusebius as his source, he makes use of two passages of Arius Didymus (fr. 39 Diels), quoted by Eusebius *PE* 15.20. The latter ends his quotation by saying: 'such are the dogmas of Stoic philosophy gathered from the compendia of Arius Didymus' (15.20.8). Before that, in ch. 17, Eusebius extracts from Numenius a refutation of the Stoics: 'That being is not a body, against the opinion of the Stoics: extract from book I of Numenius' *On the Good*', and then he turns to Arius Didymus in ch. 18–20. But in quoting the second extract from Arius, Theodoret is mistaken and attributes it to Numenius.²⁷

²⁶ It does not seem completely clear whether Theodoret is only dependent on Eusebius or if he also relies on a personal reading of Plato. It seems that Theodoret's text and Eusebius text are not always identical, and sometimes Theodoret seems to use another textual tradition than Eusebius. However, it is clear that (1) there is no text of Plato in book V that Theodoret quotes that is not among the extracts of Eusebius; (2) in some occasions, it is clear that Theodoret adopts Eusebius' correction of the text, notably in 5.36, where θεοῦ is the common emendation of Eusebius and Theodoret, while θεοῦς is Plato's textual tradition (see Canivet (1958) 238 n. 4). For these two reasons, it is clear that Theodoret's quotations of Plato in book V are dependent on Eusebius.

²⁷ See Canivet (1958) 233–234 n. 5. This is actually due to the fact that Eusebius quotes Arius Didymus in chap. 15, (18, (19 and (20, but has inserted in the midst of the sequence an extract of Porphyry as chap. 16 and an extract of Numenius as ch. 17 as parallel texts against the Stoics, but he does not explain in ch. 18 that he returns to Arius Didymus, it is only clear from the title of chap. 15 and from the closing sentence of ch. 20.8 where he explicitly says that he ends his quotation from Arius and borrows his objections from Longinus. This is a rather common procedure of Eusebius, at least in book XV, as for instance when he introduces long quotations from Atticus (ch. 4–13), but inserts in the midst of this long series an extract of Plotinus (ch. 10) and an extract of Porphyry (ch. 11) as parallel texts against Aristotle. This is because of this procedure that scholars disagree on the origin of 15.11.4, which some attribute to Porphyry and some to Atticus (see among others Karamanolis (2006) 296–298 and Hadot (2015) 60). The difference between the two sequences (the anti-Aristotelian and the anti-Stoic sequence) is subtle, because in the anti-Aristotelian chapters, Eusebius draws

And immediately after that (5.27), he quotes Longinus but again he is extracting the passage he quotes from Eusebius (15.21.3). This is a clear proof that he relies on Eusebius, since he confused two chapters of Eusebius and made a confusion of names because of that: as Diels would say, *furtum reddit manifestum*.

Let us now summarize the composition of §§17–43 in a table, noting all that Theodoret borrows from Clement and Eusebius, and also what he took directly from another source.

Theodoret	Clement, <i>Stromata</i>	Eusebius, <i>PE</i>	original source
§17			<i>Plac.</i> 4.2 Ps.Plutarch + additional material shared with Stobaeus. ²⁸
§18			<i>Plac.</i> 4.3: Ps.Plutarch + additional material partly shared with Stobaeus. ²⁹
§§19–21		15.60	<i>Plac.</i> 4.4: Ps.Plutarch + additional material mostly not shared with Stobaeus. ³⁰
§22		15.61	<i>Plac.</i> 4.5: material included in Ps.Plutarch's version
§§23–24			<i>Plac.</i> 4.7: material included in Ps.Plutarch's version

all his material from authors he deems to be hostile to Aristotle on the question of the soul (including Porphyry), while in the case of the Stoics, Arius is an informative source, not an hostile one, and only the other sources (Porphyry, Numenius and then Longinus and Plotinus) are hostile to the Stoics. In any case, the sequence of quotations in Theodoret and Eusebius, together with the mistake in Theodoret who attributes to Numenius a quotation of Arius Didymus clearly show that Theodoret is dependent on Eusebius here. I thank Alexandra Michalewski for a very stimulating discussion on 15.11.4

²⁸ In §17, the additional material (Alcmeon, Xenocrates, Dicearkos or Clearchos in Theodoret) is shared with Stobaeus: it clearly derives from the longer version of the *Placita*. Diels infers that it derives from Aëtius.

²⁹ In §18, part of the additional material (Hippasos, Heracleides) is shared with Stobaeus, but Anaximander, Empedocles and Critias do not appear in Stobaeus' version. Diels infers that it derives from Aëtius.

³⁰ In §19–21, the additional material on the Stoics is shared with Stobaeus, but the additional material on Xenocrates, Nicomachos and the followers of Pythagoras does not appear in Stobaeus' version. Diels infers that it derives from Aëtius.

§24	8.4–10		
§25		15.20.1–6 (Stoics)	Arius Didymus
§26		15.20.6 (Stoics)	Arius Didymus ³¹
§27		15.21 (Longinus against the Stoics)	Longinus
§28 (unknown source)			
§§29–31		12.27	Plato, <i>Laws</i> I
§32		12.52	Plato, <i>Laws</i> X
§§33–38		13.3	Plato, <i>Republic</i> II
§39		11.27	Plato, <i>Alcib. I</i>
§§40–43		11.27	Plato, <i>Phaedo</i>
§§44–47		10.14 15.9, 15	Anaximander et al. Aristotle and Plato

The way Theodoret composed §§17–43 seems rather clear: his main source is Eusebius, he started from book XV, from which he rearranged the material he used, added passages from books XI, XII and XIII; he took some additional material from Clement 8.4 to compose §§24–25 and also from one of Eusebius' sources, namely the *Placita* of 'Plutarch' for §§17–23. To this he added some material that is not present in Eusebius' version of the *Placita*, but presumably in the longer version, which is probably the work of the 'Aëtius' he mentions as his source.³² Does he quote Porphyry? It seems that he does not. But the argument that he does not usually seems to rely on the hypothesis that, here as in previous passages, the source is Porphyry's *History of Philosophy*, and Porphyry's *History of Philosophy* according to Eunapius, *Life of the Sophists* 2.1, ended with Plato 'and this is confirmed by all the fragments we have'.³³ But is Porphyry's *History of Philosophy* plausibly the source Theodoret

³¹ Theodoret erroneously attributes this passage to 'Numenius against the Stoics' because Eusebius 10.17 has quoted a passage from Numenius against the Stoics in the midst of his excerpts from Arius used by Theodoret in the previous paragraphs and Theodoret misinterpreted the extent of Eusebius' quotation of Numenius.

³² This is identical with Mansfeld's description of how Theodoret works in Mansfeld (2016) 154 (see also p. 000 in the present volume): 'I submit that we appeal to what we may call the principle of convenience, or law of the least effort. T, a busy cleric composing a major treatise, made abstracts from what could be cannibalized most easily, provided that what was on offer was sufficient for his purpose. Clearly the substantial account of the atheists in the first half of P ch. 1.7 *apud* E [Eusebius], [...] was more than sufficient for his needs. But in other cases the abstracts from P provided by P were not sufficient.'

³³ Porphyry 198 T Smith (Eunapius, *V. Soph.* II.1) 2.14–18 Giangrande). See Mansfeld-Runia (1997) 335 and Frede (1999) 145.

has in mind here? It is plausible, but it is not the only possibility, nor the most plausible. If we admit that Theodoret started to compose his chapters on the soul by taking the core of his material from Eusebius as his main source, he probably did not think of Porphyry's *History of Philosophy* in that context but rather of Porphyry's *On the Soul against Boethos*, which Eusebius excerpted in 15.16 (against the Stoics on the soul) and in 15.11 (against Aristotle on the soul), and also previously in 11.27, 11.28 and 14.10.3. However, there are good reasons to believe that Theodoret does not take his additional material from Porphyry's *On the Soul against Boethos*. What we have in Theodoret that we do not have in Plutarch is as follows:

§17: Alcmeon and Xenocrates, also found in Stobaeus

§18: Empedocles and Critias, not in Stobaeus

§19: Xenocrates, not in Stobaeus³⁴

§20: Aristotle and part of the Stoics, not in Stobaeus

§21: the followers of Pythagoras, not in Stobaeus.

All this could come from Porphyry, in particular what we find in §§19–21, but (1) nothing there is no evidence to confirm that Porphyry mentioned Alcmeon, Empedocles and Critias nor that he discussed the number of the parts of the soul (discussed in 19–21); (2) it would be expected that Boethos is mentioned at some point, even if it is not necessary; (3) the fact that the elements of §17 which are not found in Plutarch are found in Stobaeus point in the direction of the longer version of the *Placita*, not in the direction of Porphyry's *On the Soul against Boethos*, which Theodoret does not quote anywhere. Hence, it seems that the more plausible possibility is that Theodoret took his additional material from a longer version of the *Placita* than the one we and Eusebius know, the same version that Stobaeus knows. This is the only possible explanation for §17–18 and therefore, it is the more plausible explanation for §19–21. However, it is not entirely impossible that Theodoret's original material may come from the longer version of the *Placita* in 17–18 and from Porphyry in 19–20. It just turns out that we cannot be sure. And there is also the possibility, mentioned by Frede 1999, 145, and now defended by Lebedev, that Porphyry is the source for §28. Frede 1999, 145, says that 'this is a remote possibility', and notes that Mansfeld and Runia see a parallel in Stobaeus, I.48.7, as Diels did, but denies that the suggestion 'seems attractive'. It seems to me that Lebedev weakens his case if Porphyry is really quoted by Theodoret here. For it makes Theodoret a man who does

³⁴ There is no equivalent of 4.4 in Stobaeus.

what he claims to do. But, conversely, the argument that the extra source of Theodoret is not Porphyry is double-edged. Because, if he claims to use Porphyry and does not, why should we believe him when he says in the same sentence that he uses Aëtius? There is no reason to believe a man who obviously does not do what he claims to do. However, to be frank, whether or not he uses Porphyry seems to me rather difficult to decide.

But, if it is the case that Theodoret claims to quote Porphyry and actually does not, why is he doing so? There are two plausible answers to that question. The first is that he is copying and pasting the triad he has already referred to in previous passages, Plutarch, Porphyry and Aëtius, and reproduces it mechanically here. The second is less obvious but not implausible and not incompatible with the first: it is *because Theodoret uses Eusebius as his main source without mentioning him that he says that he is going to quote Porphyry*. The reason would be the following: Eusebius' book XV is a book on ancient philosophical physics which is composed of three main sections: an exposition and refutation of Aristotle (ch. 2–13), an exposition and refutation of the Stoics (ch. 14–22) and a general exposition of the Greek physicists explicitly based on 'Plutarch's *Placita* (ch. 23–61) with a final refutation of the Greeks in ch. 62 based on the disavowal of physics by Socrates' Xenophon and of some later philosophers denying the existence of physics as a part of philosophy. Each of these sections contains disseminated chapters on the soul: ch. 9–12 (Aristotle), ch. 20–22 (the Stoics), and ch. 60–61 (the Greek physicists according to Plutarch), and Theodoret relies heavily in most of this chapters (§§20–21 and §§60–61) on Eusebius. Now, the material of Eusebius' ch. 9 comes from Atticus, ch. 10 from Plotinus, but ch. 11–12 are extracts from Porphyry's *On the Soul against Boethos*. So it clearly emerges that Theodoret's main source, Eusebius considers Porphyry's treatise as a major reference on the soul, while he generally considers 'Plutarch's *Placita* to be a major source. So it is possible that, if Theodoret has *listed* Porphyry *among his references* here, it is because (1) he did it in other passages; but (2) he thought, *because of his main source Eusebius*, that Porphyry is an important reference on the question of the soul. He may even have had the intention to use Porphyry, as Eusebius does, but he finally did not use him, but because Porphyry's *On the Soul against Boethos* is an important reference on the soul in Eusebius, it seems natural to keep Porphyry in the list of his authorities here. But if Theodoret actually quotes Porphyry (as Lebedev maintains he does in ch. 28)³⁵, it is obviously also because he has found it among Eusebius'

³⁵ And this, again, does not seem to me an implausible hypothesis.

sources, and checked the book directly. Now again, this is not necessarily the most plausible scenario, since he does not give any sign of having read directly anything else by Porphyry than his *History of Philosophy*.³⁶ Again, it is not impossible that he read *On the Soul against Boethos* and used it in §28, but there is no direct evidence to substantiate that claim. So, all in all, it is more plausible to conclude that he refers to Porphyry in 5.16 because he originally intended to use some passages from Porphyry, as quoted by Eusebius, but finally did not. On the other hand, if he actually used Porphyry in §28, then the reason why he does so in that context is that Porphyry's *On the soul* is an important source for his own major source, Eusebius.

But what are we to think of the reference to Aëtius in 5.16? There are two hypotheses. One is Diels' hypothesis. Theodoret mentions Aëtius here because he is actually using him, and he adds 'Plutarch' and Porphyry because of their authority. Now, this seems to be wrong in so far as Theodoret uses mainly Eusebius, and in addition Clement and Ps.Plutarch and/or Aëtius. But Eusebius' authorities in book XV are Atticus, Plotinus, Porphyry, Arius Didymus, Longinus and 'Plutarch' (chap. 23–61, on other matters than the soul except in chap. 60–61) and finally Xenophon (chap. 62). So, if Theodoret initially took most of his material from Eusebius, his three authorities in 5.16 reproduce two of Eusebius' more important authorities. In that case, he does not rely heavily on Aëtius, and he does not *add* Plutarch's and Porphyry's names to give more weight to the source he uses. He basically used Eusebius, and added material he took from Clement and from one of Eusebius' source, the *Placita*, and kept the name of Porphyry in the list of his authorities, because it seemed natural in the context, given that he is one of Eusebius' authorities. And, in that case, Aëtius is just an additional source and a name added to the list, because Theodoret used it in addition to Eusebius' source. This is a revised version of Diels, more in line with the way book V is obviously composed. I think it is more or less what Mansfeld and Runia note:³⁷ "Theodoret's erudition is largely derivative. [...] One of Theodoret's main sources, Eusebius, had drawn extensively on P in his apologetic collection of texts. Almost all the *placita* material that Theodoret needed thus lay ready

³⁶ The *History of Philosophy* is quoted by Theodoret in *Therapy* 1.27, 4.32 and 12.61. He does not quote it from Eusebius nor, apparently, from any other intermediate source. In *Therapy* 1.43, 3.59 and 10.11, he quotes the *Philosophy from the Oracles* from Eusebius, and in 3.58, he quotes the *Letter to Anebo* also from Eusebius. I thank Jaap Mansfeld for all these references, which indeed prove that Theodoret had access to the *History of Philosophy*. There is no direct evidence that he may have known *On the soul*, which he never quotes, not even from Eusebius.

³⁷ Mansfeld-Runia (1997) 273.

to hand in a conveniently abridged form. Instead he chose to turn to the original work'. This is a major revision of Diels' hypothesis.

Now, there is also the second hypothesis, that of Lebedev. According to him Theodoret quotes Arius Didymus' from Eusebius, but misspells his name. And the evidence for that is that, when Theodoret quotes Arius Didymus from Eusebius, he claims that he is quoting Numenius, who in fact is quoted in the previous chapter by Eusebius. So what seems to have happened is that Theodoret used as his source Eusebius, saw that Eusebius used three authorities, Plutarch, Arius and Porphyry (not to mention Numenius and Longinus), and misspelled Arius into Aëtius. Is this implausible? No, it is not, in particular since it is obvious that Theodoret has not seen Arius Didymus directly. He thinks that if he wants to impress his reader, he must refer to the authorities extracted by his source, Eusebius. And this is even more plausible if he actually does not use Porphyry.

But then, is it plausible that the source Theodoret used, in addition to Plutarch, is Arius, and that the author of the longer version of the *Placita* is Arius? No, because Theodoret quotes Arius Didymus from Eusebius but thinks and says that he is quoting Numenius. This shows that he does not know Arius Didymus' work. So, if he does not know Arius, his additional source is not Arius.³⁸ Otherwise there would be not just one confusion, but two confusions: Theodoret would have made a confusion between the source quoted by Eusebius (Arius, confused with Aëtius), and a second confusion between the author of the longer version of the *Placita* he uses (again, Arius, confused with Aëtius). Henceforth, the hypothesis of the *lapsus* seems plausible only in a limited sense: Theodoret has noticed that Eusebius' authorities on the soul are, among others, Arius and Porphyry, but misspells Arius' name, whose work, obviously, he has not seen directly and knows only through Eusebius (as proven by the fact that he confuses a quotation of Arius with Numenius). In that case, as Theodoret seems to have known and excerpted the longer version of the *Placita*, there is only one

³⁸ Lebedev (2016) now arrives at a more complicated hypothesis that there were two works by Arius Didymus, the one extracted by Eusebius in the *Preparatio Evangelica*, and the longer version of the *Placita* extracted by Stobaeus (and Theodoret?). It seems to me that Lebedev has a double-level argument: first, it is proven by the error of attribution of a passage of Arius to Numenius borrowed by Theodoret from Eusebius that Theodoret misspells the name of Arius into Aëtius; second, given that Theodoret misspells Arius name into Aëtius and that he had a copy of the longer version of the *Placita*, it is thus clear that Arius Didymus is the author of the longer version of the *Placita* (but I am not sure to understand if this is part of Lebedev's hypothesis). However, it seems to me that one cannot have it both ways: if Theodoret misread the name of Arius Didymus in Eusebius and confused him with Aëtius, he cannot have had access to a longer version of the *Placita* with the name of Arius Didymus as the author of it (as far as I understand it: for instance in Lebedev (2016) 590 the argument of the *lapsus* due to a technical damage of the manuscript works with the mention of Arius in Theodoret's manuscript of Eusebius, not with a book of Arius that Theodoret compiled).

remaining possible name for the author of this longer version among the authors that Theodoret quotes, and this is the name of Plutarch. It means that he knew this longer version of the *Placita* under the name of Plutarch, as the version we and Eusebius know. This is a major revision of Lebedev' hypothesis. Lebedev accepts the hypothesis of a 'better Plutarch', but he does not think that this version was known under the name of Plutarch, as the version Eusebius and we know, but that it was the work of Arius Didymus, and known under his name.

Alternatively, there also remains the possibility that Theodoret did not make any involuntary confusion, but realized that the sources of Eusebius were Plutarch, Arius and Porphyry, and substituted 'Aëtius' for 'Arius' in the list of authorities *because* he did not know who Arius was (this is understandable if he had no copy of his work), while Aëtius was more familiar to him *because* he had a copy of Aëtius' book. As I said before, that he had no copy of Arius is clear from the fact that he confuses him with Numenius; that he had a copy of Aëtius is what he seems to claim, but it is not a fact: *sine dubio ad manus fuerit*, says Diels,³⁹ but it does not seem to be *sine dubio*, it just seems *sine dubio* that it is what Theodoret claims. This, in a way, is a mix of Diels' and Lebedev's hypothesis, but basically, it is a revised version of Diels.

So far, it is clear that, *at least for the passage following Theodoret's third mention of Aëtius in 5.16*, we cannot keep Diels' theory in the way he formulated it as evidence that Aëtius is 'Theodoret's true source' (*verus Theodoreti fons*, 48), for the simple reason that it is not his main source in book 5.16–47, but only a plausible additional source for a few paragraphs. However, it does not mean that Diels was necessarily wrong in thinking that Aëtius was *one* of Eusebius' sources, but just that we cannot be sure that it was one of his sources and that Theodoret really had a copy of Aëtius. So at the end of the day, 5.16 does not seem to be a decisive mention, and it seems impossible to derive any certain conclusion from it without taking into account the two other mentions of Plutarch, Porphyry and Aëtius in the *Therapy*.

It is therefore important to turn to these two other mentions of Aëtius to have a better idea of how Theodoret relies on him, if at all, especially since these two other mentions precede the mention in 5.16, which, in fact, is the last mention. For that reason, Theodoret's third mention of Aëtius is likely reminiscent of his two previous mentions. One of the interesting points is that the first of these mentions is explicitly followed by a reference to Eusebius.

³⁹ Diels (1879) 47.

3. Theodoret's first mention of 'Aëtius' in 2.95

In 2.95, Theodoret mentions the three names for the first time, and the interesting point is that, in the same passage, he refers his reader to Eusebius, acknowledging him as a source. And, as he will do in book V, when he will again refer to the triad, Theodoret will in fact use mainly Eusebius and Clement of Alexandria as his direct sources. While book V is entitled 'on the nature of man' (περὶ φύσεως ἀνθρώπου), book II is entitled 'on the first principle' (περὶ ἀρχῆς). §§8–20 are a refutation of the philosophers, §21–42 build a genealogy from the errors of the Greeks to the errors of the Egyptians, §§43–55 deal with the truth in the Hebrews and Moses on God, and §§56–94 deal with the Trinity and its anticipation in the Old Testament and the Greek philosophers, in particular the Neoplatonists. In this last section, for which Theodoret relies heavily on Eusebius and Clement, there is already a triad of authors including Plutarch, and this is a list of Platonic authorities: Plotinus, Plutarch and Numenius. Obviously Theodoret likes listing *three* authorities:

(82) Καὶ Πλωτῖνος δέ, ὁ τὴν Πλάτωνος φιλοσοφίαν ζηλώσας, περὶ τῶν τριῶν ἀρχικῶν ὑποστάσεων βιβλίον ξυνέγραψεν. [...] (84.) Καὶ ἕτερα δέ γε πλεῖστα εἴρηται καὶ τοῦτῳ καὶ Πλουτάρχῳ καὶ Νουμηνίῳ καὶ τοῖς ἄλλοις, ὅσοι τῆς τούτων ἦσαν ξυμμορίας.

(82) And Plotinus, an enthusiastic follower of Plato's philosophy, wrote a book on the three principal hypostases. [...] (84) Plutarch and Numenius said many other things about that, and some others too, who were of the same group.

The reason why Theodoret lists these three authorities is that he is very closely following Eusebius here. In §§82–83, he is quoting a passage from Plotinus which he has obviously borrowed from Eusebius 11.17.7, and in §84 he refers to Numenius and Plotinus, and then to Amelius in §88. This follows the sequence of Eusebius in 11.18–19, who first quotes Numenius (excerpted by Theodoret in §81 from Eusebius 11.18.6) and then Amelius (excerpted by Theodoret in §88 from Eusebius 11.19.1). To the authorities of Plotinus and Numenius, both borrowed from Eusebius, Theodoret has added Plutarch, replaced in §85 by Plato, and then again in §87, Plotinus and Plutarch are mentioned, alongside Amelius and Porphyry, whom he does not quote in §84. It seems rather clear then that Theodoret's list of authorities here follows the authorities of his main source, Eusebius, but adds

another authority, Plutarch, whom Theodoret does not quote here (he just mentions his name), but who also is not quoted in the chapters of Eusebius that are the source of Theodoret, though of course he is quoted in other passages. Theodoret has obviously triadic lists of authorities: Plotinus, Plutarch and Numenius (or Amelius or Porphyry) are authorities in the Platonic tradition, Aëtius, Plutarch and Porphyry are authorities on the opinions of the philosophers.

The final section of Theodoret's book II deals with Greek theology, and in particular the myths, compared to the eternal existence of the real God, who is unengendered. As a start, Theodoret makes a long list of authorities on Greek and Egyptians myths, and then the name of Aëtius appears for the first time together with Plutarch and Porphyry:

Σαγχωνιάθων μὲν οὖν ὁ Βηρύτιος τὴν Φοινίκων θεολογίαν ξυνέγραψε· μετήνεγκε δὲ ταύτην εἰς τὴν Ἑλλάδα φωνὴν Φίλων, οὐχ ὁ Ἑβραῖος, ἀλλ' ὁ Βύβλιος, τὸν δὲ Σαγχωνιάθωνα λίαν τεθαύμακεν ὁ Πορφύριος· Μανεθῶς δὲ τὰ περὶ Ἰσιδος καὶ Ὀσίριδος καὶ Ἀπιδος καὶ Σαράπιδος καὶ τῶν ἄλλων θεῶν τῶν Αἰγυπτίων ἐμυθολόγησε· (95.) Διόδωρος δὲ ὁ Σικελιώτης κοσμογονίαν ξυνέγραψε· τὴν δὲ τοῦ Ἀσκραίου ποιητοῦ Θεογονίαν οἶδε καὶ τὰ μειράκια· ὁ δὲ γε Ὀδρύσης Ὀρφεὺς τὰς Αἰγυπτίων τελετὰς τοὺς Ἕλληνας ἐξεπαίδευσε· Κάδμος δὲ τὰς Φοινίκων· Κορνοῦτος δὲ ὁ φιλόσοφος τὴν Ἑλληνικὴν θεολογίαν ξυντέθεικε· Πλούταρχος δὲ καὶ Ἀέτιος τὰς τῶν φιλοσόφων ἐκπαιδεύουσι δόξας· τὸν αὐτὸν δὲ καὶ ὁ Πορφύριος ἀνεδέξατο πόνον, τὸν ἐκάστου βίον ταῖς δόξαις προστεθεικώς. (96.) Τούτοις ὑμᾶς, ὦ ἄνδρες, ἀξιῶ τὰ ἡμέτερα παραθεῖναι καὶ μαθεῖν ὡς οὐ μόνον, κατὰ τὸν ποιητὴν,

ὅσον οὐρανός ἐστ' ἀπὸ γαίης

ἀφέστηκεν, ἀλλ' ὅσον ὁ καλούμενος Τάρταρος οὐρανοῦ. (*Therapy*, II.94–96).

Sanchuniathon of Berytos wrote down the theology of the Phoenicians—Philo, not the Hebrew, but the one from Byblus, translated it into Greek—this is the one whom Porphyry praised greatly. Manetho told the myths of Isis and Osiris, but also Apis and Sarapis, and the other Egyptian gods, while Diodorus of Sicily wrote a cosmogony. Even children know the theogony of the poet from Ascrea. Orpheus of Odrysos taught the Greek the ultimate Mysteries of the Egyptians and the Greeks, and Cadmus those of the Phoenicians. The philosopher Cornutus collected the theology of the Greeks. Plutarch and Aëtius taught extensively the opinions of the philosophers. Porphyry too took on the same labour, adding the life of each philosopher to the opinions. My dear men, I ask you to compare what we teach to these opinions, and learn that not only, according to the poets,

As far as the heavens are from the earth

so far what you call Tartarus is from heaven.

Frede makes the following suggestion:⁴⁰

... given the list of non-philosophical sources (Sanchuniathon, Philo of Byblus, Manetho, Diodorus Siculus, Hesiod, Orpheus, Cadmus, Cornutus), it is clear that the whole list is rather non-committal. T. is not suggesting that he has read all these works, let alone that he is basing his account on them. They are just the works which come to mind when one is looking for information on these matters. Perhaps the only inference to be drawn from this is that T at least must have thought that Aetius' work was not so entirely obscure as to look strange on this list. There is no suggestion here that Plutarch, Porphyry and Aetius are the actual sources of T's account.

I find the suggestion that Cornutus is a non-philosophical source quite puzzling, in particular since Theodoret himself qualifies him as a philosopher. All the authorities from Sanchuniathon to Cadmos are non-philosophical authors, while Cornutus is a philosopher who collected Greek theology, as opposed to the previous non-philosophical authors. Some of them collected Phoenician material, some others Greek or Egyptian material. In addition, it is not true that these authors are just those whose works 'come to mind when one is looking for information on these matters'. Again, the source for these authors is Eusebius, who mentions them.⁴¹

But it is true that there is a turning point in the list of authorities after Cornutus since what the authorities mentioned, including Cornutus, collected is myths, cosmogony, 'theology' or Mysteries, while the following authors teach 'the opinions of the philosophers' (τὰς τῶν φιλοσόφων δόξας) and this is quite different. It is quite clear here that there is a difference between collecting popular theology (tales on the Gods, cosmogony and religious rites of initiation) and the opinions of the philosophers, and this according to Theodoret (2.95) is what 'Plutarch', Aëtius and Porphyry are supposed to have done:

The philosopher Cornutus collected the theology of the Greeks. Plutarch and Aëtius taught extensively the *opinions of the philosophers* [my emphasis]. Porphyry too took on the same labour, adding the life of each philosopher to the opinions.

⁴⁰ Frede (1999) 146.

⁴¹ See Sanchuniathon and Philo of Byblus in *PE* 1.9.20–21; Manetho in *PE* II. Proem. 5–6 and 3.2.7 (Manethon fr. 74); Orpheus in *PE* 1.6.4. See Canivet (1958) 164, n. 1 and 2; Raeder (1904) 61–62 *app. fontium ad loc.* In addition, Cadmos is already mentioned by Theodoret in *Therapy* 1.20, in a context where also appear Orpheus and Diodorus of Sicily (again here, Theodoret is dependent on Eusebius, *PE* 10.8.4). Cornutus is not mentioned by Eusebius in the *Preparatio* but he says in *Hist. Eccl.*, 6.19.4–8 that, according to Porphyry, Cornutus was the source of inspiration of Origen's use of allegorical methods, and this is actually F 39 Smith of Porphyry's *Contra Christianos*.

There is a difference with Plotinus, Plutarch, Numenius and Amelius in §§84–88, since they are authorities on Platonic philosophy, and the list depends on Eusebius being the source, though Plutarch has obviously been added while he is not quoted by Eusebius in the corresponding passages. Plutarch, Aëtius and Porphyry are authorities not on Platonism, but on philosophers in general, of whom they collected the various opinions (though of course Porphyry's *History of Philosophy* did not go beyond Plato)⁴². They are also in opposition to Cornutus and other writers who collected religious material. A few lines later Theodoret refers his reader to Eusebius:

Ἐγὼ δ' αὐτοὺς θεῖναι παραιτοῦμαι τοὺς μύθους, ἵνα μὴ μέ τις ἀδολέσχην ὀνομάσῃ καὶ φλήναφον· ἐνίων δὲ καὶ μάλα ὀλίγων ἐν τῇ μετὰ τήνδε, ξὺν θεῷ φάναι, γραφησομένη διαλέξει μνησθήσομαι, ἵνα τῶν μυθολογουμένων περὶ τῶν καλουμένων θεῶν μὴ μόνον τὸ ἀπίθανον, ἀλλὰ καὶ τὸ ἀνόητον καὶ δυσαγές ἐπιδείξω. (97.) Εἰ δὲ τῷ φίλον καὶ αὐτὴν διαγνῶναι τὴν ξύγκρισιν, εὐρήσει ταύτην ἐν τοῖς Εὐσεβίου τοῦ Παλαιστίνου ξυγγραμμάσιν, Εὐαγγελικὴν δὲ προπαρασκευὴν τόνδε τὸν πόνον ἐκεῖνος ὠνόμασεν.

As far as I am concerned, I refuse to give an account of the myths, in order to avoid to be called an idle talker and a babbler. I shall recall a few of them in the discussion following this one, so help me God, in order to show that this tales about the so-called gods are not only incredible but even impious. (97) If someone would like to deepen one's judgement about this, he will find it in the work of Eusebius of Palestine, which he himself called the *Evangelical Preparation*.

The 'myths' here are apparently not only the tales of traditional religions, but also the 'opinions' of the philosophers. Again, in most of the following paragraphs, Theodoret mainly compiled material from Eusebius, in particular *PE* 11.10, 11, 21–34, 13.13, 14.3, and 14.16. So here he clearly refers his readers to the source he started from. The mention of the three 'doxographers' in §95 is non-committal and does not indicate sources he may have used nor had access to, nor is there any evidence that he checked Aëtius' or even Plutarch's text here in addition to the material he compiled from Eusebius. His only real source here is the one he gives in §97. So the successive lists of authorities in §94–96 cannot be used as a proof that Theodoret used Aëtius at any point here, no more than he used Plutarch, Porphyry or Cornutus. The only important piece of information concerns Porphyry's *History of Philosophy*, because we learn from it that it includes doxography and biography, while the

⁴² Porphyry 198 T Smith (Eunapius, *V. Soph.* 2.1, 2.14–18 Giangrande). See above n. 33.

two other authors only included doxography. This is an element in favour of Theodoret knowing the content and structure of Aëtius' book.

4. The mention of Aëtius in 4.31

The second mention of Aëtius, in 4.31, gives an additional piece of information:

Εἰ δέ τις οἶται κάμει συκοφαντῆσαι τοὺς ἄνδρας, τὴν παμπόλλην αὐτῶν διαφωνίαν ἐλέγξαντα, ἀναγνώτω μὲν Ἀετίου τὴν Περὶ ἀρεσκόντων ξυναγωγὴν, ἀναγνώτω δὲ Πλουτάρχου τὴν Περὶ τῶν τοῖς φιλοσόφοις δοξάντων ἐπιτομήν· καὶ Πορφυρίου δὲ ἡ Φιλόσοφος ἱστορία πολλὰ τοιαῦτα διδάσκει.

If anyone thinks that I am slandering these men, when I refute their complete dissension, let him read the collection *On the beliefs* by Aëtius, let him read the epitome *On the opinions of the philosophers* by Plutarch; Porphyry's *Philosophical History* also teaches many things on such questions.

Book IV is 'on matter and the cosmos'. The book apparently starts with a quotation of Porphyry's *Philosophical History*, on Socrates preceded by a sentence on Democritus, the source of which seems to be Clement's *Stromata* 4.23. The source of §§5–25 that follow appears to be mainly the longer, lost version of the *Placita*, as shown by the fact that parallel texts may be found in Stobaeus, but not in the version of the *Placita* known to us under the name of Plutarch. One paragraph, which could have its source in Eusebius or in Clement, namely a quotation of Parmenides (§7) quoted by Clement, 5.14.112 and Eusebius, 13.13.39, even seems to use a better version of the *Placita*, the closest parallel for which is Plutarch's *Stromata* §5, p. 580 Diels. But then, starting from §26, Eusebius is again Theodoret's main source. In those paragraphs, Theodoret wants to show that astronomy and physics are useless and he starts with a quotation from Xenophon's *Memorabilia* I, 1, 11–14. The text is quite famous but it is important here to notice that it is the text with which book XV of Eusebius ends, 15.62.1–6. And precisely Eusebius concludes book XV by saying that he as 'demonstrated' the dissensions of the philosophers and the uselessness of physics (62.16). Theodoret now refers his readers to Aëtius, Plutarch and Porphyry for further reading, but adds that he will not give a detailed treatment, since Xenophon's texts constitute a sufficient refutation:

Ἀπόχρη δὲ καὶ τὰ Ξενοφώντος, ὧν ἀρτίως ἐμνήσθημεν, μαρτυρῆσαι τοῖς παρ' ἡμῶν εἰρημένοις ἀλήθειαν· μάλα γὰρ ἐκεῖνος καὶ τὴν πολλὴν αὐτῶν ἀγνοίαν καὶ ἣν πρὸς ἀλλήλους ἐσχήκασιν ἐκωμώδησε διαμάχην. Ἐγὼ δὲ τοὺς μὲν ἄλλους ἅπαντας παραλείψω. (*Therapy*, 4.31–32).

To testify in favour of the truth of what we have said, the texts of Xenophon, which I have quoted exactly, are enough. He is the one who has best ridiculed their great ignorance and the fight they used to have together. So I shall leave all the others.

Therefore, Theodoret here does not claim to use Aëtius, Plutarch and Porphyry as sources. Rather he claims not to do so—though in fact he did it quite extensively before, in the preceding paragraphs of the book. In the following paragraphs (§§32–49), in his account of Plato's doctrine, his main source will again be Eusebius' book XI, before he shifts to an account of the *creatio ex nihilo* revealed by the Scriptures. His method of composition in book IV is thus more or less the same as in book V, where his exposition of the Greek philosophers relies mainly on Eusebius, but also uses doxographical sources, though here, he draws his Presocratic material from doxographical sources before mentioning them and then takes his Platonic material from Eusebius' book XI, while in book V, Eusebius' book XV and the *Placita* are a source for Presocratic and Hellenistic material, and books XII and XI are sources for the Platonic passages. To sum up, in book IV, when Theodoret mentions the three doxographical authorities, he does this *after* he has used them (or at least one of them), and claims that he *will not* use them, while in book V, when he mentions the three doxographical authorities, it is before using them to a rather limited extent. In both texts he takes his material mainly from Eusebius.

Now, it is true that taking his material mainly from Eusebius is what Theodoret does in most of the *Therapy*. However, after book V, when he uses Eusebius as a source, it is, with some rare exceptions, mainly to use it for extracts from Plato. In particular, in these subsequent books after book VI, Eusebius is not used for the *Placita* material pertaining to Hellenistic or Presocratic doctrines.⁴³ Therefore it is clear that when Theodoret is mentioning the three names of Aëtius, Plutarch and Porphyry, he does so in contexts where he in fact uses Eusebius as his main source, not for Platonic material, but precisely for the doxographic material he will borrow from the *Placita*, partly through Eusebius and partly directly. It is common to the second and the third mentions of

⁴³ This is clearly seen in Mansfeld-Runia (1997) 274–275.

the three doxographical authorities that they appear before long sections where he relies heavily on Eusebius, and additionally, or not at all on Plutarch, Aëtius or Porphyry.

Now, this confirms that when he refers to these three authors, he does not necessarily rely on them. The three mentions show that these three authors constitute Theodoret's triad for the history of philosophy, and it is striking that these three authors seem to stand for an equivalent triad in his main source, Eusebius, who actually uses three sources of doxographical nature, namely Plutarch, Arius Didymus and Porphyry. All the other authors Eusebius uses do not belong to the category of 'historians' of philosophy or doxographers. However, Porphyry's *History of Philosophy* is not quoted by Eusebius, but *On the soul* and other philosophical treatises. More importantly, Theodoret explicitly quotes Porphyry's *History of Philosophy* and 'Plutarch's' *Opinions of the Philosophers* in other passages of the *Therapy* in passages where he does not mention the triad. This is what he does for Porphyry in 1.27–29 and 12.61–68 with explicit mention of the title, and also in 4.2, though he does not give the title. This is also what he does in 2.112 and 3.4 for 'Plutarch's' *Opinions of the Philosophers*. It is quite surprising that he never does that for Aëtius, but only mentions him with the other two authors, in passages heavily dependent on Eusebius. Conversely, he never even mentions Arius Didymus. And, as a matter of fact, this is quite surprising, because *all the other Greek authorities extracted by Eusebius* are mentioned by Theodoret: Amelius, Atticus, Longinus and Numenius are all quoted, with the exception of Severus. So (1) Theodoret gives some extracts from Porphyry's *History of Philosophy* and 'Plutarch's' *Opinions of the Philosophers* by expressly acknowledging that he is quoting these works, but he never does so for Aëtius, whom he values as a source equivalent to the other two; (2) he mentions all the Greek authorities quoted by Eusebius with only two exceptions, Severus and Arius Didymus. These are convergent anomalies because (1) Porphyry, ps.Plutarch and Arius Didymus are *the only three historians of philosophy* excerpted by Eusebius; (2) Porphyry, 'Plutarch' and Aëtius are *the only three historians of philosophy* listed by Theodoret; (3) whenever Theodoret mentions these three authorities, he is heavily dependent on Eusebius; and (4) Arius is the only Eusebian source Theodoret never mentions while Aëtius is the only source that Theodoret does not know from Eusebius and never mentions otherwise than in conjunction with the two other sources whom he borrows from Eusebius. In other words, both use three historians of philosophy as their sources, and while Theodoret is heavily dependent on Eusebius, there is only one different name in their lists of authorities: the third authority is Arius

Didymus in Eusebius, while it is Aëtius in Theodoret, and none of the two seems to know the third author used by the other.

So why is Arius Didymus absent from the list of Theodoret's authorities? On one occasion, clearly it is because he has confused him with Numenius. But it seems to me quite strange that, given the fact that he obviously had no copy of Arius and did not know who he was, while he quotes almost all the other authorities to be found in Eusebius, he precisely never mentions Arius but Aëtius, who is the only author he never quotes independently from the passages where he mentions him with two other authors. If Theodoret had no copy of Arius Didymus, this is exactly what he would do: misspelling his name and never quoting him directly, but only with other authorities, to give more weight to what he says. And if one misspells a name because one does not know the person, there would be a tendency to repeat this error, rather than doing it once. It seems to me that describing this as a *lapsus calami* slightly misrepresents what happens. Because if you distort a name in all its occurrences, this is not a *lapsus*, this is a misspelling due to the ignorance of the person you name. This is actually what Theodoret does when he makes a mistake concerning the name of Diagoras, by confusing his native town, as his source and many other do. If one is mistaken on a name, one reproduces this error in all the mentions of the name, one does not do it just once. A *lapsus calami* or a *lapsus memoriae* is when you know a name correctly but accidentally misspell it; but if you do not know a name, you write it incorrectly in all occasions and presumably under the same form.

Prima facie, the mention of 4.31 seems to contain much more information than the two other mentions because it gives titles for both works: *On the beliefs* for Aëtius' work (Περὶ ἀρεσκόντων), and *On the opinions of the philosophers* (Περὶ τῶν τοῖς φιλοσόφοις δοξάντων) for Plutarch's book. In addition, Theodoret calls Plutarch's book an ἐπιτομή. Now, this cannot come from Eusebius, since he gives for the work he attributes to Plutarch the title Περὶ τῶν ἀρεσκόντων τοῖς φιλοσόφοις φυσικῶν δογμάτων (*On the dogmatic opinions of the natural philosophers*) and he never describes it as an ἐπιτομή, but only as a συναγωγή (by using the participle συναγαγών), whereas he applies the word ἐπιτομή to the work of Arius Didymus, apparently as a title:

Eusebius, *PE* 14.13.9: δῆτα λοιπὸν ἤδη ἄνωθεν ἀρξάμενοι τὰς τῶν εἰρημένων φυσικῶν φιλοσόφων δογματικὰς πρὸς ἀλλήλους ἀντιδοξίας. γράφει δὴ ἀθρόως ἀπάντων τῶν Πλατωνικῶν ὁμοῦ καὶ Πυθαγορείων τῶν τε ἔτι πρεσβυτέρων φυσικῶν φιλοσόφων ἐπικεκλημένων καὶ αὖ πάλιν τῶν νεωτέρων Περιπατητικῶν τε καὶ Στωϊκῶν καὶ Ἐπικουρείων τὰς δόξας συναγαγών ὁ Πλούταρχος ἐν οἷς ἐπέγραψε 'Περὶ τῶν ἀρεσκόντων τοῖς φιλοσόφοις φυσικῶν δογμάτων.'

Let us now start from farther back the dogmatic contradictions of the natural philosophers. Plutarch has collected the opinions of all the Platonists as well as the Pythagoreans, and some of the so-called older natural philosophers, and conversely the younger ones, the Peripatetics, the Stoics and the Epicureans, which he has entitled *On the dogmatic opinions of the natural philosophers*.

Eusebius, *PE* 15.15.9: Ταῦτα μὲν ἡμῖν ἀπὸ τῆς Ἐπιτομῆς Ἀρείου Διδύμου προκείσθω.

Let us oppose what comes from the *Epitome* of Arius Didymus.

Eusebius *PE*, 15.20.8: Τοιαῦτα καὶ τὰ τῆς Στωϊκῆς φιλοσοφίας δόγματα ἀπὸ τῶν Ἐπιτομῶν Ἀρείου Διδύμου συνειλεγμένα.

Such are the dogmas of the Stoic philosophy, gathered in the *Epitomai* of Arius Didymus.

Hence, it would seem, Theodoret does not rely on Eusebius for the title of the book attributed to Plutarch. However, the information he provides on the title of Plutarch is less in conformity with other sources of the text than Eusebius' indications, which seem more reliable. The work appears as no. 61 in Lamprias catalogue as an ἐπιτομή, under the title Περὶ ἀρεσκόντων φιλοσόφοις φυσικῆς ἐπιτομῆς βιβλία ε'. This is more or less the title it bears in the manuscript tradition, Περὶ ἀρεσκόντων φιλοσόφοις φυσικῶν δογμάτων βιβλία ε' and also in Eusebius, 14.13.9, Περὶ τῶν ἀρεσκόντων τοῖς φιλοσόφοις φυσικῶν δογμάτων, with the word ἐπιτομή added as well. The word ἐπιτομή is not used by Eusebius for the *Placita* of 'Plutarch', but it appears in various places of ps.Plutarch's text as transmitted, mainly in the title of books II, III and V.⁴⁴ Cyril, *Adv. Iul.* 2.14 572 A, quotes the work under the title Περὶ τῶν φυσικῶν δογμάτων and describes it as a συναγωγή—this is apparently the same title as ps.Plutarch's manuscript, Lamprias and Eusebius, but compressed. In contrast to all these authorities, Theodoret quotes the book under an alternative title, Περὶ τῶν τοῖς φιλοσόφοις δοξάντων, but describes it as others do as an *epitome*. He attributes to Aëtius the title of Plutarch's ἐπιτομή but does not describe it as an ἐπιτομή, but as a collection, a συναγωγή. The obvious meaning of the word is that it is a collection of writings, and therefore, in particular in contrast to an ἐπιτομή, it seems to refer to a rather long work, though in some cases it may an equivalent of ἐπιτομή, a 'summary-like treatment'.⁴⁵ συναγωγή was the word used by Cyril to describe the work of 'Plutarch'. As a result, the situation is quite confused: the work appears under more or less the same title in four

⁴⁴ Mansfeld-Runia (1997) 182.

⁴⁵ On this further possibility, see Mansfeld-Runia (1997) 324.

sources (the manuscript tradition, Lamprias, Eusebius and Cyril), but under a different title in Theodoret, while it is qualified as an *epitome* by sources which differ on its title (Lamprias and the manuscript tradition on the one hand, Theodoret on the other hand). It is qualified as a 'collection' (συναγωγή) by Cyril, while Theodoret applies this term to Aëtius' book, to which he gives the title that all the other sources attribute to Plutarch.

This, in itself, is not particularly puzzling, since book titles in Antiquity tend to vary⁴⁶, but it does mean that there is nothing certain in the information that Theodoret gives in 4.31 on the respective titles of Aëtius' and Plutarch's works. However and more importantly, there may be a valuable piece of information in the denominations that Theodoret gives to the works of Aëtius and Ps.Plutarch as συναγωγή and ἐπιτομή respectively. If one admits that, in general, the contrast between ἐπιτομή and συναγωγή is that an ἐπιτομή is more of a condensed form than a 'collection', then the difference of denominations could be taken to allude to the fact that Theodoret thinks that 'Plutarch's' book is a more condensed work than Aëtius' and therefore it could hint to the fact that Plutarch's *On the opinions of the philosophers* is an abridged, more condensed version of Aëtius' *On tenets*.⁴⁷ Theodoret does not say explicitly that one abbreviates the other, but he could have that in mind. This, again, is only a possible interpretation, but it is not an implausible one. Of course, an alternative explanation can be given of the distinction, namely that 'Plutarch's' *On the opinions of the philosophers* was known as an *epitome* in catalogues and manuscript traditions, and that Theodoret did not want to use the same word for Aëtius' *On tenets*, and it is plausible as well. However, the possibility is worth mentioning.

All in all, the only precise piece of information Theodoret ever gives about Aëtius' book is the one he gives in II.96, namely that it is a collection of opinions similar to Plutarch's collection of opinions, differing from Porphyry's *History* in that it does not include biographies of philosophers. On the face of it, it seems that Theodoret had a copy of a work by Aëtius, entitled *On beliefs* (Περὶ ἀρεσκόντων), and that it is one of the sources he used to complete the information he drew mainly from Eusebius. One cannot rule out the possibility that this really happened and that Theodoret actually had a copy of a work by an author called Aëtius and that this work was the longer version of the *Placita* also extracted by Stobaeus, a different version from the shorter one known by Eusebius

⁴⁶ On books-title in Antiquity, see Schröder (1999), esp. 9–29.

⁴⁷ Though Mansfeld-Runia (1997) 182-184 do not use this argument they note that the *Placita* of Ps.Plutarch are "an epitome in a double sense", namely a 'summary presentation of a subject' and "an epitomized version" of Aëtius.

and transmitted to us under the name of Plutarch. Nonetheless, it seems that there is a place for reasonable doubt: though there can be no doubt that Theodoret had access to the longer version of the *Placita* and excerpted it, it may not be a work by a man called Aëtius and Diels' hypothesis is a plausible inference, not a securely established conclusion. Contrary to what he does for Porphyry and 'Plutarch', Theodoret never quotes 'Aëtius' directly but only mentions him as a plausible source, and he does so in contexts where most of his material comes from Eusebius, who himself relies on three works of history of philosophy, Porphyry, 'Plutarch', and Arius Didymus. The fact that Theodoret never mentions Arius seems to show quite clearly that he did not have a copy of this author, and it is a fact that, in the triad of authors used by Eusebius, Theodoret has replaced Arius Didymus by Aëtius. A possible explanation of this fact is that Theodoret had no copy of Arius Didymus at his disposal and misquoted his name because he did not know anything about this author.

To conclude, I must say again here that, all in all, my reason for making this supposition is that it seems unlikely to me that, if Theodoret knew a book by Aëtius and a book by Plutarch, of which the first was a longer version of the second, he never mentioned that fact but instead of that treats the two works as two different books. In any case, it is a fact that Theodoret presents Aëtius and Plutarch as two books similar in structure, but different, but does not say that these are as two versions of the same book.

5. The 'authorship' of the two versions of the *Placita*

Then the question becomes: if one admits that Theodoret had a longer version of the *Placita* but is not necessarily convinced that Aëtius was the author of this longer version, nor that Arius Didymus was its author, what possibilities remain?

As I already argued elsewhere⁴⁸ and above, the possibility is that both versions were known under the name of Plutarch. Is it pure speculation? No, it is not, because, in addition to no. 61 in Lamprias catalogue, *Περὶ ἀρεσκόντων φιλοσόφους φυσικῆς ἐπιτομῆς βιβλία ε΄*, Lamprias lists no. 196, *Φυσικῶν ἀρεσκόντων*. The work is usually supposed to be a work in one book, because of its place in

⁴⁸ See Gourinat (2011), esp. 175–176.

Lamprias' catalogue⁴⁹, but the existence of these two titles clearly shows that there were at least two works by 'Plutarch' with an almost similar title, and, at some point, it may lead to a confusion between two versions of the same book, and the longer version of the work may be misplaced in the catalogue. The fact that the word *epitome* is ambiguous and does not necessarily describes an *abridged version* of a longer work but rather a handbook⁵⁰ may also have induced some confusion.

There is here an additional argument: Theodoret quotes Plutarch's work under the name Περὶ τῶν τοῖς φιλοσόφοις δοξάντων, and he is the only one to do so. Lamprias, the manuscript tradition and Eusebius all have it under the same title: Περὶ τῶν ἀρεσκόντων φιλοσόφοις φυσικῶν δογμάτων. Then, after all, why not to trust Theodoret on this, and believe that he really had a copy of a book attributed to Plutarch, entitled Περὶ τῶν τοῖς φιλοσόφοις δοξάντων, while the shorter version we and Eusebius have circulated under the title Περὶ τῶν ἀρεσκόντων φιλοσόφοις φυσικῶν δογμάτων? After all, if he really had a longer version of the *Placita*, he may have known its title.

Now, what do we gain by that? *Prima facie*, not much. We change the name of Aëtius into Plutarch as the author of the long version of the *Placita*, and we change the name of Aëtius as the alleged source of Theodoret, and we have a more consistent list of ancient doxographical authorities, reduced to Arius Didymus, 'Plutarch' and Porphyry, without a name known only by Theodoret. Another advantage is that it squares more with what Theodoret seems to have done: starting from Eusebius, and checking some of the authorities he quotes (or does not, like Porphyry's *History of Philosophy*). What is more important to be aware of is the way Theodoret composed his work. Contrary to what Diels maintains, 'Aëtius' was not his main source to whose name he added the authority of Plutarch and Porphyry to impress his reader. His main source was Eusebius, to whom he added at least one of Eusebius' sources, the longer version of the *Placita*, and whether this source is to be known under the name of Plutarch or under the name of Aëtius is a rather minor issue, unless one wants to defend the idea that 'Arius Didymus' is the author of this work.

Against all odds, this may make stronger the case in favour of the reliability of Theodoret as a source for the *Placita*. For if Diels' conviction that Theodoret knew 'Plutarch's' *Placita* only through Eusebius does not hold, then it is difficult to imagine that he had a copy of Plutarch's *Placita* and a copy of Aëtius' *Placita* but never realized that the first was an abbreviated version of the second.

⁴⁹ See Sandbach (1969) 26 n. 26.

⁵⁰ See Mansfeld-Runia (1997) 183–184.

While if Theodoret only had a copy of a longer version of the *Placita* under Plutarch's name and had no copy of one by Aëtius, because he just confused his name with Arius' name of whose work he had no copy, then he is more coherent in what he did, and quite reliable in everything but in the name of 'Aëtius'.

All this being said, I want to add that the more important issue seems to me the relationship between Arius' *Epitome* and the *Placita*, whether from 'Aëtius' or from 'Plutarch', whether the longer or the shorter version. For even if Arius is not the author of the *Placita*, I am under the impression that our version of Plutarch's *Placita* either derives sometimes from Arius, or may be contaminated by it. And it is particularly plausible in the case of the Stoic material, for instance in 1.10, 1.11 and above all in 4.11–12. 4.11–12 are very puzzling chapters: they present exclusively Stoic material, they are in style closer to Arius than to the rest of the *Placita*, they have no equivalent in Stobaeus, while ch. 12 does seem to be known by Theodoret. If we want to explain the presence of these chapters, we are left with very few possibilities: (1) Arius was in fact the author of the *Placita*; (2) the author of the *Placita* took some of his material from Arius; (3) the tradition of the shorter *Placita* is contaminated by Arius, while the longer version, known to Stobaeus, is not. (3) does not seem to me the more plausible option⁵¹, and in that case, we are left with (1) and (2). In the case of (1), again, if Theodoret had both Arius' longer version of the *Placita* and Plutarch's version of the *Placita*, it is strange that he did not realize that they were two versions of the same work or says nothing about that. But if (2) is the right option, then it makes sense that Theodoret does not realize that because, obviously, he did not know the two versions—and Eusebius who obviously did not know the longer version of the *Placita*, could not be puzzled by that either. So, in the end, this is what we can gain here. Because, if Arius is the author of the *Placita*, then it is difficult to explain why extensive parts of Arius preserved in Stobaeus have disappeared from 'Plutarch's' *Placita*, but reappear in Eusebius and Stobaeus, and it is also difficult to understand why Eusebius used the shorter version under the name of Plutarch and did not make more extensive use of the longer version instead. However, if Arius is not the author of the *Placita*, but an Aëtius, it is still difficult to explain why people who had access to Plutarch and Aëtius and Arius were not aware of the complex relations between the three books. Then we still have the possibility that the *Placita* derived part of its material (in particular the

⁵¹For Mansfeld's preferences on this issue see below ch. 6, pp. 000.

Hellenistic material) from Arius, without being identical to it, and this is what seems to have been preserved in some chapters like 4.11–12.

This may be here that we have a little more that can be gained. Diels' idea seems to be that someone abridged a book by a man named Aëtius, and that the work of this abbreviator was known under the name of Plutarch. The method of epitomisation, from 'Aëtius's long version to Plutarch's shorter version is described by Mansfeld and Runia:⁵² keeping the same book and chapter structure, but skipping some chapters, and more frequently skipping some paragraphs in each chapter, abridging some other chapters, and conflating some paragraphs, to produce a much shorter version of basically the same work. Now, if a man called 'Plutarch' was the author of an epitomisation of a work by a man named Aëtius, then it should appear somewhere that 'Plutarch' has epitomised a work by a man named 'Aëtius', but unfortunately this does not appear in any ancient source or in any manuscript of the work. On the contrary if a text attributed to Plutarch circulated under two versions, it is sufficient that it appears under the name of Plutarch, without mentioning that Plutarch abridged his own work, or without mentioning who produced the abridged version. And this is exactly what happens since we have some sources describing our text as an *epitome*, and some not describing it as such, and we have two different titles for the same work—and in particular in Theodoret, who knows the longer version of the *Placita*, it is attributed to Plutarch under a different title than the one under which we know the epitomised version.

To conclude, I do not want to rule out the possibility that Theodoret really had a copy of a book by a man named Aëtius. But I want to stress that the reliability of the three passages where he claims to have done so is not as high as Diels claims it to be. In fact his hypothesis leads to some implausibilities and incoherences. Whether voluntarily or not, Theodoret apparently relied on Eusebius' authorities but substituted Aëtius for Eusebius' Arius because, unlike Eusebius, he had not read Arius. This may mean that he has read a work by a man named Aëtius and voluntarily replaced the name of the author he had not read by the name of the author he had read, or this may mean that he involuntarily replaced one name by the other. This results in a weaker case for Aëtius being the author of the *Placita* than Diels thought.

In sum, it seems to me that *Quellenforschung* and a careful examination of Ps.Plutarch, Stobaeus and Theodoret demonstrate *without any doubt* that there was a longer version of the

⁵² Mansfeld-Runia (1997) 182–195

Placita, known by these three ancient authors, but that a careful examination of the mentions of Aëtius by Theodoret reveals that it cannot be proven *beyond any doubt* that the author of this common source was a man called 'Aëtius'.

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Arius Didymus as a Doxographer of Stoicism: Some Observations

Keimpe Algra

Abstract. A considerable number of doxographical passages on Aristotelian and Stoic physics and two continuous accounts of Aristotelian and Stoic ethics, all reproduced in Stobaeus, plus a much smaller number of fragments provided by other authors (Eusebius in particular) are nowadays commonly attributed to Arius Didymus, who is often identified with the court philosopher to the emperor Augustus. Various aspects of these attributions, previously canonized in Diels' *Doxographi Graeci*, have been challenged by scholars in the past few decades. The first part of this paper takes critical stock of these developments: to what extent can we be sure of the attributions to Arius, of the identity and date of the author, and of the title(s), nature, and purpose of his work(s)? The second part zooms in on the material on Stoic physics and ethics. How was it structured, what can be said about the sources used and about the degree of authorial intervention on the part of the doxographer? What does this tell us about the value of Arius as a source? And to what extent does this type of doxography (belonging to the *περὶ αἰρέσεων* tradition) differ from the *Placita* tradition that is central to the rest of this volume?

Key words: Arius Didymus, Eusebius, Hermann Diels, Aristotelianism, Stoicism, physics, ethics, *Placita*, *Peri haireseôn*

Introduction

Much of our information on early Stoic physics and ethics is derived from texts that can be ascribed — sometimes tentatively, sometimes securely — to the doxographical work of a certain Arius Didymus, often taken to be identical to the Areus or Arius who was court philosopher to the emperor Augustus. Ideally, the student of Stoic philosophy would want to be able to assess the value of these testimonies as sources for our knowledge of Stoic philosophy by developing as clear a picture as possible of the way in which Arius compiled and arranged his material. What were his purposes and which sources did he use? As things are, such questions are not at all easy to answer, in particular because they invoke a number of preliminary questions on the identity and date of the author, the extent of the corpus that can be ascribed to him, the nature of his work or works and the title or titles under which it became known.

Fortunately such preliminary questions, which concern what has been called ‘the problem of Arius Didymus’, are of interest in their own right as well, i.e. also apart from what they can tell us about Arius as a source for our reconstruction of early Stoic philosophy.¹ Trying to answer them enriches our view on how philosophy was studied and transmitted in the late Hellenistic period — as we shall see, there are reasons to believe that these texts were

¹ ‘The problem of Arius Didymus’ is the title of a separate section in Mansfeld and Runia (1997) 238–265.

compiled in the first century BCE — and offers us some precious insights into an alternative doxographical tradition that developed independently, or so it appears, of the *placita* tradition that is at the focus of attention in the present volume.

The first part of this paper (sections 1–5) will be devoted to these general and preliminary questions. The second part (sections 6–11) will examine various aspects (such as structure and sources) of the texts on Stoicism that have been ascribed to Arius, most of which are to be found in the first two books of Stobaeus' *Eclogae*. The overall focus in this paper will thus be on Arius and Stoicism. The texts ascribed to Arius that deal with Peripatetic philosophy deserve closer study as well, even after the groundbreaking work of Paul Moraux and others. However, within the limited confines of this paper they will only be discussed in passing.

1. *Status quaestionis*: hypothesis and relevant sources

A considerable number of doxographical passages on Aristotelian and Stoic physics and two continuous accounts of Aristotelian and Stoic ethics reproduced in Stobaeus' *Eclogae physicae et ethicae*, and a much smaller number of fragments provided by other authors, mainly Eusebius of Caesarea, are nowadays commonly attributed to Arius Didymus. The attribution of the texts from Stobaeus is based on the work of Hermann Diels, who was to a large extent following in the footsteps of August Meineke.² Due to the almost canonical authority achieved by Diels' *Doxographi graeci*, the hypothetical nature of these attributions has often gone unnoticed.³ Moreover, the claims made with regard to this Arius Didymus have sometimes been rather grand. In his *Abriss der Peripatetischen Ethik*, published in 1926, Von Arnim confidently claimed that we could attribute to this 'Lehrer und Freund des Kaisers Augustus' a doxographical work entitled ἐπιτομή τῶν ἀρεσκόντων τοῖς φιλοσόφοις, 'welcher Logik, Physik, Ethik der vier Hauptschulen (Akademie, Peripatos, Stoa, Epikur) darstellte'. The title in this form is Von Arnim's own construct (made on the basis of the reference in Eusebius *PE* 11.32.2–6 to ἐκ τῶν Διδύμου περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων); the evidence that the doxographical work also covered logic is rather slight;⁴ we have no indications that it included Epicureanism; and the identification of the author (or compiler) of these texts with the Areios (Latinized as Areus or Arius) who was the court philosopher of Augustus is nowadays no longer generally taken for granted.

In fact, over the past few decades there has been a fresh surge of scholarly interest in the problem of Arius Didymus, as a result of which the many hypothetical aspects of the 'traditional' story have been brought to our attention again.⁵ One may even say that there has been a fair amount of iconoclasm, or attempted iconoclasm, going on, so it may be appropriate to start this paper with a reasoned account of the *status quaestionis*: where are we at, what do

² On Meineke's contribution to the debate, see Mansfeld and Runia (1997) 49–54.

³ See, for example, the slightly over-confident assessment by Moraux (1973) 259: 'Es ist das Verdienst A. Meinekes, die bei Stobaios erhaltenen Abhandlungen über die Stoiker und die Peripatetiker dem Areios Didymos mit Sicherheit zugeschrieben zu haben'.

⁴ Kahn (1983) argues that the fragment on Plato's Forms preserved by Eusebius *PE* 11.32. 2–6 (ἐκ τῶν Διδύμου περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων) derives from an epistemological, hence 'logical', context.

⁵ Kahn (1983); Long (1983); Hahn (1990); Göransson (1995); Mansfeld and Runia (1997); Bremmer (1998); Gourinat (2011).

we know for sure, what is at least plausible and which claims about Arius Didymus can now no longer be maintained?

As already indicated, apart from a few safely attested fragments in Eusebius (and some contested fragments in Clement of Alexandria, on which see more below) Stobaeus is our main source, and pretty much all questions concerning the attribution or non-attribution of material to Arius really concern Stobaeus. What is certain is that Stobaeus knew and used the work of a certain Didymus, for he refers to it twice: once (*Ecl.* 2.1.17) as Διδύμου ἐκ τοῦ περὶ αἰρέσεων — if, that is, like Diels and all relevant subsequent scholars we take over Wachsmuth's text containing Heeren's emendation αἰρέσεων for αἰρέσεως in the MSS — and once (*Flor.* 4.39.28) as ἐκ τῆς Διδύμου ἐπιτομῆς. That this Didymus is identical with the author referred to as *Arius* Didymus in the *Praeparatio Evangelica* of bishop Eusebius of Caesarea, is virtually certain. Whereas, as we just saw, Stobaeus credits Didymus with having written an ἐπιτομή, Eusebius does the same with *Arius* Didymus (*PE* 15.15.1, heading: ἀπὸ τῆς ἐπιτομῆς Ἀρείου Διδύμου), although he also uses the plural ἐπιτομαί (*PE* 15.20.8: ἀπὸ τῶν ἐπιτομῶν Ἀρείου Διδύμου).⁶ Elsewhere, however, Eusebius also uses the single name 'Didymus' (*PE* 11.32.2–6: ἐκ τῶν Διδύμῳ περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων), and the way he describes this author's work (περὶ τῶν ἀρεσκόντων Πλάτωνι) may be taken to suggest that we are here dealing with a reference to an epitomizing work as well. Thus Eusebius speaks of Didymus and Arius Didymus in a similar connection, and it is hardly likely that these references are *not* to the same author.

In addition, there is a reference, in a rather defective medieval Latin translation of Priscianus Lydus' *Solutiones ad Chosroem*, to a work by a certain Didymus with a title that must have been something like περὶ Ἀριστοτέλους καὶ τῶν (ἀπ') αὐτοῦ δογμάτων.⁷

There are two further fragments ascribed to 'Didymus' in Clement of Alexandria: the first one referring to a Didymus who attributed particular sayings of the Seven Sages to Solon, Cleobulus and Thales (*Strom.* 1.14. 61.1–2), and the second one to a Didymus who states ἐν τῷ περὶ Πυθαγορικῆς φιλοσοφίας that Theano of Croton was the first woman philosopher (*Strom.* 1.16.80.4). Are we talking about the same Didymus here as the one used by Stobaeus and Eusebius? Diels was sceptical about the attribution of the first fragment (although he also suggested that in the end it might have had a place in some sort of prooemium in the

⁶ Doubts about the trustworthiness of the evidence of Eusebius in connection with the name Arius Didymus have been raised by Bremmer (1998), 159, who argues that the double name 'Arius Didymus' *cannot* come from the Augustan era (but how can we be so sure?) and suggests that the evidence of Eusebius is not to be trusted, for 'it may well have been the case that a copyist of Didymus must have wondered which Didymus was meant and added the name of the famous Stoic philosopher Arius because of his attention to Stoic views'. So on this line of thought Eusebius did have a copy ascribed to Arius Didymus, but the name 'Arius' was inauthentic and had been added by a copyist. But this is a strange argument. Why would any copyist of Didymus add the name of the 'famous' (well, was he so famous and can we be so sure that he was a Stoic?) philosopher Arius to show which Didymus was meant, if the Stoic Arius was himself not called Didymus? Note, moreover that not all the passages ascribed to (Arius) Didymus concern Stoic ideas, so the supposed link to the 'famous Stoic' Arius would not that easily come to mind. In fact other scholars have used the supposed Stoicism of the court philosopher to doubt that he could have had anything to do with this broad doxography, on which see below, section 4 of this paper.

⁷ Priscianus Lydus *Solutiones ad Chosroem* 41.39–40b Bywater. The skewed Latin translation runs: *Usi sumus ... Didymoque de Aristotele et eius scriptore dogmatum*, which Diels (1879) 78 translated back as *κεχρήμεθα δὲ ... καὶ Διδύμῳ τῷ περὶ Ἀριστοτέλους καὶ τῶν αὐτοῦ γεγραφότι δόγματων*. More or less similar backward translation in Bywater *ad. loc.*

doxographical work),⁸ and appears to have plainly denied that the second had anything to do with his own doxographer Arius Didymus (he suggested that it might derive instead from Didymus Chalenterus or from a Pythagorean Didymus, ‘son of Heracles’).⁹ As a result, these two fragments have been living in a kind of scholarly limbo ever since.¹⁰ They have not been given much consideration in studies of Arius Didymus, although they deserve to be taken into account in connection with important questions concerning the nature and purpose of Arius’ work (or works): did it include separate sections or even books on the Presocratics, or at least on some of them? There is a clear danger of circularity here: we may be tempted to deny these fragments a provenance from the text of our Arius Didymus, because we start out with some preconception of what that text must have looked like, a preconception which is itself shaped by the rejection of these fragments by Diels and others. I will briefly revert to the position these fragments *may* have had below.

For the moment we may stick to what I take to be the secure evidence in Stobaeus and Eusebius, and conclude that there was an Arius Didymus, who was sometimes also just called ‘Didymus’ (i.e. in Stobaeus and sometimes also in Eusebius), and whose work (or possibly more than one work) was used by these two authors. Eusebius is an author who in general faithfully copies out his sources and mentions them. Stobaeus, however, often does not mention his sources and we can actually see that some passages that are elsewhere ascribed *nominatim* to (Arius) Didymus appear anonymously in his work. We may accordingly assume that Arius Didymus was an important source for Stobaeus, also apart from the very few places where he is explicitly presented as such. However, the precise extent of Stobaeus’ borrowings from Arius Didymus, and how these borrowings should be distinguished from material deriving from other doxographical sources, in particular from Aëtius,¹¹ is hard to establish.

2. Attributions in Stobaeus

In order to be able to deal with the question whether particular stretches of texts in Stobaeus can be attributed to Arius Didymus (I shall henceforth follow the convention and refer to him as Arius or Arius Didymus) we need to have some idea of the scope of topics covered in Arius’ original work. Here the secure ground is provided by the attested fragments and titles. On the basis of the evidence they provide we can claim with certainty:

- (i) that Arius Didymus wrote about Plato’s theory of Forms (Eusebius *PE* 11.23.3–6 = fr. 1 Diels);
- (ii) that he wrote about *eudaimonia* in Aristotle’s ethics (Stobaeus *Flor.* 4.39.28);
- (iii) that he wrote about Stoic cosmo-theology (*PE* 15.15.1–9 = fr. 29 Diels) physiology and psychology (Eusebius *PE* 15.18.1–8 = fr. 36 Diels), hence about Stoic physics.

⁸ Diels (1879) 79.

⁹ Diels (1879) 80.

¹⁰ Diels’ position is referred to without further comment by Moraux (1973) 260, n. 6. See also Kahn (1983) 12, n. 5; and Göransson (1995) 207.

¹¹ For the sake of convenience I will here follow the lead of Mansfeld and Runia and continue to refer to the common source of Stobaeus and ps.Plutarch as Aëtius.

These claims are uncontroversial. On the basis of other attested fragments we might then add the following claims — which, however, have been contested and for that reason may count as less secure:

(iv) that Arius wrote about the Presocratic Xenophanes in an epistemological context (Stobaeus *Ecl.* 2.1.17); the authenticity of this fragment was doubted by Diels, basically on stylistic grounds;¹² however, stylistic considerations are extremely precarious in the case of an author of whom so few securely attested fragments have been preserved, whom we may expect to have used a variety of stylistically differing sources, and who was excerpted by Stobaeus.

(v) that Arius' dealings with Presocratic thought were not confined to Xenophanes, but that he also discussed — in what kind of context we cannot say — the sayings of the Seven Sages and that he wrote a section *περὶ Πυθαγορικῆς φιλοσοφίας*; on Diels' (not straightforwardly convincing) reasons for doubting the authenticity of these fragments, see above, 00.

We may then extend the scope of some of these claims along the following lines:

Ad (i): the surviving title *ἐκ τῶν Διδύμῳ Περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων* rather suggests that it is likely that Arius wrote about Plato in a broader sense (i.e. covering material beyond the theory of Forms) as well;

Ad (ii): on the basis of the reconstructed title *περὶ Ἀριστοτέλους καὶ τῶν (ἀπ') αὐτοῦ δογμάτων* from Priscianus Lydus we may regard it as likely that Arius covered other areas of Aristotle's philosophy, such as physics, as well.

Ad (iii) the other surviving 'titles' *περὶ αἰρέσεων* and *ἐπιτομή/ἐπιτομαί* are not only compatible with a 'broad' approach of the philosophies of Plato and Aristotle, but also with the claim that Arius' discussion of Stoicism covered areas beyond physics (such as ethics) as well.¹³

In short, on the basis of the attested fragments we may take it as secure that Arius Didymus' doxographical work (or works) covered the philosophies of Plato, Aristotle and Stoicism, and as slightly less secure, but still at least possible, that it also dealt with some Presocratics (although here we do not really know in what kind of context).

If we now turn to Stobaeus, we may note that the following stretches of the text of his *Eclogae* have been attributed to Arius Didymus:

(1) The synopsis of Peripatetic ethics at *Ecl.* 2.7.13–26 (pp. 116.19–152.25 Wachsmuth (henceforth: W.)) which on the basis of Hahm (1990) is now generally referred to as 'doxography C' includes a brief excerpt on *eudaimonia* which is elsewhere in Stobaeus (*Flor.* 4.39.28) ascribed *nominatim* to 'Didymus'. It is plausible to assume that these two passages represent a single work (by Arius Didymus).¹⁴ The synopsis of Peripatetic ethics is presented more or less *en bloc* — preceded by the heading '[The views] of Aristotle and the other Peripatetics'. Part of it appears to have been written from a recognizably late Hellenistic perspective, including Stoicizing terminology, though without clearly recognizable attempts

¹² Diels (1879) 78. Another reason may have been that it did not appear to square with his view of Arius' work as covering basically Plato, Aristotle and the Stoics, as aptly noted by Göransson (1995) 207. But see on this below, my conclusions to section 3 of this paper.

¹³ All this under the supposition that these titles do not all refer to different and separate works, on which see below, section 3.

¹⁴ I.e., a single work, rather than two works which happened to contain the same passage, either because they represent a common source, or because one of them is the source of the other.

to syncretize Aristotelianism and Stoicism.¹⁵ However, it also contains elements that differ in style and that betray a different provenance, apparently mainly coming from earlier handbooks and summaries. The parallel case of Stobaeus' use of Aëtius' *Placita* in book 1 of his *Eclogae* shows that, apart from those cases where Plato was concerned, he did not do large-scale research in other sources than the Aëtian doxography he had at hand. This suggests that, where he had the doxography of Aristotelian ethics of Arius Didymus at hand, as we saw he had in writing book 2 of the *Eclogae*, he did not do a lot of extra research in other (Aristotelian) sources either. In other words, it is unlikely that Stobaeus compiled all this material himself and likely, though not certain, that it derived *in toto* from Arius.

(2) The assumption that the synopsis of Stoic ethics in *Ecl.* 2.7.5–12 (pp. 57.13–116.18 W.), nowadays also known as 'doxography B' is taken from Arius Didymus as well, is less secure, for Stobaeus *nowhere* mentions its author and, unlike the Peripatetic doxography, it does not contain elements that are paralleled by other material attested for Arius. But it is still plausible. For one thing, it immediately precedes the doxography of Aristotelian ethics and looks like its Stoic counterpart. At any rate, to judge from its *incipit* and *explicit* as well as from various authorial remarks in between, it appears to have been written by a single author.

(3) If the attribution of the Stoic ethical doxography in Stobaeus to Arius can thus be considered to be, even if not certain, then at least plausible, the same cannot be said of the general introductory section which immediately precedes it in Stobaeus (*Ecl.* 2.7.1–4, pp. 37.15–57.12 W.), nowadays called 'doxography A'. Göransson, following Kenny and Giusta in this respect and followed by Bonazzi, has shown that the number of serious arguments that have been put forward in favour of this attribution is actually zero — people have just followed the authority of Diels (*Dilesius dixit*).¹⁶ Göransson, for one, has argued instead that we have to assume that Stobaeus took it from another source as a more or less systematic introduction to the general topic of ethics.

The important thing is that doxographies B and C, though dealing with different philosophies, constitute the same type of text: a compilation of more or less heterogeneous material from a single school. The text of doxography A, by contrast, is structured in a different way — i.e. thematic rather than school-oriented. Moreover, it proposes a division of ethical topics that, it claims, goes back to Eudorus, but that we do not find back in any clearly recognizable form in doxographies B and C.¹⁷ According to Diels we must assume that it was the ethical part of what must have been a broad introduction to Arius' school-oriented doxographies proper.¹⁸ If we take this suggestion at face value, it would imply that the full

¹⁵ On which see the excellent conclusions of Moraux (1973) 435–443, esp. 441–442. Moraux shows that we are dealing with a late Hellenistic compilation of scholastic Aristotelian texts, that shows attempts, by later Peripatetics, to offer Aristotelian answers (though sometimes couched in Stoic terminology) to problems set on the agenda by Stoicism as the dominant school of the day. See also White (1983) 71–72. As an example we may take Arius' description of an Aristotelian theory of *oikeiôsis* which may be read as an alternative to the Stoic one; on which see also Algra (2003).

¹⁶ Giusta (1964), 140–147; Kenny (1978) 21–22; Göransson (1995), 221–226, esp. 222, an amusingly thorough passage on the absence of any decent arguments *pro*. See now also Bonazzi (2011).

¹⁷ But see Long (1983) 53–56 on possible Eudoran traces in doxography B; doubts expressed by White (1983). Giusta (1986) 105–124 finds such traces in both B and C.

¹⁸ Diels (1879) 72: 'universo volumini Prolegomena praefixa erant iam tripartita, unde extat ethicae philosophiae pars'. This appears to have been the considered view Diels ended up with, and he proceeds to give

introduction was implausibly long. One might dodge this objection by claiming, against Diels, that the main division of Arius' work was not according to schools, but according to parts of philosophy (with the theories of the various schools spelled out within each part), and that doxography A represents only the introduction to the section on ethics. But the wording of the *incipit* of the immediately following doxography of Stoic ethics strongly argues against this possibility (on which see further below, section 7), for it implies that 'we now move on to ethics', thus suggesting that what preceded in Arius was *not* doxography A (which, after all, is on ethics as well). Anyway, the latter part of doxography A, as Göransson already remarked, does not read like an introduction at all, but like a doxography in its own right. Moreover, as Moraux already saw, there are divergencies between the accounts of doxographies A and C concerning aspects of Aristotle's ethics.¹⁹ Finally, Mansfeld and Runia, who took over this part of Göransson's argument, offered an additional argument: doxography A uses *laudationes* (references not just to individual philosophers but to actual *works*) in a way unparalleled in doxography B.²⁰

Of course we cannot be absolutely certain even here, for we cannot exclude the possibility that Arius' work was itself just badly organized and that doxography A represents a chunk of text simply copied out, without any form of authorial intervention on Arius' part, before doxographies B and C and derived from other sources (which would in itself perfectly explain the kind of divergences noted above). However, in the absence of any *positive* evidence linking doxography A to Arius, we should rather give due weight to the fact that the text does make some sense as a general introduction to *Stobaeus' book* on ethics, whereas, for the reasons just outlined, it is much harder to fit it into the context of Arius' work. Its insertion, in other words, is more likely to have been due to Stobaeus than to Arius. All in all, then, even if we cannot be absolutely certain, for all practical purposes the hypothesis that doxography A belonged to the work of Arius may be considered as refuted, and it seems methodologically sound to leave it out of consideration in discussing the work of Arius Didymus.

(4) Thus far, we can conclude with certainty that Stobaeus has used Arius Didymus in the ethical doxography of *Eclogae* 2 at least in one passage, and with considerable plausibility that he used him on a larger scale (i.e. in doxographies B and C) as well. That Stobaeus used Arius in the first book of his *Eclogae* (devoted to physics) as well, although he nowhere mentions him, can be established on the ground that some passages which Eusebius explicitly ascribes to Didymus (the fragment on Plato's Forms) or to Arius Didymus (a set of fragments on Stoic cosmology) can also be found — the first one completely (although slightly abbreviated), the second one in part — in the first book of the *Eclogae*, though without ascription. It is therefore perfectly legitimate, and not a matter of *Quellenforschung* run wild, to ask whether *Eclogae* I contains more material on Stoic physics that can be ascribed to Arius Didymus. In trying to

some arguments for it (according to Mansfeld and Runia (1997) 243 he even argues 'strongly' for it), but he seems to view his conclusion as plausible rather than certain, or at least his presentation is less than clear, for earlier on the same page he presents the question as still open ('sed illud ambiguum utrum sectarum logica physica ethica deinceps singularum persecutus sit an tres partes aliam post aliam sectarum diversitate illustravit') and on p. 70 he suggests that the Prolegomena were prefixed to the *ethical* part of the work ('e Stobaeo apparet Prolegomena eum praemisisse ethicae libri parti').

¹⁹ Moraux (1973) 308–311.

²⁰ Mansfeld and Runia (1997) 258–260.

answer this question we run up to the difficulty that we know, on the basis of many parallels with the work of ps.Plutarch, that Stobaeus made ample use of the *placita* tradition, more particularly of the source we call Aëtius, in his first book. It is not very likely, though it cannot be excluded either, that having both Arius and Aëtius at his disposal Stobaeus in addition used one or more other doxographical sources, i.e. sources of roughly the same type, on a large scale, although Mansfeld and Runia offer a few cases where he just may have done so, and although he did use other sources of a different type, such as a work on Homer as a predecessor of early Greek philosophy, clearly related to ps.Plutarch *De Homero*,²¹ and the works of Plato.²² Hence it is likely (again: no more than likely) that any unascribed *doxographicum* on Stoic or Peripatetic physics to be found in book 1 should be ascribed to either Aëtius or to Arius Didymus. At least two further questions then arise, viz. (i) whether we can always, or as a rule, or in principle, clearly distinguish between these two sources, i.e. whether we are dealing with two non-contaminated traditions,²³ and (ii) whether we can establish criteria to assign passages in Stobaeus that have no parallel in ps.Plutarch to either one of these sources rather than to the other. Diels, followed by Mansfeld and Runia, took it for granted that the answer to (i) was affirmative.²⁴ Both Diels and Mansfeld and Runia then answered question (ii) by formulating criteria for separating fragments from Aëtius from what comes from Arius Didymus.²⁵ Their answers to both (i) and (ii) have recently been disputed by Jean-Baptiste Gourinat, who argued, as for (i), that we cannot be certain that the *Placita* (Aëtius) did not actually *depend on* Arius Didymus,²⁶ and as for (ii), that the main criterion of length can hardly be decisive, since (a) we know from those cases where we have versions of Aëtius in both Stobaeus and ps.Plutarch that ps.Plutarch often abbreviated his source and that relatively *lengthy* lemmata in Stobaeus without a parallel in ps.Plutarch may thus still go back to Aëtius, and (b) we also know (see the parallel versions of Arius preserved by Stobaeus and Eusebius and printed together as fr. 36 Diels) that Stobaeus sometimes actually abbreviated Arius, so that *brief* lemmata in Stobaeus without a parallel in ps.Plutarch may still go back to Arius; moreover, (c) Stobaeus cut up his source, so that Aëtian lemmata with no parallel in ps.Plutarch may have ended up in isolated positions, cut loose from the original and typical *diaeresis*-context of the *placita* literature.²⁷ He concludes that ‘il est possible, d’une part, de distinguer avec une certaine probabilité au sein des texts cités par Stobée. Mais, d’autre part, à cause des procédures de réécriture de Stobée, il est extrêmement difficile de distinguer *systematiquement* entre les *Placita* et Arius Didyme comme sources de Stobée’.²⁸ These

²¹ Diels (1879) 88–99 stipulated the existence of yet another ps.Plutarch as the common source of Stobaeus and ps.Plutarch *De Homero*, but see Mansfeld and Runia (1997) 211–212.

²² See Mansfeld and Runia (1997) 209–213. I am not sure, however whether the three cases they adduce on p. 212 all unambiguously point to a source that cannot be either Aëtius or Arius.

²³ We cannot be sure, in so far as I can see, that the supposed source of the *placita* tradition, Aëtius or whatever he was called, did not use Arius, nor can we be sure that the branch of the *placita* tradition to which Stobaeus had access was not contaminated with material from Arius.

²⁴ See the *stemma* representing Diels’ theory as printed in Mansfeld and Runia (1997) 81; see also their own revised *stemma*, *op. cit.* 328.

²⁵ Diels (1879) 73–75; Mansfeld and Runia (1997) 245–265.

²⁶ Gourinat (2011) 183–184.

²⁷ Gourinat (2011) 185–187 and 189.

²⁸ Gourinat (2011) 189.

arguments are well worth pondering, and they show that in itself the criterion of length may not be the most significant one. On the other hand, there are other criteria as well, such as contextual evidence, and the careful approach taken by Mansfeld and Runia has led to conclusions that are, in my view, on the whole persuasive.

(5) A similar story appears to hold for the *doxographica* on Aristotle's physics that are to be found in *Eclogae* 1. Here we are on even less secure ground, because in this case, there are no explicit links between any of the passages at issue and any of the attested fragments of Arius Didymus. It is just the likelihood that Arius, whom we know to have dealt with Peripatetic ethics, and to whom, as we saw, Johannes Lydus ascribes a work, or a section of a work *περὶ Ἀριστοτέλους καὶ τῶν (ἀπ') αὐτοῦ δογμάτων*, dealt with Peripatetic physics as well, combined with considerations of economy — again: if Stobaeus had the complete Aëtius and the complete Arius at his disposal, it is rather unlikely that he made large-scale use of any additional comparable doxographical sources — that allow us to make the inference that part of the material on Aristotelian physics in *Eclogae* 1 goes back to Arius. Here as well the next step is to ask on which criteria we should assign unattested passages without parallel in ps.Plutarch to either Aëtius or to Arius Didymus.

3. Preserved 'titles' and number of works

Let us now have a closer look at the transmitted 'titles' — more on the term below. There are in fact four different ways in which a work or works by (Arius) Didymus are described and labeled in our sources. First, Eusebius speaks of an ἐπιτομή (singular; *PE* 15.15 ἀπὸ τῆς ἐπιτομῆς Ἀρείου Διδύμου). Secondly, the same Eusebius also refers to the ἐπιτομαί (plural) of Arius Didymus (*PE* 15.18–20 ἀπὸ τῶν ἐπιτομῶν Ἀρείου Διδύμου). Thirdly, Eusebius quotes from 'what has been written by Didymus on the doctrines of Plato' (*PE* 11.32.2–6 ἐκ τῶν Διδύμῳ περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων). And, as we have seen, other sources in a similar way refer to a work (or part of a work) on Aristotle and his school and on Pythagoras.²⁹ Finally, there appears to have been a reference to a work *περὶ αἱρέσεων* (at least, as we saw, on the basis of Wachsmuth's text containing Heeren's emendation αἱρέσεων for αἱρέσεως in the MSS in *Ecl.* 2.1.17: Διδύμου ἐκ τοῦ περὶ αἱρέσεων).

Since Diels entitled the fifth chapter of the introduction to his *Doxographi Graeci* 'De Arii Didymi Epitome', capitalizing the word 'Epitome' throughout the chapter, and doubted — although in so far as I can see, without any obvious ground — the authenticity of the title *περὶ αἱρέσεων*, scholars have tended to assume that Arius Didymus' work was actually 'entitled' *Epitomê*.³⁰ And that, in its turn, has led to questions and speculations about the other references just mentioned: perhaps, for example, the *περὶ αἱρέσεων* was a larger work from which the ἐπιτομή was a summary? Three different versions of this view have in fact been proposed, by Howald, Giusta and Hahm respectively.

²⁹ [On references to Pythagorean cosmology in Stobaeus, partly drawn from Arius Didymus, see the article by O. Primavesi below, ch. 4. Editors]

³⁰ Diels (1879) 69. See also Kahn (1983) 6 'the title *Epitome* refers to Arius' original work'. Mansfeld and Runia (1997) 242–243 speak of the 'work called the *Epitome*'; Göransson (1995) 220 speaks of 'Didymus' *Epitome*'.

E. Howald and M. Giusta believed they had good reasons to argue against the identification of the *περὶ αἱρέσεων* and the *ἐπιτομή*, and to claim that the *ἐπιτομή* was rather an epitome *from* the *περὶ αἱρέσεων*, made either by Arius himself (a suggestion favored by Howald) or by someone else (Giusta).³¹ Howald postulated that the original *περὶ αἱρέσεων* was a work that combined biographical *and* doxographical material, and that could thus serve as an important source for Diogenes Laertius. Since the surviving fragments show no signs of a biographical component, they must represent an abridged version of the original. However, the claim that Arius Didymus' original work contained biographical information and thus could serve as a main source for Diogenes Laertius is entirely hypothetical and has found no scholarly support. We have no reason to follow Howald in distinguishing between *περὶ αἱρέσεων* and *ἐπιτομή* on these particular grounds.

Giusta's case is different, though in a sense comparable. He thought of an even grander role for an original *περὶ αἱρέσεων*, viz. as the basis — the *Vetusta placita* — for a broad ethical doxographical tradition to which not only Diogenes Laertius belonged, but also Cicero and others, like Alcinous and Hippolytus. This original version, he believed, followed the theme-oriented approach of Doxography A. The fact that Doxographies B and C instead appear to be school-oriented he then explained by assuming that the version of these texts that we find in Stobaeus represents a later abridgment of the work by someone else.

Giusta's *Einquellentheorie* of ancient ethical doxographies has met with general scepticism, so that from that perspective the hypothesis of two distinct works — one being the postulated 'universal source', the other being the abstract from that source represented by the extant fragments of Arius Didymus — has lost whatever urgency it may once have had. Apart from this, his concomitant claim that an original theme-oriented text was epitomized in order to obtain the running accounts of Peripatetic and Stoic ethics provided by Stobaeus seems to resemble the view that one can turn an omelet into an egg.³² The normal procedure would surely be the other way round.

But we can be more specific and counter Giusta's hypothesis on philological grounds as well. His interpretation of the phrase *ἀπὸ τῆς ἐπιτομῆς Ἀρείου Διδύμου* (as meaning: 'from the summary *from* (the work of) Arius Didymus') is not very plausible. True, Giusta was able to come up with some examples in other ancient writers where in the combination *ἐπιτομή plus* genitive case the name in the genitive case refers to the epitomized author, rather than to the epitomator. However, as David Hahm has managed to show, in the specific case of the two sources we are dealing with here, Stobaeus and Eusebius, the use of such genitives in book titles seems to be restricted to the *author* rather than to the *object* of the epitome.³³ The only

³¹ Howald (1920); Giusta (1964) 194.

³² There are of course examples of thematic *placita* having been coalesced into new person-oriented texts — think of book I of Hippolytus *Refutatio*, or the concatenation of *placita* in individual *bioi* in Diogenes Laertius. But there the new unities are more disjointed — sets of *placita* 'stitched' together — rather than the more running text — or at least: blocks of running text — that we find in the Arian fragments.

³³ Hahm (1990) 3022–3031; see also Göransson (1995) 294–295. Hahm's conclusion on p. 3027, however, seems to concede rather too much: 'the most we can say is that the form of the title in Stobaeus admits of the possibility that Stobaeus regarded Arius Didymus as the compiler, rather than the subject of the epitome' (my italics). His hesitation is here based on the fact that Stobaeus is not always consistent in the way he refers to his sources.

case in Stobaeus which comes close to a counter-example displays the additional formula ἐκ τῶν to indicate that the epitome is *from the works of* the author named, rather than written *by him*: ἐκ τῶν Τέλητος ἐπιτομή (4.32.21; 4.33.31). Here, in other words, the addition seems precisely designed to avoid ambiguity, i.e. to avoid the suggestion that Teles is the *author* of the *epitomé*. With regard to Eusebius, furthermore, Hahm clearly shows that in *all* cases where we have a comparable formula with a name in the genitive case, the name is the name of the *author* (the epitomator) not of the *object* of the epitomization.

To these arguments I want to add the following. First, on Giusta's interpretation ('from the epitome *from* (the work of) Arius') the information provided would be incomplete, and would invite questions like '*which* or *whose* epitome?'. Conversely, if we take the name in the genitive to be the name of the *author*, we do not have to wonder *of what* or *of which* or *what kind of works* the epitome was drawn, for the context itself would suggest that we are dealing with a survey of various philosophical systems based on considerable number of different sources. Secondly, the plural variant ἐπιτομαί can be much better explained as indicating that we are dealing with summaries *by* Arius of various philosophies, taken from various sources, than on the supposition that we are dealing with a summary of a single work of Arius Didymus. Thirdly, the reference in Eusebius *PE* 11. 32.2–6 ἐκ τῶν Διδύμῳ περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων points to an author-oriented work, or part of a work, on Plato's main views written *by* Didymus. Finally, as David Hahm already argued, the opening lines and the *subscriptio* of doxography B suggest that the 'I' who is speaking here presents himself as the compiler of an epitome from the works of Stoics like Chrysippus, not as someone who epitomizes one single source, let alone his own work (Howald's hypothesis, as we may recall). In conclusion, since nothing really speaks for Giusta's hypothesis and many things against it, it can be considered as for all practical purposes refuted.

David Hahm himself made an alternative case for separating the ἐπιτομή from the περὶ αἱρέσεων, independently of the suggestions of Howald and Giusta and independently of any interpretation of the phrase ἀπὸ τῆς ἐπιτομῆς Ἀρείου Διδύμου. The main ground he adduces is the fact that the one surviving fragment that is explicitly ascribed to the περὶ αἱρέσεων (*Ecl.* 2.1.17, p. 6.13–7.4 W.) differs in style and content from what we find in doxographies B and C: it quotes Xenophanes' δοκὸς δ' ἐπὶ πᾶσι τέτυκται and then adds that some philosophers (Stoics and Epicureans are mentioned) thought they had found what philosophy is looking for (its θήραμα) whereas others thought the search was still going and that truth was not available at the human level (here Socrates and Pyrrho are mentioned). According to Hahm this shows that the work referred to was *not* structured according to schools but was rather problem-oriented. Since he finds the same characteristics in doxography A, he ascribes both this fragment and doxography A to a separate work περὶ αἱρέσεων.

This view is perhaps less susceptible to criticism than Diels' and Von Arnim's identification of doxography A, with its clearly divergent structure, as part of a continuous whole comprising doxographies A, B and C. However, it is still not compelling, for there are alternative explanations for the state of affairs signaled by Hahm. The fragment at issue may derive from

However, the relevant fact remains that we do not find any clear parallels for the use of this particular construction in his work.

a general introduction or from an epistemological section, for example on Platonic or Academic philosophy, and that as well may explain its divergent structure.³⁴ Moreover, on the basis of the very meaning of the title *περὶ αἰρέσεων*, and on the basis of the examples from the genre offered by Diogenes Laertius (on which more below) we may expect such a work to have been ordered by schools rather than having been problem-oriented in the fashion of the *placita* literature.³⁵

We may conclude that there are no compelling reasons to assume that the three surviving titles — or two of the three surviving titles — refer to different works. We may add that there are two general reasons for skepticism *vis-à-vis* such a claim. First, ‘titles’ in antiquity were not a particularly stable category,³⁶ and one and the same work could easily be referred to by various labels anyway. In this connection *ἐπιτομή* could simply be used in referring to a particular work to indicate the type of writing we are dealing with — we may recall the way Epicurus refers to his letter to Herodotus as the ‘small epitome written to Herodotus’ (*Ep. Pyth.* 85) — and the phrase ‘from what Didymus wrote about Plato’s views’ (ἐκ τῶν Διδύμῳ περὶ τῶν ἀρεσκόντων Πλάτωνι συντεταγμένων) should perhaps hardly count as a ‘title’ at all.³⁷ Secondly, it does not seem very likely that Stobaeus had both a *περὶ αἰρέσεων* and an *ἐπιτομή* as two separate doxographical works by Arius at his disposal, nor that Eusebius used both the *ἐπιτομή* and a separate work by Arius on Plato. All in all, then, I think the most economical and most plausible hypothesis is to assume that all three ‘titles’ or labels refer to the same work: *περὶ αἰρέσεων* comes closest to a modern ‘title’ in indicating the work’s contents in general terms — or the ‘genre’, as we might say — whereas *ἐπιτομή* indicates its underlying ‘method’ and thus the *type of text* we are dealing with. The cirumscriptions *περὶ τῶν ἀρέσκοντων Πλάτωνι συντεταγμένων* or *περὶ Ἀριστοτέλους καὶ τῶν (ἀπ’) αὐτοῦ δογμάτων* or even (if, that is, we accept the testimony of Clement) *περὶ Πυθαγορικῆς φιλοσοφίας* then may be taken to refer to the part of the work dedicated to Plato, Aristotle, or Pythagoreanism. I have here argued for this position mainly *e contrario*, but in essence, this simple hypothesis was already put forward by Paul Moraux.³⁸

This may be the place to add a few comments on what might have been the nature of such a *περὶ αἰρέσεων*, more particularly on the extent of its coverage. It has been noted by Jörgen

³⁴ This was already suggested by Inwood (1989) 346. It should be noted however that in this article Inwood appears to waver between the idea of Arius’ text being primarily organized according to parts of philosophy (*ibid.* ‘L’introduction à la section consacrée à la logique constituerait l’endroit naturel où situer un matériel sceptique comme celui que l’on trouve en Stobée II, 1, 17’) and the idea of an organization primarily according to schools (*ibid.* ‘il était probablement ordonné d’abord par écoles, puis par secteurs (logique, éthique, physique) pour chaque école’).

³⁵ See further the conclusions of this section.

³⁶ On titles see Nachmansson (1941); Searby (2011) 27–30 (with further references in note 9); Fredouille *et al.* (1997).

³⁷ On this use of *ἐπιτομή*, not so much as a ‘title’ but as an indication of the type of text we are dealing with, one may compare Galen (*NHN* 15,25.10–26.6 K. = Theophrastus fr. 231 FSHG) who refers to Theophrastus’ *Phusikai Doxai* using the formula ἐν ταῖς τῶν Φυσικῶν δοξῶν ἐπιτομαῖς, thus indicating that the work ‘entitled’ *Phusikai Doxai* is in its own nature a series of excerpts, and who adds that the so-called *Menoneia* is a work of a similar nature (i.e. a series of excerpts on medical issues). I owe this reference to Jaap Mansfeld.

³⁸ Moraux (1973) 271: ‘Ist *ἐπιτομή* eine durchaus adäquate Bezeichnung für Areios’ Überblick über die philosophische Systeme, so ließ sich die Kompilation vom Inhalt her auch als *περὶ αἰρέσεων* zitieren’.

Mejer that Diogenes Laertius only uses the term αἵρεσις to refer to postsocratic schools.³⁹ And the few attested fragments that remain of works entitled *On the Sects* are compatible with this usage: Hippobotus' περὶ αἱρέσεων claimed that there were nine sects in all: Megarian, Eretrian, Cyrenaic, Epicurean, Annicerean, Theodorean, Zenonian or Stoic, Old Academic and Peripatetic (Diog. Laert. 1.19). References to the περὶ αἱρέσεων of Panaetius (Diog. Laert. 2.87), Clitomachus (Diog. Laert. 2.92) and Theodorus (Diog. Laert. 2.65) all concern the Cyrenaics, and in the case of Clitomachus we are told, in addition, that the information he provided about the Cyrenaics (viz. that they thought of dialectic and physics as useless) was to be found in the first (!) book of this work. It thus seems entirely plausible to assume, as Diels already did, that Arius' work basically covered (a selection of) postsocratic schools.⁴⁰

It is worth noting that the evidence for Arius' dealings with the Seven Sages, with Xenophanes and with Pythagoras — for what this evidence is worth, on which see above — is not incompatible with such a general postsocratic focus of his work. Diels already pointed out that the information on Xenophanes may have been given in some sort of prefatory context, where definitions of philosophy were given and where more skeptically inclined philosophers could be opposed to more dogmatically oriented ones.⁴¹ That the Seven Sages could be taken on board in works on philosophical sects and successions is well illustrated by the example of Diogenes Laertius himself (1.12–13; and 1.40–122) and we know that a certain Apollodorus (possibly the Epicurean Apollodorus of Athens, the 'Garden-Tyrant') discussed Solon in the context of a work entitled περὶ τῶν φιλοσόφων αἱρέσεων.⁴² I would like to add that Eusebius *PE* 15.20. 2–3 (fr. 39 Diels), a securely attested fragment of Arius Didymus, shows us that Arius represents Cleanthes as drawing historical connections: Zeno's conception of the soul as an 'exhalation' is compared with the views of Heraclitus. And one of the physical fragments in Stobaeus (*Ecl.* 1.24, p. 207, 8–11 W.; fr. 32 Diels) shows us Apollodorus arguing that the identification of morning star and evening star is of Pythagorean origin. It is conceivable that the Xenophanes reference had its place in such a context as well — e.g. within the section on Plato in relation to Academic skepticism — and even a section on Pythagoras may have been at home in a context dealing with Platonic philosophy and its pedigree.

4. Identity of the author

We may now turn to one further aspect of the Meineke-Diels hypothesis that has been challenged: were Diels and others justified in identifying the 'doxographer' Arius Didymus with the Stoic, or presumed Stoic, Arius, who for some time served as the court philosopher to the emperor Augustus, and was later to become governor of Sicily?⁴³ On this point, Tryggve

³⁹ Mejer (1978) 77.

⁴⁰ Diels (1879) 78: 'at multa sunt quae extra principales posteriorum sectas vagari dissuadeant'.

⁴¹ Diels (1879) 78–79.

⁴² Diog. Laert. 1.60.

⁴³ On this Arius or Areus, see Groag and Stein (1933) pars I, item A 1035. The identification with our doxographer was accepted by Kahn (1983) 6; Long (1983) 41. Note that the fact that the court philosopher was a Stoic is not entirely certain, though plausible; circumstantial evidence in its favour: (i) a (Stoic) Arius is mentioned in the *index locupletior* of Diogenes Laertius in a position that is chronologically fitting (on this index and its status, see Dorandi (1992); the index has been re-edited in Dorandi (2013) 65–66); (ii) Augustus was earlier taught

Göransson, reviving the position taken by Heine as early as in 1869, has argued once again that the identification of the doxographer with the Stoic court philosopher is hardly more than a guess, the arguments which have been used in its favor being circular or otherwise inconclusive.⁴⁴

There are basically two arguments against the identification: one concerns the name, the other the (probable) philosophical allegiance of the court philosopher. Let us start with the name. In principle both Arius and Didymus were common names, especially in Egypt. Moreover, Diels may well have been right in pointing out that in the first century BCE Romans often used their father's name in the nominative case as a second name and that they could in such cases be referred to by either of both names, or by the combination. His argument has been countered by Bremmer, who points out that in such cases the most normal combination was 'x, ὃς καὶ y'. He himself immediately diminishes the value of this argument by claiming that the words ὃς καὶ could sometimes be omitted, but adds that double names only really became popular in the second century CE.⁴⁵ However, given the hazardous nature of our evidence, all this does not appear to be sufficient to support his conclusion, namely that Eusebius, in so far as he reports the double name Arius Didymus, cannot be trusted.⁴⁶ Moreover, I have argued above that his explanation that the name 'Arius' must represent an addition made by a copyist who was uncertain about the identity of the Didymus whose work he was copying, and that we are thus in the end 'left with an unknown Didymus, who must have lived in Egypt between the mid-first century BCE and Eusebius', is definitely odd.⁴⁷

Even if we have no sufficient reason to go along with Bremmer in his attempts to refute the identification of our author with the court philosopher by trying to establish that the former was *not* called 'Arius', we are still left with the problem — emphatically signaled by Göransson — that the latter is *never* called 'Didymus' in any of our sources. At this point Mansfeld and Runia appear to send out some slightly mixed signals. On the one hand they state that Göransson's 'point is well taken'; on the other hand, they also claim that his case is 'not as strong as he himself believes' (without clearly indicating why it is not), while they themselves appear to conclude that on the basis of the available evidence we cannot reasonably offer more than a *non liquet*. However, on closer view the only counterargument they offer is that the simplicity of the Meineke-Diels hypothesis retains a certain persuasive force and that *entia non sunt multiplicanda*. The latter claim will not really do as it stands (i.e. without the crucial phrase *praeter necessitatem*) in a prosopographical context in which we are dealing with two names that are as such common. The real question, it appears, is whether the objection put forward by Göransson (and Heine before him) can be countered, i.e. whether we can explain why our sources do *not* use the name 'Didymus' to refer to the court philosopher. The only attempt to answer this question, in so far as I know, was made by David Hahm, who suggested that the *historiographical* sources referring to the court philosopher use the (single) name with which

by another Stoic, Athenodorus; and (iii) the Stoic Seneca quotes and praises Arius' *consolatio* for Livia (*Cons. ad Marc.* 4.2–5.6) whereas the quoted passages reveal some Stoic ideas (that misfortunes test the virtuous soul (5.5–6); that there is no way to show more contempt to fortune than by an unruffled spirit (*aequo animo*, 5.6)).

⁴⁴ On Heine, see Göransson (1995) 218, n. 1, and Mansfeld and Runia (1997) 52, n. 164.

⁴⁵ Bremmer (1998) 158.

⁴⁶ Bremmer (1998) 159.

⁴⁷ See above, n. 6.

Arius was normally designated in everyday social life, whereas he *himself* signed his works with his double name. This does not sound entirely implausible, but doubts remain.

The second argument that has been adduced against the identification of our author with the court philosopher is the latter's supposed philosophical affiliation.⁴⁸ As noted, it is probable, though not certain, that the court philosopher was a Stoic, and according to Göransson this faces us with the following problem: 'why would a Stoic philosopher take interest in recording the doctrines of the rival schools, if not for polemical purposes? But of polemics there is no trace in the Didymean texts'.⁴⁹ This 'disinterested interest', according to Göransson, points to someone standing outside the philosophical schools or to someone of sceptical leanings.

It may be noted, however, that philosophers — and certainly, we may presume, the type that worked as a court philosopher — were often also teachers and we may assume that doxographical works of the kind we are dealing with could serve all kinds of educational purposes. It is to be doubted that a work written in such a context would display, or would be expected to display, obvious polemical characteristics, or even an obvious *parti pris* with regard to one of the schools described. Suetonius (*Aug.* 89.1) tells us, moreover, that Arius provided Augustus with a broad intellectual education (*eruditione varia*), which is not immediately suggestive of a narrow scholastic approach. The fact that Arius, even if he may well have been a Stoic himself, was also a friend of the Peripatetic Xenarchus of Seleucia (Strabo 14.670) also suggests a rather open-minded attitude.⁵⁰ Seen from this, perspective, neither the fact that Arius covered Platonism and Aristotelianism next to Stoicism, nor the detached way in which the Stoic school is being described in the ethical Stoic doxography (doxography B) need strike us as incompatible with any supposed Stoic affiliations on the part of its author.⁵¹

Two further parallels may perhaps help to strengthen this point. The first one concerns Stobaeus, our main source, himself. If his supposed Neoplatonic leanings may shine through in the choice of many examples, such as scraps from Plato's own texts which he chose to include, it does not lead to a hostile presentation of those schools for which he feels less sympathy;⁵² indeed it does not lead to any kind of 'presentation' at all, for one of the striking features of Stobaeus' anthology is the complete absence of anything like an authorial voice.⁵³ Stobaeus does not comment on the texts he presents and he does not tamper with them otherwise than by selecting and (sometimes) abbreviating them. But even if Stobaeus shows us a clear and transparent example of sustained detachment, it has to be admitted that he constitutes an example that is of a much later date and that does not belong to the *περί*

⁴⁸ On the question of the philosophical affiliation, see above, n. 41.

⁴⁹ Göransson (1995) 218.

⁵⁰ Note that Xenarchus himself was far from 'orthodox' as an Aristotelian: he rejected the theory of the fifth substance and seems to have been open-minded with regard to the Stoic theory of the void, on which see Moraux (1973) 210–212 and Algra (2014) 42–47.

⁵¹ See e.g. the neutral descriptions of Stoicism at 2.79.14: *κατὰ τοὺς ἐπὶ τῆς αἰρέσεως ταύτης* and II, 110: *ἐγένετο τις ἐν αὐτοῖς ἀμφισβήτησις*.

⁵² He could, for example, have left out the Epicurean material which he includes from Aëtius, on which see Runia's paper in this volume.

⁵³ As Searby (2011) 24 puts it: 'an anthology is about as close as one can get to an authorless text'.

αἰρέσεων tradition. A parallel closer to home appears to be offered by the case of the Stoic Panaetius, who did write a *περὶ αἰρέσεων*. Admittedly, we know precious little about this work, but the one piece of information we do have about its contents (Diog. Laert. 2.87; fr. 141 Alse) shows us Panaetius explaining the differences between Cyrenaic and Epicurean hedonism in an entirely non-polemical way.

This is not to say, by the way, that the philosophical allegiance of a supposedly Stoic Arius Didymus could not in *any* way have affected his doxographical work. It is certainly conceivable that it affected his *selection* of material. Indeed, also in Stobaeus' case the author's freedom appears to have been primarily a freedom *to select* his material rather than a freedom to change or comment on it.⁵⁴ In view of the fragmentary nature of the evidence we have to be careful with arguments *e silentio*, but it remains striking that Arius' work does not appear to have covered Epicureanism (in fact, if it did cover Epicureanism, one wonders why Stobaeus did not use the relevant section as a source next to Aëtius, the way he used the material on Aristotle and Stoicism). Now the omission of an account of Epicureanism in Arius may have been partly due to the fact that the Epicurean tradition had itself provided a well-stocked library of *epitomai* and *sententiae* that could be used for getting a quick overview of the outlines of its philosophy. But a *περὶ αἰρέσεων* leaving out Epicureanism and covering only Plato, Aristotelianism and Stoicism (including their respective philosophical pedigrees) may also well reflect a view of these schools as 'the relevant philosophies' — a view that appears to have been defended by people like Antiochus and Cicero in the first century BCE, but to which also Stoics (always eager to attack Epicureanism as their most formidable rival, but also eager to underscore the Platonic and Socratic pedigree of their own philosophy) could conceivably subscribe.⁵⁵ On such a view Epicureanism was the odd one out, and in this respect Arius' strategy of selection, rather than the contents of his doxography, may have reflected his supposed Stoic affiliation.

We may conclude that the possibility that our Arius Didymus was in fact identical with the court philosopher Arius has not been excluded by Göransson's arguments. What remains of the contents of the work is compatible with the identification, although the different practices of name-giving in our various sources should urge us to be cautious. We cannot move, it seems, beyond the *non liquet* advocated by Mansfeld and Runia. Yet, in the meantime we did find some arguments in support of dating our texts to roughly the period in which Augustus' court philosopher lived.

5. Date

Also in this respect Göransson has at least to some extent challenged the basis of our supposed certainty. He did this by focusing on the relation between Arius' only surviving fragment on Plato, quoted by Eusebius (Eusebius *PE* 11.23.3–6; fr 1 Diels) and a very similar passage in the *Didaskalikos* of Alcinous (*Didasc.* 166.39–137.16 H.), printed by Diels in parallel columns next

⁵⁴ Mansfeld and Runia (1997) 213.

⁵⁵ See Algra (forthcoming) on the 'Antiochean physics' as described in Cicero *Acad.* 1.24–29 as an amalgamation of Platonic, Aristotelian and Stoic elements jointly to be set in opposition to Epicureanism. On the interest someone like Posidonius took in the *Timaeus*, see below, n. 58.

to the text from Eusebius. It has been generally assumed since Diels (*DG* 76) that Alcinous was here dependent on the text of Arius Didymus, which he supposedly transcribed and abridged. However, a comparison of the two passages led Göransson to the opposite conclusion, viz. that 'beyond doubt Arius Didymus is the borrower, either from the *Didaskalikos* or from a source text of this work'.⁵⁶ Especially the first possibility would at least leave room for a later dating of Arius than the Augustan era, even if we do not know the exact date of Alcinous. However, Göransson's arguments fail to convince.⁵⁷

As I indicated, Diels neatly printed the two texts in parallel columns as Arius Didymus fr. 1, so I do not think I need to reproduce them here in full. Let me just list the most striking differences:

(a) Arius Didymus' text is mainly paratactic; it juxtaposes disconnected statements. Alcinous, by contrast, has subsumed all this material in one coherent sentence ('since ... it is necessary that ...').

(b) Arius adds a number of examples of sensible instantiations of Forms which are absent from Alcinous.

(c) Arius offers a definition of a Platonic Form as an *αἰδῖος οὐσία* which is absent from Alcinous.

(d) Arius adds that a Form is *αἰτίαν καὶ ἀρχὴν τοῦ ἑκάστων εἶναι τοιοῦτον οἷα ἐστὶν αὐτή*. In Alcinous this information is integrated into a subclause of the overarching hypothetical clause ('since ... it is necessary that ...', see (a)); however, in this subclause, which has the form of an absolute genitive, something appears to have gone wrong, for we get an ungrammatical construction, in which the subject of the absolute genitive appears to be taken up again in the nominative case as subject of the subsequent clause: *τῆς ιδέας οὔσης αἰτίας ἀρχή* (sic) *τοῦ εἶναι ἑκάστων τοιοῦτον οἷον αὐτὴ ὑπάρχει, ἀναγκαῖον καὶ τὸ κάλλιστον κλτ.* This, at any rate, is the MS reading. Whittaker's edition of Alcinous emends *οὔσης αἰτίας ἀρχή* into *οὔσης αἰτίας <καὶ> ἀρχῆς* and thus adapts the text to what we find in Arius Didymus; Göransson, by contrast, follows Hermann and Louis in proposing *οὔσης αἰτίας ἀρχήν*, with the word *ἀρχήν* functioning as an adverbial accusative (meaning something like 'in the first place').

(e) Alcinous adds the motivation for the Demiurge's creative activity: *διότι ἀγαθὸς ᾗν*.

(f) Alcinous uses the word *ὕλη*, where Arius uses *οὐσία*.

According to Göransson all these differences can be explained by assuming that Arius used the *Didaskalikos* or a text very much like it (rather than the other way round) and that he changed it, as follows:

Ad (a) Arius 'has broken up the long sentence into a series of short statements'.

Ad (b) Arius 'has, for clarity's sake, elaborated the meaning of the simile'.

Ad (c) Arius 'has inserted a definition of the Idea'.

⁵⁶ Göransson (1995) 196–202. The quotation is from the beginning of the next chapter, p. 203.

⁵⁷ Mansfeld and Runia 241, n. 137 observe that 'the philological argument that Alcinous' version is more coherent and thus more likely to be the source than the adaptation is not decisive'. I would go further than that: the argument is not convincing at all. However Göransson's argument is actually more complicated than that, on which see the text above.

Ad (d) Arius has ‘misconstrued’ the adverbial use of ἀρχήν in his source in writing αἰτῶν καὶ ἀρχήν.

Ad (e) Arius has neglected the statement on the Creator’s motive as ‘irrelevant for his own context’.

Ad (f) Arius has ‘by inadvertence, misled by Stoic usage [...] substituted οὐσία for the correct ὕλη’.⁵⁸

All this, I am afraid, is very unlikely, even at first sight. The different styles we find across the texts that can be plausibly ascribed to Arius, such as the doxographies of Stoic and Aristotelian ethics, suggest that as an epitomator Arius did not in general tamper with the *style* of his sources or *add* a lot of information of his own (in fact, being an epitomator usually involves leaving out stuff rather than adding it). True, his leaving out the reference to the Demiurge’s Goodness (difference (e)) could in principle be explained by a wish to abbreviate on Arius’ part (but then see below on possible motives for Alcinous to *add* it), but it is extremely unlikely that he was responsible for the other changes, i.e. a that he cut up a well-formed sentence (difference (a)), or that he added examples of his own making to illustrate a simile (difference (b)), or added a definition that was not in his source (difference (c)) or that he replaced a *correct* term in his source by an *incorrect* term that he merely had at the back of his mind (difference (f)).

By contrast, if we assume that Alcinous used Arius, all the differences can be readily explained:

Ad (a) Alcinous substituted the rather limping prose of Arius by one well-formed conditional sentence.⁵⁹

Ad (b) Alcinous left out some superfluous and in fact rather childish illustrations which his own readership would not need.

Ad (c) Alcinous left out a definition of a Platonic Form which his readership did not need either, especially since he had explained the nature of the Forms earlier in his work.

Ad (e) Alcinous added the motivation of the Demiurge — an important element for a Platonist — with a reference to *Tim.* 29e1.

Ad (f) Alcinous corrected the term οὐσία — which Arius had apparently simply copied from a Stoicizing source,⁶⁰ but which for a Platonist like Alcinous was simply unacceptable as a term to designate matter — and substituted the Platonically correct term ὕλη.

We are left with difference (d), but on closer view even that can be more easily explained if we assume that it is Alcinous who made the mistake in using Arius, rather than the other way round.⁶¹

⁵⁸ All the quotations are from Göransson (1995) 210.

⁵⁹ For a similar case, see my analysis of the parallel texts of Sextus *M* 10.6–12 and *PH* 3.120–121 in Algra (2015) 200–204, where I argue that the more developed *PH* III, 120–121 offers the later version.

⁶⁰ There must have been Stoic descriptions of the contents of Plato’s *Timaeus* around in the first century BC; think of Posidonius (see frs. 28, 31, 49.141, 149, 205, 291 E.-K.), even if we do not have to accept the attribution to the latter of a commentary on this Platonic text, on which see Kidd (1988) 338–340. Anyway, Stoicizing terminology in this part of Arius appears to be compatible with the Stoicizing terminology used in the doxography of Peripatetic ethics.

⁶¹ The supposedly adverbial usage of ἀρχήν (‘in the first place’ or ‘to begin with’) which Göransson detects in what he takes to be the original passage in Alcinous, and which he thinks was misunderstood by Arius, makes little sense to me in this particular context, especially not since its juxtaposition to the term αἰτῶν was bound to

In view of all this the possibility that Arius is the borrower here can be virtually excluded. *A fortiori*, there is no reason to assume that he borrowed these passages *directly* from Alcinous, and thus there is no reason to entertain the possibility that his date may be considerably later than the first century BCE. So whatever reasons we may have to doubt the identity of Arius Didymus and Arius the court philosopher, the arguments adduced by Göransson in connection with the parallel passage in Alcinous should not be among them.

In principle we do not have any secure clues for dating the texts that can be ascribed to Arius Didymus, apart from the *t.p.q.* and the *t.a.q.* offered by the lifetimes of Posidonius (the latest philosopher quoted, if I am correct) and Eusebius (the earliest source quoting him). But for various reasons a date at the end of the 1st century BCE seems eminently plausible. As I already noted in the previous section, the choice (if what we now have is indeed the result of selection on Arius' part, and not of the accidents of transmission) of Stoicism, Platonism and the Peripatos as the schools to be covered seems representative for the kind of philosophical atmosphere that we find in particular 1st century BCE circles (the followers of Antiochus, Cicero). The same goes for the decision (again, if that is what it was) to leave out Epicureanism. The choice of a Stoicizing vocabulary in the Peripatetic ethical doxography and (if the above analysis is correct) also in the account of Platonism, coupled with the fact that the doxography of Peripatetic ethics shows a predilection for divisions and definitions of ethical concepts that appears to have been copied from Stoicism,⁶² points to (the use of sources from) a period in which Stoicism was dominant, in which Plato and Aristotle could be seen as the *veteres* or *antiqui* or *superiores* that were in a sense related to that tradition,⁶³ and in which the purer forms of (middle) Platonism and (post-Andronican) Aristotelianism were not as yet the strong presences they were to become. Finally, as has already been observed by Moraux, the Peripatetic texts show no signs as yet of the emerging early commentary tradition, although they are mainly post-Aristotelian, i.e. Hellenistic. In this respect as well, in other words, the late first century BCE comes out as the most plausible period for the gestation of Arius' work.

6. The doxography of Stoic ethics in Stobaeus: content, structure, tradition

Let us now turn to the texts on Stoicism that have been ascribed to Arius Didymus. As we saw, we have a longish and continuous doxography of Stoic ethics in *Ecl.* 2, next to a number of separate fragments on physics in *Ecl.* 1 and in Eusebius.

create ambiguity. Conversely, it is easy to imagine how Alcinous made a mistake in copying Arius' αἰτίαν καὶ ἀρχὴν τοῦ ἑκάστου εἶναι τοιοῦτον οἷα ἐστὶν αὐτῇ: first he transformed αἰτίαν into a genitive and included it in a genitive absolute construction; but he then went out to copy the rest of the sentence straightforwardly as he found it in his source (i.e. forgetting, for the moment, that he had started a genitive absolute construction, and thus creating an anacolouthon). Someone may then have tried to mitigate the anacolouthon by changing the accusative ἀρχὴν into a nominative case, possibly taking the whole phrase ἀρχὴ τοῦ ἑκάστου εἶναι τοιοῦτον οἷα ἐστὶν αὐτῇ as a kind of parenthesis.

⁶² On which see Moraux (1973) 438.

⁶³ See e.g. the Antiochean account in Cicero *Acad. Post.* 1.22 (*omnis illa antiqua philosophia*), 34 (*superiores*), 39 (*Xenocrates et superiores*); see also the text printed as Arius Didymus fr. 40 Diels (on ἐννοήματα): ταῦτα δὲ ὑπὸ τῶν ἀρχαίων ιδέας προσαγορεύεσθαι. Incidentally, and as Diels already noted in *app.*, the stock examples here used of Platonic Forms (man, horse, other animals) are the same as in fr. 1 (from Eusebius) on Plato, discussed above.

Let us start out with the account of Stoic ethics, nowadays also known as doxography B. It is actually one of the three main sources for our knowledge of early Stoic ethics, next to Cicero's *De finibus* and Diogenes Laertius. Although it is thus an important text for us, it is also notorious in virtue of its endless classificatory divisions and definitions of virtues and (numerous) sub-virtues. As a text it is not in all respects and in all details carefully structured,⁶⁴ but it does consist of some recognizable main sections — all the more recognizable because the text itself offers some explicit pointers as to its own structure.⁶⁵ Let us briefly review these main sections and the explicit signposting that connects them (the page numbers, once again, refer to the edition of Wachsmuth (W)).

The end of the first, and longest, part of the text claims (p. 79.1–4 W.) that thus far three subjects, or related sets of subjects, have been covered, and that we should now move on to another one:

Having now discussed (i) the good and the bad, (ii) what are (things) worth choosing and what are (things) to be avoided, and (iii) the goal and happiness, we think we should now expound in the proper order the doctrine of the indifferents.

What are (things) worth choosing' (αἰρετά) in a broad sense cover both the virtues and all things good (see p. 64.13–17 W.), and 'what are (things) to be avoided' (φευκτά) are the opposites of these. In that sense subject (ii) 'what are (things) worth choosing and what are (things) to be avoided' would seem to overlap with subject (i) 'the good and the bad', and would thus cover the whole of pp. 58.5–78.17 W. (good, bad, virtues, vices). In a narrower sense, however, it may be said to be a reference to the discussion of things αἰρετά (see p. 72.14–25; p. 75.1–6). W.), in which case the discussion of virtues and vices could be taken to be subsumed under subject (i), i.e. under the discussion of 'the good and the bad'. In both cases the passage quoted above may count as an adequate summarizing reference to the preceding discussion of good and bad, virtues and vices (even if it does not explicitly mention virtues and vices, on which see below), moral choice, and the goal and happiness — the subjects that are indeed discussed in the first part of the doxography, which arguably covers the core of Stoic ethics. Later on, in section 8 of this paper, we will further zoom in on the subdivisions of this part of the text and on the proper position of the discussion of the virtues. For the moment let us call this whole first part of Arius' overview (pp. 57.19–79.1 W.) section (A). A conspicuous feature of this whole section is that it consists almost entirely of divisions ('of things good some are virtues, others are not' etc.) and definitions.

As we saw, the concluding passage of section (A) also announces that we should next turn to the subject of indifferents, and discuss them in 'the proper order' (thus announcing the

⁶⁴ I find myself unable to go along with Viano (2005) 337, who claims that this text 'se distingue par une grande originalité dans la selection et l'arrangement de ces arguments'. Nor do I think that many people would agree that this doxography is 'redigée avec un soin et une précision extrêmes' (*op. cit.* 339).

⁶⁵ The structure of the text has been eminently analyzed by Long (1983). My own analysis here does not differ much from his (he subdivides my section (A); I have subdivided his section H), and both are in the end based on the signposting in the text itself. However, as for the microstructure of the first part of the text (dealing with goods and virtues), I think the overview he offers as an appendix (*op. cit.* 57–62) should be modified — or at least presented side-by-side with an alternative overview — because it is based on Wachsmuth's edition of Stobaeus, which features the transposition of a considerable chunk of text to a position it does not occupy in the MSS and for reasons that can be disputed. On this transposition, see further below, section 8.

discussion of pp. 79.1–85.11 W.). Next, the *topos* of the appropriate acts (*καθήκοντα*), including ‘right actions’ (*κατορθώματα*) is discussed (pp. 85.11–86.16 W.) — a *topos* which is said to be logically connected’ (*ἀκολουθός*) to the subject of (preferred) indifferents discussed in the previous section. Let us label this whole connected stretch of text section (B); it is full of divisions and definitions and in this sense resembles section (A).

There follows a section on impulse (pp. 86.17–88.6 W.), which is explicitly connected (‘since passion is a species of impulse’, p. 88.6–7 W.) with a discussion of *πάθος* and its species (pp. 88.8–93.13 W.). Here we are taking leave of the divisions, but there are still plenty of definitions. Let us call this section (C).

What then follows (pp. 93.14–99.3 W.) provides us with a mixed bag, the main element of which seems to be a section on social and political philosophy (pp. 93–95 W.); but it also reverts to the topic of *κατορθώματα* and some other items. Perhaps we may say that we are in general dealing with the implications of the Stoic theory of virtue for social and political thought and for the characteristics of the sage.⁶⁶ For the sake of convenience I nevertheless regard it as a unified section (D).

From p. 99 W. onward until the end (i.e. pp. 99.3–116.18 W) the text focuses more and more, though initially not exclusively, on the characteristics of the sage, the *σοφός*, and his counterpart, the *φάυλος*. Let us call this section (E). It is introduced as a new topic by the words ‘it is the view of Zeno and his Stoic followers that there are two kinds of men etc.’.

At the end of the whole account, we find what for the sake of convenience, and following Von Arnim, I shall here refer to as the *subscriptio*, to which I will revert later on.

On the basis of this analysis we end up with the following recognizable sections:

(A) Good and bad, virtue and vice, goal and happiness (pp. 57.19–79.1 W.).

(B) Indifferents, *καθήκοντα*, *κατορθώματα* (pp. 79.1–86.16 W.).

(C) Impulse and passions (pp. 86.17–93.13 W.).

(D) Social and political implications of the theory of virtue (pp. 93.14–99.3 W.).

(E) Sages and fools (pp. 99.3–116.18 W.).

It might be argued that (D) and (E) are less neatly demarcated than the other parts, and it is also possible to follow Tony Long and regard them as a single, though very long and diverse, section.⁶⁷

The sequence of these sections is roughly the same as the sequence we find in book VII of Diogenes Laertius:

(A) Virtue and the good (preceded by an explanatory account of primary natural impulses): 7.84–104.

(B) Indifferents: 7.104–110.

(C) Passions (here treated without connection to the subject of impulse): 7. 110–117.

(D) A mixed section on social philosophy, lives and the characteristics of the sage (here we find some passages — especially definitions and divisions — which are almost exactly identical to what Arius offers): 7.117–131

⁶⁶ Wachsmuth's *apparatus* on p. 93 complains that ‘ordo fere nullus est idemque aliquotiens bis terve diversis locibus tractatur’. A more positive assessment of the coherence of this part of the text in Long (1983) 49–50, who takes this section together with the next one as dealing with ‘lives’ (*op. cit.* 48)

⁶⁷ See the overview in Long (1983) 50.

Also the third book of Cicero's *De finibus* offers a similar sequence:

(A) The chief good and the virtues (including a link with *οὐκ ἐλπίς*, missing in Arius, but partly present in Diogenes): 3.30–50.

(B) Indifferents: 3.50–59.

(D) A mixed bag concerning practical corollaries, cosmopolitanism, friendship and the nature of the sage: 3.60–73.

What is missing in Cicero is (C), a section on passions (which are only mentioned in passing, so to speak, in 3.35). But as Tony Long has pointed out, this can perhaps be explained by the nature of Cicero's philosophical *grand projet*: he wrote the *De finibus* in the summer of 45 BCE, i.e. at roughly the same time at which he was also preparing his *Tusculanae Disputationes* in which he was to deal *in extenso* with passions like the fear of death and grief.⁶⁸

However, there are also significant differences. First, the degrees of authorial intervention differ considerably. Cicero gives a rhetorically coloured account that is meant to be persuasive and that offers sustained argument; there is much less sustained argument in Diogenes and Arius.⁶⁹ Secondly, although all three texts offer a common Stoic account as their basis, Diogenes and Arius offer views of individual Stoics as well, whereas Cicero in general does not; and Diogenes often offers lists of *laudationes* (references to specific works), which are absent both from Arius' ethical account (we do find a few references to works of Chrysippus in the *subscriptio* and a few others to works of Chrysippus and Apollodorus in the *physical* fragments ascribed to Arius) and from Cicero. Thirdly, as Von Arnim already noted,⁷⁰ the way the individual sections are organized is sometimes rather different; thus Arius orders most of section (A) by means of endless lists of divisions, of which only a few recur in Diogenes and none in Cicero.

In view of these considerable divergences, the supposition, put forward by Aurelio Covotti in 1897, that we are dealing, at least in the case of Arius and Diogenes, with versions of one and the same source seems jejune.⁷¹ Even Von Arnim's supposition that we are dealing with a single source — Chrysippus' *ὑπογραφή τοῦ λόγου*, a title mentioned at the end of Arius' account — which had been adapted many times over in scholastic contexts in the course of time, seems to be too neat. Long is probably more realistic in speaking of a 'common tradition'.⁷²

This common tradition shows itself in the first place in what appears to be, roughly, a standard sequence of topics in dealing with Stoic ethics: the core topics of the good, virtue, the end and happiness were treated first; then came what we might call the corollaries: (i) the theory of indifferents and the connected issue of *καθήκοντα*; (ii) the theory of impulse and the passions, and (iii) what I called a mixed bag of 'lives', political and social issues and the characteristics of the sage. The second sense in which these three texts may be said to represent a common tradition concerns content: they all use a number of standard definitions,

⁶⁸ Long (1983) 49, n.23.

⁶⁹ Pace Long (1983); see White (1983).

⁷⁰ Von Arnim xl: 'inter haec tria ethicorum compendia (Sextus, Diogenes, Arius) ratio intercedit, ut cum mira quadam in rebus ipsis affinitate varietas quaedam in minutiis et maxime in verbis coniuncta sit'.

⁷¹ Covotti (1897) 75 and 81 (*non vidi*); summarized by Strache (1909) 71.

⁷² Long (1983) 52.

descriptions and divisions that, we may presume, were recycled over and over again in numerous works of different individual Stoics, and hence also in the various ἐπιτομαί based on these works. It stands to reason that this technical material is less visible in the rhetorically more embellished text of Cicero — even if his Stoic spokesperson Cato claims to keep things low-key because *consectaria me Stoicorum brevia et acuta delectant* (*Fin.* 3.26)⁷³ — but that it comes closer to the surface and even constitutes the core of the ὑπόμνημα-like accounts of Stoic ethics in Diogenes and Arius.

7. Zooming in (i): the opening phrase in Stobaeus and its implications

One of the most interesting feature of doxography B is the fact that it is both introduced and closed by phrases, using the first person singular, that must come from the original author — i.e., presumably, from our Arius. After the Stobaeian title Ζήνωνος καὶ τῶν λοιπῶν Στωικῶν δόγματα περὶ τοῦ ἠθικοῦ μέρους τῆς φιλοσοφίας the actual opening phrase of the doxography reads as follows:

Next I will offer a summary of ethics (περὶ δὲ τῶν ἠθικῶν ἐξῆς ποιήσομαι τὸν ὑπομνηματισμόν), taking up the essentials of the principal beliefs (p. 57.15–17 W.).

The closing phrase runs as follows:

Now that I have adequately gone through all the ethical beliefs of the Stoic school that I set myself the task of surveying, I will bring this survey (ὑπομνηματισμόν) to an end (p. 116.15–18 W.).

The first words of the opening phrase ('next I will offer a summary of ethics') are of particular interest, as Diels already pointed out, for precisely because (unlike the title that was added by Stobaeus) they do *not* include any reference to the Stoics and do not announce that what follows will be *Stoic* ethics, they suggest that in the immediately preceding context Arius had been talking about the Stoics — for example about Stoic physics or logic — all along.⁷⁴ This in its turn supports the suggestion that Arius Didymus' doxography was organized by schools, not by subject matter, an organizational principle that makes every sense for a work entitled Περί αἱρέσεων anyway.

According to Mansfeld and Runia, however, Diels' argument here 'is not as strong as he thought'. They think allowance has to be made for the intervention of Stobaeus: 'for example, after the words ἠθικῶν may have come the words <τοῦ> Ζήνωνος καὶ τῶν λοιπῶν Στωικῶν, which Stobaeus used for his title and so may have been left out of the excerpt'.⁷⁵

In my view this counter-argument is not as strong as Mansfeld and Runia think. If Stobaeus here really did the kind of editing they suggest — leaving out the reference to the Stoics in his excerpt — he must have had a reason. And if this reason was that he wanted to smoothen

⁷³ See also *Fin.* 3.19: 'Haec dicuntur ieiunius; sunt enim quasi prima elementa naturae, quibus ubertas orationis vix adhiberi potest'.

⁷⁴ As Jaap Mansfeld points out to me, one may compare the transitional formula we find at the beginning of fr. 1 Diels (the fragment on Plato's Forms) in the versions of both Eusebius and Stobaeus (and which we can therefore trace back to Arius as their common source): περὶ δὲ τῶν ἰδεῶν ὡδὶ διεξήρχετο. This formula indicates that the preceding text was on Plato as well, though not on the Forms.

⁷⁵ Mansfeld and Runia (1997) 243, n. 145.

things by adapting his text to his title (to which he had presumably transferred part of the text) what he did — at least according to the suggestion of Mansfeld and Runia — was particularly inept. For in that case he should rather have cut out the *whole* first sentence, not just the words <τοῦ> Ζήνωνος καὶ τῶν λοιπῶν Στωικῶν. After all, the sentence ‘I will go on with ethics’, which he evidently left standing, is definitely misplaced in the Stobaeian context, both because it immediately follows a title which makes the more specific claim that what follows will be about *Stoic* ethics, and because it occurs in a context — book II of the *Eclogae* — which thus far has been about ethics all along. In fact the very ineptness of this first sentence in the context of his overall account rather suggests that Stobaeus did no editing whatsoever here, but on the contrary blindly copied the text of his *Vorlage*. It appears, then, that Diels’ argument is left standing, and that we have a very strong indication here that doxography B comes from a context in which the dogmata of Stoic philosophy as a whole were discussed.⁷⁶

8. Zooming in (ii): Wachsmuth’s transposition of part of the MS text

Those who use the doxography of Stoic ethics in Stobaeus should realize that the text as printed by Wachsmuth is in part (i.e. in so far as section (A) in the above overview is concerned) a reconstruction that differs from the text as presented in our manuscripts. In order to obtain a more smoothly structured result, Wachsmuth transposed a large chunk of text from its original position in the MSS to pp. 59.4–68.24 of his own edition, on the grounds that this section deals with the virtues and hence should be placed directly after the first paragraphs, where the virtues are first introduced.⁷⁷ In his preface he added the codicological details of what he thought had gone wrong in the course of transmission: the section on the virtues comprises some 210 lines in the (i.e. his own) Teubner edition and we can infer from other similar cases that this exactly equals three *folia* in the MSS; at the same time the passage which the MSS presented in that position (and which he now prints immediately *after* these 210 lines) comprises 70 lines, i.e. one *folium*. So four (3+1) loose *folia* may have swapped places.⁷⁸

Wachsmuth’s transposition has been taken over (without acknowledgment or comment, in so far as I can see) in the recent English translation of A. J. Pomeroy and in the Italian

⁷⁶ Long (1983) 43 has suggested that also the first sentence of the actual doxography, which he translates as ‘Zeno says that these are the things which participate in existence; and of existing things some are good, others bad and others indifferent’ may be taken to refer to an immediately preceding context in which Zeno’s ideas — presumably concerning physics — were being discussed. This of course would further strengthen Diels’ point. However, his suggestion appears to rest on a questionable interpretation of the words: ταῦτ’ εἶναί φησιν ὁ Ζήνων ὅσα οὐσίας μετέχει, which should probably be translated ‘Zeno says that those things are that partake of being’ (the text then goes on offering a division of ὄντα). The word ταῦτα, in other words, does not refer back to anything, but should be taken as the antecedent of ὅσα οὐσίας μετέχει. Strangely, Viano (2005) appears to follow Long (‘Zenon dit que ce sont ces choses qui participent de la substance. Et des choses qui sont, les une sont de biens etc.’) although her translation in Viano (1999) rendered the first sentence (in my view correctly) as ‘Zenone dice che esistono quelle cose che partecipano della sostanza’.

⁷⁷ According to the critical apparatus *ad loc.* (p. 59) Wachsmuth was here following a suggestion made by Spengel in an article of 1850.

⁷⁸ See the introduction to Wachsmuth’s 1884 edition, xviii–xix.

translation of Christina Viano, and also Tony Long's elaborate analysis of the structure of Arius' account of Stoic ethics is based on a text including Wachsmuth's transposition. But do we have good reasons to follow Wachsmuth here? Let us have a closer look at what is at issue. Below I have divided the relevant section of the text (pp. 57.15–75.7 W. — section (A) in the above overview) into five subsections (A1)–(A5), in the sequence in which we find them in the MSS (each time adding the relevant pages of the edition of Wachsmuth, who changed this sequence):

(A1) Introduction — Both in the MSS and in Wachsmuth's edition we start out (pp. 57.18–58.4 W.) with a general introduction, which claims that the basic division is one between things good, bad and indifferent. We then (pp. 58.5–59.3 W.) get a first subdivision of things good (some are virtues, some are not) and a first subdivision of virtues (some are ἐπιστήμαι or τέχναι, others are not).

(A2) Further divisions of the good — The MSS next give a section containing divisions and definitions of the good, or things good (printed further on, at pp. 68.24–72.13 W.).

(A3) Division and definitions of the virtues — The MSS then give a whole block of definitions and divisions of virtues (printed on pp. 59.4–68.23 W.).

(A4) Further divisions of the good — From p. 72, 14 W. onwards, the MSS and Wachsmuth's edition run parallel again, with a further section with definitions of the good/goods. The first of these, though not all of them, make the connection with the subject of the αἰρετόν.

(A5) The goal and happiness — also in this final section (pp. 75.7–78.17 W.) Wachsmuth's edition and the MSS run parallel.

Wachsmuth's proposal comes down to swapping sections (A2) and (A3), so that his printed text gives the above sections in the sequence (A1)–(A3)–(A2)–(A4)–(A5). In his view the transmitted sequence ineptly cuts up the account of the good ((A2) and (A4)) by bluntly (without warning, or introduction or transitional phrases) inserting a whole section on the virtues (A3). And it has to be admitted that his printed text in a sense satisfies our predilection for order in offering an account of the virtues at the beginning, followed by an equally continuous account of the good. But is the sequence as transmitted by the MSS really one that makes no sense at all?

We may note, to begin with, that Arius, as we saw, marks the end of the whole first part of the doxography at *Ecl.* 2.79.1 by telling us that 'having given an adequate account of (i) the good and the bad and (ii) what is worth choosing and what is to be avoided, and (iii) about the goal and happiness, we have thought it necessary also to give an account of what they say about indifferents in a suitable order'. He does not start with 'virtue'; indeed virtue, as we saw, is not even mentioned as a separate subject. It is apparently supposed to be subsumed under the general discussion of 'the good and the bad', in accordance with the first subdivision of things good in section A (some goods are virtues, others are not, p. 58.5 W.), which clearly implies that 'good' is the more general term.

Now, if the 'good' is the more general term, and if the introductory section (A1) gives *two* quite general subdivisions, viz. (i) of the good and (ii) of virtue, and in that order, one might well expect the next section, section A2, to turn to divisions of the good first, as indeed it does in the text transmitted by the MSS.

Moreover, even if it is true that the transition from (A2) to (A3) in the transmitted text is rather blunt and unmarked, we may still note that section (A3) is not entirely *out of place* in the position allotted to it in the manuscripts, right after the section which gives a division of good things into τελικά ('final') and ποιητικά ('productive') goods, and which notably concludes by saying that the virtues are both. Indeed this sentence may have served as a 'bridge' to the discussion of the virtues.

Furthermore, even if it is true that the transition from (A3) to (A4) is, once again, rather blunt and unexpected, the fact that the section on virtue is thus enclosed by two sections on the good, may also be taken to reflect that it is part and parcel of the more general discussion of the good (we may recall that the opening section A1 claims that the general ordering division is that into things good, bad, and indifferent).

Perhaps, given the kind of text we are dealing with, such considerations of a general overarching order — roughly based on Arius' own explicit description and division of this part of his text at *Ecl.* 2.79.1 — should be given precedence over our own aesthetic considerations concerning the micro-level (based on our preference for continuous sections on both virtue and the good, and for smooth transitions). We may then conclude that the three topics signaled by Arius at *Ecl.* 2.79.1 W. are indeed treated, but that otherwise things are not very well organized at the micro-level. In general, the separation between subjects or sections in this doxography simply is not watertight: right in the midst of the section on the goal and happiness ((A5)), for example, we suddenly get yet one more division of 'things good' that is not clearly related to its immediate environment (p. 77.6–15 W.). And within each of the sections the sequence of the topics appears to be fairly random.

The lack of connections and the more or less random sequence of individual divisions and definitions within each section — all this within a fairly global general structure (the five main sections (A)-(E) of the overall overview given above) points to a certain lack of editorial intervention, an impression that is confirmed by the inclusion of doublets and other forms of repetition, especially in the later sections of the doxography. Thus, we have two separate passages dealing with the positive characteristics of the sage (and the corresponding negative characteristics of the non-wise, or fools). The first overview is attached to the discussion of the virtues, on pp. 65.12–68.23 W. The second, and more elaborate overview more or less takes up the whole final part of Arius' account (approximately pp. 99–116 W.; i.e. section (E) in the overall overview of the doxography provided above). Had the text been carefully edited as a whole, these overviews would presumably have been merged, and overlap (e.g. on eros, cf. p. 66.3–12 W., part of the first overview, and p. 115.1–5 W.) would have been avoided. In a comparable fashion — although on a smaller scale — the material on right actions (κατορθώματα) is distributed over various sections of the account: the κατορθώματα appear, as we might expect, in the context of the discussion of καθήκοντα on pp. 85–86 W., but they also resurface at the end of the section on impulse and on the passions (p. 93 W.).

For the moment we may conclude, I think, that the text of the first main part of Arius' doxography of Stoic ethics as transmitted by the MSS provides us with a sequence of issues that makes sufficient sense, both against the background of the organizing principles (macro-level) explicitly referred to by Arius himself (*Ecl.* 2.79.1 W., the summarizing text quoted above) and when compared with the rather haphazard character which also the later parts of his text

exhibit at the micro-level. Although not much hinges on our decision, there is no strong reason to accept Wachsmuth's transposition.

9. The nature of the ethical doxography, *subscriptio* and sources

These findings are compatible with the ways in which the author of our doxography — Arius Didymus, we still assume — himself characterizes the nature of his work. First of all, both at the beginning (p. 57.15–17 W.) and at the end (p. 116.15–18W.) of the doxography he claims to present the main elements (κεφάλαια) of the essential beliefs (τῶν ἀναγκαίων δογμάτων), which is a way of saying that we are indeed dealing with an ἐπιτομή. Secondly, and more importantly, the text presents itself both times as a ὑπομνηματισμός. It appears (cf. LSJ s.v.) that this word was used as an equivalent of the more wide-spread term ὑπόμνημα, a term typically used to refer to a collection of raw material ('notes') culled from various sources, and often based on a set of tablets (*pugillares*) containing notes made while reading (or while listening to the recitation of) larger texts.⁷⁹ Secondly, a ὑπομνηματισμός or ὑπόμνημα typically lacks the 'finishing touch', the neater argumentative structure or the rhetorical or stylistic embellishment of a work (σύγγραμμα) in the proper sense.⁸⁰

This is indeed a feature that stands out in our doxography of Stoic ethics. Although there is some overall order which, as we saw, reflects the main area divisions of Stoic ethics (and is paralleled in the works of Diogenes Laertius and Cicero), at the micro-level we are sometimes dealing with asyndetic juxtapositions of chunks of text, and a lack of stylistic unity — a phenomenon paralleled in the doxography of Peripatetic ethics (doxography C) — which suggests that the author was often content just to copy out passages from his (diverse) sources. In fact our author was not even consistent in applying the minimal level of editorial intervention that consisted in converting the reports he found in his sources into *oratio obliqua* ('the Stoics believe that'), for among these endless accusative-cum-infinitive constructions, we also find incidental scraps where the *oratio recta* style of the original has been preserved. All this suggests that in general Arius stayed rather close to his sources and that his doxography does not show a lot of authorial intervention, at least not in so far as style is concerned, on his part.

Is there anything we can say about the sources of the doxography of Stoic ethics? First of all, there is no particular reason to assume that the whole of Arius' account must go back to a *single* source.⁸¹ It was already noted by Von Arnim that the first part of the account, with its neat divisions of 'good things', is rather different in style from the later part of the account,

⁷⁹ Cf. the chapter entitled 'The Roman Scholar' in Skydsgaard (1968) 101–116; and Dorandi (1991).

⁸⁰ One may usefully adduce the example of Cicero who in 60 BC sent a ὑπόμνημα of the feats of his own consulate to Posidonius asking the latter to convert it into a proper historico-rhetorical work (cf. *Att.* I 1.19.10 and 2.1.2). Posidonius refused, claiming (probably tongue-in-cheek) that Cicero's ὑπόμνημα did not need further elaboration. One may also compare the difference between Sextus Empiricus' *Adversus Mathematicos* (referred to him elsewhere as σκεπτικά ὑπομνήματα) and the partly parallel, but structurally more achieved *Purrhôneioi Hupotupôseis* by the same author, on which see the introduction to Algra and Ierodiakonou (2015), esp. 5–7. See in general also Skydsgaard (1968), 107.

⁸¹ Although he rejects Giusta's hypothesis of a common source for the accounts of Stoic ethics in Diogenes Laertius and Arius Didymus, Long (1983) 55 does assume that 'Arius used a reliable Stoic compendium of the kind suggested by Von Arnim'. Similar suggestion in Annas (1999).

which, in dealing with the various characteristics of the sage, is rather badly organized and contains some curious repetitions, so that it would rather seem to have been culled from various sources.⁸² Secondly, the labels ἐπιτομή and especially ἐπιτομαί that were used to refer to the work suggest that the author made his own selections rather than copying out a single pre-existing compendium. Finally, the so-called *subscriptio* which closes this doxography hardly suggests such a dependence on a single source in so far as it shows that the author was well acquainted at least with a number of works by Chrysippus. It begins as follows:

So much for these matters. For all the paradoxical beliefs have been discussed by Chrysippus in many other works (ἐν πολλοῖς μὲν καὶ ἄλλοις) as well. For he did so in the book *On Tenets* (καὶ γὰρ ἐν τῷ περὶ δογμάτων) and in the *Outline of the Theory* (καὶ ἐν τῇ ὑπογραφῇ τοῦ λόγου),⁸³ and in many other works on particular subjects (καὶ ἐν ἄλλοις πολλοῖς τῶν κατὰ μέρος συγγραμμάτων).⁸⁴

On the basis of the references to ‘many other works of Chrysippus’ in general and to the περὶ δογμάτων and the ὑπογραφὴ τοῦ λόγου in particular, Von Arnim concluded that Chrysippus himself (more particularly, his ὑπογραφὴ τοῦ λόγου) was likely to be the main source of at least the first part of Arius’ compendium, i.e. roughly the sections (A)-(C) in the general overview I presented above.⁸⁵ He opted for the ὑπογραφὴ rather than for the περὶ δογμάτων because, to judge from Stobaeus, the supposed Chrysippean compendium must have consisted in series of divisions and definitions, rather than of ‘plain’ *placita*.⁸⁶ Unfortunately, however, we have no firm ground to stand on here, since we have really no idea what either the ὑπογραφὴ or the περὶ δογμάτων looked like, so that we should be wary of making such specific claims. Moreover, the text of the *subscriptio* itself on closer view does not support Von Arnim’s reconstruction.

To some extent this text is vague. If the ‘many other works’ mentioned in the first line are supposed to *include* the περὶ δογμάτων and the ὑπογραφὴ τοῦ λόγου, the implication would probably be that in the preceding part of Arius’ text yet another work by Chrysippus (the title of which is here not mentioned) or even by someone else has been epitomized. Alternatively the words ἐν πολλοῖς μὲν καὶ ἄλλοις in the second line might be connected with the phrase ἐν ἄλλοις πολλοῖς τῶν κατὰ μέρος συγγραμμάτων in the last line, and taken to refer to a set of specialized works as opposed to the supposedly more general overviews of the περὶ δογμάτων and the ὑπογραφὴ. In that case the implication might be taken to be that the latter two overviews have been used as a source for (part of) the preceding account. In either case, however, there is no reason to give pride of place to the ὑπογραφὴ as Arius’ alleged source. Moreover, the ‘paradoxes’ here referred to must be the statements to the effect that only the wise man is king, rich, rhetorician etc., as they are to be found in the latter part (sections

⁸² SVF 1, *Praefatio*, xlii: ‘alteram partem ex pluribus libris excerptam esse cum eo probatur quod eadem res compluribus locis repetantur, tum eo quod nullo fere ordine neque continuo sententiarum filo singula placita deinceps collocantur’. The suggestion that Arius used various sources was defended once again by White (1983) in his comments on Long (1983).

⁸³ Christina Viano in Natali (1999) 79 translates along similar lines ‘nello *Schizzo del discorso*’. Pomeroy (1998) 103 has ‘in the “Treatise on Reason”, which cannot be a proper translation of ὑπογραφὴ τοῦ λόγου. On the Stoic use of λόγος for ‘theory’ (i.e. the whole of Stoic philosophy), see Mansfeld (2003), esp. 128.

⁸⁴ Stobaeus, *Ecl.* 2.7, p. 116.11–15.

⁸⁵ SVF 1, *Praefatio*, xl–xli.

⁸⁶ SVF 1, *Praefatio*, xli: ‘cum illud compendium ex partitionibus definitionibusque totum fere constituisse, atque ipsa placita non nisi per hanc formam adumbrasse videatur’.

(D) and (E) in the overview provided above) of the account of Stoic ethics which has just been finished.⁸⁷ This means, *pace* Von Arnim, that whatever more or less hidden message the *subscriptio* contains about Arius' source or sources, it only refers to the *last* part of his account and cannot be taken to tell us anything about the rest.

As things are, we do not have any secure indications as to the nature of the sources used in the rest of the doxography. However, especially with regard to the first part there is room for some reasoned speculation, using the prominence accorded to Chrysippus in the *subscriptio* not so much as the basis for an *Einquellentheorie* concerning the impact of the ὑπογραφή, but simply as an indication that Chrysippus was important in general. Now, the (incomplete) catalogue of Chrysippus' writings In DL 7.199–202 lists his ethical writings under three *topoi* or *logoi* — fields or subfields of ethics. The first deals with 'the classification of ethical conceptions', the second with 'the common *logos* and the sciences and virtues thence arising' and the third with 'things good and bad'. Listed under the first subfield, we find no less than 8 titles (comprising 31 books in all) that must have belonged to works dealing with definitions (ῥοι). Under the same heading (7.200) we find other titles like *On Genera and Species* (περὶ εἰδῶν καὶ γενῶν) and *On Divisions* (περὶ διαιρέσεων). Chrysippus appears to have displayed a certain fondness for works of this kind, which was probably due to his preoccupation with the problem of ambiguity and his apparent belief that this problem was to be solved by applying conceptual division (διαιρέσεις).⁸⁸ It is a fair guess that for the first section of his doxography of Stoic ethics (especially the sections on the divisions of things good) Arius or his source(s) primarily used excerpts from Chrysippean works belonging to the first subfield marked in the catalogue of his writings.

Arius or his source(s) — for it is eminently plausible that the doxography is based on intermediary sources as well. We know from Cicero's working procedures that ἐπιτομαί of key works circulated widely, and we may assume that the same went for collections of *placita* and definitions. It is likely that, just like Cicero, Arius used a mix of original works and school compendia for his own ἐπιτομή of Stoic ethics.

On this point — the use of original works of Chrysippus as the 'second founding father' of the school — we may signal what appears to be a difference between the Stoic and Peripatetic doxographies (doxographies B and C), despite resemblances in other respects (repetitions, lack of authorial intervention, predilection for divisions and definitions). In his important study of the accounts of Peripatetic physics and ethics ascribed to Arius Didymus, Paul Moraux sketched the following picture. The individual 'chapters' in the Peripatetic doxography often exhibit a quite different 'literarische form': there are discursive summaries, but there are also collections of mere tenets or definitions (which remind one of the *placita* literature), and διαιρέσεις. He concludes that Arius' doxography of Peripatetic physics and ethics must have used various sources, but there are no clear indications that Arius consulted the original texts of the *corpus Aristotelicum*. According to Moraux, Arius was to a large extent dependent on

⁸⁷ On this particular application of the term παράδοξα see Cicero *Acad.* 2.136 (*SVF* 3.599); Origenes *In Iann.* 2.10 (*SVF* 3.544).

⁸⁸ Note that the logical part of the catalogue of his writings in Diogenes Laertius comprises 8 titles (together amounting to 19 books) dealing with ambiguity. Among them we find the title *Against those who do not practice division*. On the Stoic theory of ambiguity in general see Atherton (1993).

late Hellenistic Peripatetic school treatises.⁸⁹ A more systematic investigation of these matters — including a comparison of the material in Arius and the original texts of Aristotle and a more detailed comparison between the Stoic and Peripatetic doxographies — is still to be undertaken.

In the meantime we may perhaps formulate the following tentative (and unspectacular) conclusions with regard to Arius' sources in his doxography of Stoic ethics:

(i) It is likely that Arius used various sources and stayed rather close to them. This at least is suggested by the repetitions and by the different styles which we encounter in the text.

(ii) It is also likely that one or more works by Chrysippus were among these sources, both for the sets of definitions and divisions that we find in the first part and for the final part dealing with the (in part paradoxical) characteristics of the sage.

(iii) It is eminently plausible that Arius also used more recent existing compendia: one may think of the kind of first century BCE compendia he also used for the Peripatetic doxography or a work like Panaetius' *Περὶ ἀνθρώπου*. It is probably to such works that we owe the references in his text to post-Chrysippean philosophers, although the possibility cannot be excluded that he culled these references from some original sources himself. After all, the *subscriptio* suggests that he was rather widely read in Chrysippus — perhaps more widely, we may note, than a non-Stoic author would have been — so he may have known other Stoic philosophers as well.

10. The absence of the theory of *οἰκείωσις*

The preceding analysis of the way Arius' doxography was built up — following an order of general subjects that can be paralleled from Diogenes Laertius and Cicero, but fleshing out this skeleton with texts copied, without much editing, from various Stoic sources — allows us to explain, or so I believe, the absence of a reference to *οἰκείωσις* as the basis of the formation of natural impulses at the beginning of Arius' account of good and evil, a place to which it is relegated in Cicero and Diogenes.⁹⁰ To be sure, this does not mean that *οἰκείωσις* is altogether absent from the account: Arius refers to the process without using the word *οἰκείωσις* or *οἰκείωσθαι* at 2.62.9–15. But it is no longer the main inroad or structuring principle of the account of the good.

Apparently Arius himself, or the source he here followed, decided to fill up the first part of the standard account of Stoic ethics — the part dealing with good, bad and virtues, i.e. section (A) in the above overview — in his own way. As the backbone of this section (A), he chose a patchwork of definitions and divisions that probably were ultimately culled from Chrysippus' works. This was not the only option available, but it was surely a reasonable one in so far as it mirrored the predilection of the 'second founder' of the school for definitions and conceptual distinctions. In such a framework — whether we are talking about the presumed Chrysippean original or with the way Arius copied it out — a discursive account of *οἰκείωσις* did not fit.

Of course, one may still feel tempted to follow Nicholas White and object to this very procedure by claiming that it leads to a 'lexicographical presentation that tends by its episodic

⁸⁹ Note that Moraux identifies Arius with the court philosopher, hence he dates 'recent' sources in the 1st century BC

⁹⁰ Annas (1999) 12 speaks of 'uno dei principali enigmi che questo brano presenta agli studiosi'.

character to minimize the relevant sort of coherence', and that 'when Chrysippus wrote his books of *Horoi*, he can hardly have meant them to stand on their own as expositions of Stoic ethics'. Here, however, some qualifications are in order. As for Chrysippus himself, much depends on what kind of 'expositions of Stoic ethics' we have in mind. We may grant that there is no reason to assume that his *Horoi* were meant as an exposition for beginners. They probably rather served as a useful *aide-mémoire* for Stoics who were already familiar with the connections it presupposes but does not, or not always, make explicit. What is more, for such a readership the definitions and divisions collected in this text may not only have served as a useful representation of the scholastic consensus — this is what we believe and it is on this basis that we are to conduct our discussions — but they may also have had a formative role. For they arguably allow us to view the basically binary structure of Stoic ethics — either good or bad, either virtue or vice, either sage or fool etc. — again and again from different perspectives, and to see how Stoicism forces us to re-conceptualize our moral life. As Julia Annas puts it in the introduction to the Italian translation of Christina Viano: 'consentono di cogliere in modo abbastanza approfondito le conseguenze del ripensamento stoico del nostro mondo etico' (p. 29). We may note that there are parallels for the use of collections of definitions as *aides-mémoire* or manuals for the not-quite-beginners. Think of the pseudo-Galenic *Medical Definitions* (ῥοι ἰατρικοί). Other brief compendia of ethical definitions, like ps.-Andronicus' *On Emotions* (Περὶ παθῶν), may have served a similar purpose.⁹¹ True, we may still grant Michael White that Arius wrote for a different readership than Chrysippus, but even so he may have thought the collection of divisions and definitions with which he filled up section (A) good enough for a general doxography.

If we can thus explain the absence of a sketch of the theory of οὐκείωσις at the beginning of the doxography by appealing to Arius' selection of a particular type of sources to fill up section (A), we no longer need to take recourse to the alternative explanation that Arius is here following the programmatic sequence of Eudorus in Doxography A,⁹² an argument which no longer seems tenable anyway, now that we have taken leave of the idea that doxography A was written by Arius as well.

11. The ethical and physical fragments compared: names and authorial intervention

Scholars have sometimes been struck by the differences between the account of Stoic ethics in Stobaeus *Ecl.* 2.7 and the fragments on Stoic physics ascribed to Arius that can be found scattered over *Ecl.* 1. Most importantly, the physical fragments look neater and they offer much more information on individual Stoics. Thus, Von Arnim wrote: 'Nam moralia Stoicorum quae e Didymo servavit Stobaeus, ab eiusdem auctoris physicis excerptis mirum quantum discrepant, siquidem in physicis doctissimam deprendimus singularum auctorum librorumque memoriam, in moralibus nullam fere librorum, scriptorum perraram'.⁹³ He even went so far as to suggest that the doxography of Stoic ethics as presented by Stobaeus must

⁹¹ See the section on *Satzsammlungen* in Asper (2007) for further examples, and the partial parallel with Epicurus' *Kuriai Doxai*.

⁹² Thus, albeit tentatively, Long (1983) 55–56; criticized by White (1983) 70.

⁹³ *SVF* 1, *Praefatio*, xlii. See e.g., also Gourinat (2011) 155, n. 45.

have been a mutilated version of a better organized original containing many more references.⁹⁴

Let us have a brief look at the evidence. The doxography of Stoic ethics contains individual references to Zeno, Cleanthes, Chrysippus, Diogenes of Seleucia, Antipater of Tarsus, Archedemus of Tarsus and Panaetius of Rhodes. In order of appearance:

(i) p. 63.25–64.12W.: Panaetius illustrates the relation between the virtues by using the analogy of archers trying to hit one goal, with each one of them hitting a particular part of it.

(ii) p. 64.13–17 W.: Diogenes distinguishes between two kinds of αἵρετά.

(iii) p. 65.9–11W.: Cleanthes illustrates the thesis that there is nothing between virtue and vice by using an analogy: half a verse (a hemiamb) is not a verse.

(iv) p. 75.11–76.15 W.: Zeno, Cleanthes, Chrysippus, Diogenes, Archedemus and Antipater develop the *telos* formula.

(v) p. 77.20–27 W.: Zeno's definition of εὐδαιμονία is taken over by Cleanthes, Chrysippus, 'and all'.

(vi) p. 83.13–84.1W.: Antipater about types of ἀξία.

(vii) p. 84.4–6 W.: Diogenes' definition of δόσις.

(viii) p. 84.23–24 W.: terms προηγμένα and ἀποπροηγμένα are introduced by Zeno .

(ix) p. 98.20–99.2 W.: Chrysippus claims that εὐδαιμονία lasting only an instant is no different from the εὐδαιμονία experienced by Zeus.

(x) p. 99.3–5 W.: Zeno and the Stoics after him claimed that there are basically two types of life.

(xi) p. 103.14–23 W.: Cleanthes offers a syllogism about the πόλις being ἀστέιον.

We see that these references to individual Stoics may serve different purposes. First, they may be used to underline the basic doctrinal continuity within the school (this seems to be the point of (v), (viii), (x); and even (iv) is meant to show not so much fundamental disagreement between the leading Stoics, but rather the way in which they each worked out Zeno's original definition — the terms used are προσδιαρθροῦντες and σαφέστερον βουλόμενος ποιῆσαι). Secondly, they may be used to offer an attractive illustration or a particularly striking formulation (e.g. Cleanthes' syllogism in (xi)) of a common Stoic point (this goes for (i), (iii) (ix), (xi)). Thirdly, they may offer new, i.e. post-Chrysippean, definitions that are worth adding to the (basically Chrysippean) corpus of the text (examples (ii), (vi), (vii)). The main message of the text thus appears to have been to convey a common Stoic orthodoxy *in ethicis*, illustrated rather than challenged by individual opinions. The main text is anonymous in talking about 'the school' or 'they', and although it appears to go back to Chrysippus in many respects, we cannot simply attribute it to Chrysippus with certainty. Von Arnim was accordingly right to print it in the smaller characters he reserved for those fragments which are neither *verbatim* quotations, nor explicitly attributed testimonia, hence not securely attributable, but which 'in one way or other seem to be useful for the purpose of getting to know Chrysippus' philosophy'.⁹⁵ There is no reason, however, to assume that the references to individual Stoics, such as Antipater and Diogenes, cannot be trusted.

⁹⁴ SVF 1, *Praefatio*, xlii–xliii.

⁹⁵ Cf. SVF 1, *Praefatio*, v.

If we now turn to the fragments on Stoic physics preserved by Eusebius and to the fragments on Stoic physics from Stobaeus which Diels ascribed to Arius, one difference indeed stands out: virtually every single one of the 23 fragments in Diels' collection contains a reference to one or more individual Stoics (although the *librorum memoria* of which Von Arnim speaks in the text quoted above, appears to be confined to three references to works of Apollodorus and one to a work by Chrysippus).⁹⁶ These are the names: Zeno, Cleanthes, Chrysippus, Mnesarchus, Apollodorus, Panaetius, Posidonius. However, the overall framework is pretty similar to what we found in the ethical doxography.⁹⁷ A common Stoic account appears to have been the basis here as well, as appears not only from the way Eusebius introduces the material he quotes (e.g. fr. 29 Diels: ὅποιαν δόξαν ἐπάγονται οἱ Στωικοὶ περὶ τοῦ θεοῦ κτλ.), but also from the texts themselves (e.g. fr. 28 Diels: διαφέρειν γὰρ ἀρέσκει τοῖς ἀπὸ τῆς Στωικῆς αἰρέσεως κτλ. or fr. 36 Diels: ἀρέσκει δὲ τοῖς πρεσβυτάτοις τῶν ἀπὸ τῆς αἰρέσεως ταύτης κτλ.),⁹⁸ which also often use the third person plural (φασί).⁹⁹ Moreover, the juxtaposition of the views of several Stoics is in most cases not meant to point out really contrary views, but rather to show different ways of working out what is basically the same definition or of various elaborations of the common theory (compare e.g. the definitions of time ascribed to Zeno, Apollodorus, Posidonius and Chrysippus in fr. 26 Diels), although there are some cases of real disagreement (see fr. 29 Diels on the different views of Cleanthes and Chrysippus on the ἡγεμονικὸν of the cosmos). And here it is even more difficult to ascribe the common Stoic main account to anyone in particular, although it is likely that much of it can be traced back to Chrysippus. Matters are further complicated, as I have argued elsewhere, by the fact that Stobaeus, who in *Ecl.* 1 cut up Arius' original running exposé, has added name labels in the genitive case before the relevant lemmata. Where the running text of Arius himself contained one or more names, he could simply copy these. But where the running text represented the common Stoic main account (using formulae like 'they say') he had to invent an appropriate name label and in these cases he appears to have preferred to add Ζήνωνος (see frs. 23 and 40 Diels). I do not think we have any reason to ascribe the relevant tenets specifically to Zeno on this basis.¹⁰⁰

All in all, it is interesting to see that the two doxographies show the same general strategy — offering a more or less unified common account of Stoic ethics and physics, illustrating it

⁹⁶ See frs. 29 (Chrysippus) and 24, 26, and 32 (Apollodorus).

⁹⁷ See Algra (1988) and (2002) and especially Mansfeld and Runia (1997)

⁹⁸ Note that formulae like οἱ ἀπὸ τῆς αἰρέσεως ταύτης also occur in the ethical doxography, on which see above, n. 48. They are likely to have been typical for doxographies of the περὶ αἱρέσεων type. Even if the fragments on Stoic physics and the ethical doxography are not both by Arius Didymus, they show themselves as representing the same genre.

⁹⁹ Gourinat (2011) 155, n. 45 claims that the attested fragments from Eusebius are rather different from the physical fragments from Stobaeus *Ecl.* 1 (and closer to the ethical doxography) in that Stobaeus *Ecl.* 1 offers longer excerpts from individual Stoics than Eusebius. But I think this overstates the differences: many if not most of the lemmata devoted to individual Stoics in Stobaeus *Ecl.* I are of roughly the same length as the first lemma (on Zeno) in fr. 39 Diels (from Eusebius).

¹⁰⁰ See Algra (2002) 165–167. Gourinat (2011) 149, n. 29 is skeptical about my approach in this respect and notes that 'le parallèle entre Eusèbe et Stobée pour le fr. 36 d'Arius montre clairement que Stobée ne procède pas ainsi'. But this is not a counter-argument, for in the case of fr. 36 the text of Eusebius shows clearly that Stobaeus could find *all three* name labels (Zeno, Cleanthes, Chrysippus) in the text of Arius. My suspicion concerned cases where there was *no* name label in the text that he could copy (but only phrases like 'they say'), and where he had to add, or invent, it himself.

by references to individual Stoics. The fact that the physical doxography appears to have been better organized may well be due to the use of different sources. The same goes for the fact that it offers more information on individual Stoics than its ethical counterpart, although in the end the consideration that physics offered more room for uncertainty and divergent views may have played a role as well. It is interesting, at any rate, that a comparable difference between a rather general ethical account (with comparatively few references to individual Stoics) and a physical account that explicitly presents the contributions of individual Stoics can be witnessed in the case of Cicero's *De finibus* 3 and *De natura deorum* 2 respectively. Even in Diogenes Laertius the section on ethics contains less references to individuals and less *laudationes* than the section on physics (in fact there are whole stretches of text, especially the sections containing definitions, where we find no *laudationes* at all).

About the sources of the physical doxography we can only speculate. Here again, Arius Didymus may have used a first century BCE handbook or compendium, but is also very well possible that he used some of the authors he quotes, e.g. Posidonius and Apollodorus. The latter is known to have written an *εἰσαγωγή εἰς τὰ δόγματα*, and both of them occur prominently among the *laudationes* offered by Diogenes Laertius in the context of his account of the Stoic *principia physica* (and *principia physica* rather than all kinds of cosmological details are what the presumed Arian fragments in Stobaeus *Ecl.* 1 are mostly about).

Another respect in which we may compare the doxography of Stoic ethics in Stobaeus *Ecl.* 2.7 and the fragments ascribed to Arius' doxography of Stoic physics in *Ecl.* 1 concerns the kind of authorial interventions meant to *clarify* the text, as opposed to *stylistic* interventions, of which, as we saw, we find very little. In Moraux's words: 'Areios versuchte, so gut es ging, diese verschiedenartigen Materialien einigermaßen zu ordnen; die Querverweise zwischen einzelnen Teile der Epitome beweisen, daß er sich nicht mit der mechanischen Wiedergabe seiner Vorlagen begnügte. Dennoch beschränkte sich seine redaktionelle Tätigkeit offenbar auf ein Minimum. Wiederholungen, Unstimmigkeiten, Widersprüche und sonstige Verstöße gegen die Einheitlichkeit des ganzen wurden nicht restlos eliminiert'.¹⁰¹ I think it is important to note that the texts we are dealing with offer more than just cross-references as a service to the reader. We also find attempts to *clarify* connections, for example between individual definitions. Thus, the ethical doxography contains such expressions as ἀκολουθεῖ γὰρ αὐτοῖς τὸ οὕτως λέγειν (2.65.5–6 W.); ἀκολουθῶς γὰρ τούτοις δογματίζουσιν (2.65.15 W.); δῆλον. ὃν τρόπον γὰρ λέγομεν κτλ. (2.66.14 W.); τοῦ δὲ πάθους τοιούτου ὄντος ὑπολήπτεον κτλ. (2.88.12 W.); παραλαμβάνεσθαι τὴν δόξαν ἀντὶ τῆς ἀσθενοῦς ὑπολήψεως (2.89.1–2 W.); λάβοις δ' ἂν εἰκόνα σαφὴ τοῦ δηλουμένου τῷ δ' ἐπιστήσας (2.107.1 W.). Such phrases invariably help to see the connections between the various parts of the Stoic theory or to better understand the vocabulary used. We cannot exclude that Arius drew these connections and offered the relevant clarifications himself in some cases. Yet, other examples rather suggest that he copied out a connection he found in his sources: ἀκόλουθον ῥήθησαν τὸ περὶ τοῦ πάντ' εἶποιεν τὸν σοφὸν δόγμα (2.67.1 W.) or ποιεῖσθαι δὲ λέγουσι τὸν περὶ τούτων λόγον ἀπὸ κτλ. (2.80.6–7 W.).

The physical fragments from Eusebius and the excerpts provided in the texts from Stobaeus *Ecl.* I as a rule offer a more discursive and argumentative text than the text of the ethical

¹⁰¹ Moraux (1973) 438.

doxography (with its numerous definitions and divisions), so that even at the most basic level of the excerpted *doxai* themselves the connections made between individual tenets are already much more numerous. But here as well we find explicit attempts to clarify and connect: τὸ δὲ λεγόμενον τοιαύτην ἔχει δύναμιν (fr. 18 Diels); τῷ τῆς αἵρέσεως ἡγέμονι Ζήνωνι κατακολουθῶν (fr. 21 Diels); ὥσπερ ... ἐλέγομεν (fr. 24 Diels); κατὰ μὲν τὴν προτέραν ἀπόδοσιν and οἷς ἀκολουθῶς νομίστεον (fr. 29 Diels); ἐκ τούτων δὲ δῆλον, ὅτι Χρύσιππος ἐπὶ τῆς οὐσίας οὐ ταύτην παρείληφε τὴν σύγχυσιν (fr. 36 Diels); τὸ δὲ διαμένειν τὰς ψυχὰς οὕτως λέγουσιν (fr. 39 Diels).

We have seen two aspects in which the doxographies on Stoic ethics and on Stoic physics resemble each other in their main approach: (1) the way in which in both cases a common account is interspersed with information about individual philosophers which is in general not adduced to underline disagreement or differences, and (2) the way in which in both cases explanatory connections are drawn between various *doxai* or between the approach of various philosophers and in which terminology and procedures are explained. Both resemblances set off Arius' doxographies — and should they not be by Arius: this type of doxography — from the *placita* literature. In a section entitled 'disagreement and deviation' Mansfeld and Runia have briefly, but adequately dealt with the former point: whereas disagreements of philosophers constitute the *raison d'être* of the *placita* literature, the emphasis on a school's continuity is what we might expect in a work entitled περὶ αἵρέσεων (and they rightly emphasize that this is an argument for identifying the ἐπιτομή of which our sources speak with that work).¹⁰² On the basis of our investigations concerning (2) we may now add another important difference: where the *placita* literature may be said to be primarily interested in drawing *negative* connections between (in other words: in opposing) contrasting or contrary tenets of various philosophers or schools, the texts ascribed to Arius show the conscious attempt to draw *positive* connections between the various tenets that were current within Stoicism. The distinction is not watertight: there are some connecting and argumentative passages in Aëtius as well, and part of the ethical doxography ascribed to Arius consists of asyndetically juxtaposed definitions and divisions. Yet even there the way in which the various divisions and definitions together reveal the underlying binary structure of Stoic ethics (on which see above) and the overall organization of the doxography according to main subjects, can be seen as an attempt to convey the idea of the coherence of Stoicism as a philosophy.¹⁰³

¹⁰² Mansfeld and Runia (1997) 264–265.

¹⁰³ I am grateful to the participants at the Melbourne conference for their questions and discussion, and to the editors of this volume, Jaap Mansfeld and David Runia, for their useful written comments.

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Aristotle and the Doxographical Tradition on Pythagorean Cosmology

Oliver Primavesi

Abstract. V. Rose in his 3rd edition of the fragments of Aristotle (1886) showed bad method when, in fr. 201 he persisted in citing the text of Stobaeus only, ignoring the advances made by Diels in his *Doxographi Graeci*. The transmitted text in both Stobaeus and ps.Plutarch is analysed, taking into account the different methods used by the two authors. This allows the establishment of the text in Aëtius, who rightly records Aristotle's report on Pythagorean cosmology, in contrast to the epitomator ps.Plutarch who presents the doxa as Aristotle's own view. But the second part of ps.Plutarch's text, correctly preserved by ps.Galen but omitted by Stobaeus, does go back to Aëtius. Further investigation of Stobaeus' text confirms that its second half is a compilation of excerpts—most probably by Arius Didymus—from Aristotle's *Physics* Book 4 dealing with void, place and the infinite. Detailed analysis of this compilation reveals subtle modifications of the original Aristotelian account. It is further proposed to combine the quotation from Aristotle's *On the philosophy of Pythagoras* in the earlier part of Stobaeus' text with the final phrase of the Aristotle lemma in ps.Plutarch, thus providing a new Aëtian text of Aristotle fr. 201 R³.

Key words. Valentin Rose, Hermann Diels, Stobaeus, ps.Plutarch, ps.Galen, Aëtius, Aristotle, Pythagorean cosmology, place, void.

1. The Aristotelian section in Stobaeus 1.18

In the third edition of his *Fragments of Aristotle*, Valentin Rose included the following text as fr.

201:¹

ἐν δὲ τῷ Περὶ τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει (Αριστοτέλης) τὸν μὲν οὐρανὸν εἶναι ἓνα, ἐπεισάγεσθαι δ' ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοὴν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας αἰεὶ.

¹ Rose (1886) 162.

He took the text from Stobaeus' chapter *Ecl.* 1.18 'On void, place, and space' (Περὶ κενοῦ καὶ τόπου καὶ χώρας). There the text of Rose's fragment appears to be the second part (henceforth: S[*ii*]) of the Aristotelian section,² which shows a total of three parts, distinguished by means of their references. As Mansfeld and Runia have shown, a proper break runs between parts two and three.³ The first two parts are Aristotelian reports of Pythagorean doctrines about the extra-cosmic void, one from the *Physics* and one from the monograph on the Pythagoreans, with a precise indication of the sources:

S[<i>i</i>]: Ἀριστοτέλης ἐν τετάρτῳ Φυσικῆς ἀκροάσεως γράφει [Δ 6.213 ^b 22–24] ⁴ 'εἶναι δέ φασιν οἱ Πυθαγόριοι κενόν, καὶ ἐπεισιέναι αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος ὡς ἀναπνέοντι'.	Aristotle writes in the fourth book of the <i>Physics</i> : 'and the Pythagoreans say that there is a void, and that an infinite breath enters the heaven because of its inhalation.'

S[<i>ii</i>] (= fr. 201 Rose ³): ἐν δὲ τῷ Περὶ τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει τὸν μὲν οὐρανὸν εἶναι ἓνα, ἐπεισάγεσθαι δ' ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοὴν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας αἰεὶ.	And in the first book of his work <i>On the Philosophy of Pythagoras</i> he writes that the heaven is one and that it inhales time and breath out of the infinite, as well as the void, which delineates in each case the places of things.

The extensive third part seems to sum up Aristotle's own views on place, void in general and the *apeiron*. This time, the indication of the sources is quite vague (ἐν ἄλλοις):

S[<i>iii</i>]: (1) καὶ ἐν ἄλλοις λέγει, τόπον εἶναι τὸ τοῦ περιέχοντος πέρας ἀκίνητον, (2) ἣ ἐν ᾧ μένει τε καὶ κινεῖται τὰ σώματα, πλήρη μὲν, ὅταν πανταχόθεν περιέχῃ τὸ σῶμα, κενὸν δέ, ὅταν μηθέν ἔχῃ τὸ παράπαν ἐν αὐτῷ. (3) τόπον μὲν οὖν ἀναγκαῖον ὑπάρχειν καὶ σῶμα, κενὸν δὲ οὐδαμῶς, εἰ μὴ μόνον πρὸς νόησιν· ἀναιρετικὴν γὰρ εἶναι τὴν κατ' ἐντελέχειαν [Primavesi – mss. ἐνδελέχειαν]	And elsewhere he says that place is the unmoved limit of the surrounding [body], or that in which bodies remain and move, it (<i>scil.</i> the place) being full when it encompasses the body on all sides, but empty when it contains nothing within itself at all. It is necessary that place and body exist, but void does not exist in any way, except theoretically; for in the mode of actuality its nature (<i>scil.</i> of void) would be capable of

² Stob. *Ecl.* 1.18, p. 156,8–25 Wachsmuth.

³ Mansfeld and Runia (1997) 252.

⁴ At the end of the passage here quoted, the direct transmission of the *Physics* has πνεύματος ὡς (ἂν) ἀναπνέοντι καὶ τὸ κενόν, which has been emended by Tenneman to πνεύμα ὡς ἀναπνέοντι καὶ τὸ κενόν, by Diels to πνεύμα τε ὡς ἀναπνέοντι καὶ τὸ κενόν and by Von Fritz to ὡς πνεύμα τι ἀναπνέοντι τὸ κενόν.

αὐτοῦ φύσιν τῆς τε τῶν ὄντων συμπαθείας καὶ τῆς τῶν σωμάτων ἀλλήλουχίας.	abolishing the affinity of things and the mutual contact between the bodies.
(4) τὰς δὲ κινήσεις γίνεσθαι τὰς κατὰ τόπον ἀντιπερισταμένων ἀλλήλοις τῶν σωμάτων.	But the movements of place occur when bodies change their places with respect to each other.
(5) ἄπειρον δὲ οὐθὲν ἀπολείπει οὔτε κατὰ τὸ πλῆθος οὔτε κατὰ τὸ μέγεθος.	He does not concede anything infinite, either with regard to quantity, or with regard to size.

Rose relied only on Stobaeus (S[*ū*]) for his fr. 201, and he did so even in the third edition of his fragment collection (1886). This was bad method. For Diels had shown in 1879 that Stobaeus extracted the content of *Ecl.* 1 out of a much older doxographical compilation, which—if in a summarised (‘epitomized’) version—is also preserved as ps.Plutarch’s *Placita philosophorum*. Diels convincingly identified this compilation with the ‘Compendium of doctrines’ (Περὶ ἀρεσκόντων ξυναγωγὴ) of *Aëtius* cited several times by Theodoret.⁵ Therefore, it is necessary to confront Stobaeus’ text with ps.Plutarch and to examine whether Stobaeus also took S[*ū*] (i.e. the present excerpt from Aristotle’s monograph ‘On the Pythagoreans’), from the common source, i.e. from *Aëtius*, and whether he shortened the *Aëtian* original on this occasion or changed it in other ways. In this case, *Aëtius* and not Stobaeus would be authoritative for the constitution of the Aristotelian fragment.

In principle, such an examination has to pay attention to the asymmetry between Stobaeus’ compiled *Anthology* on the one hand, and ps.Plutarch’s *Epitome* of a single work on the other. In the first book of his *Eclogae*, Stobaeus augments the *Aëtian* material to a considerable degree with *material from several other sources*. In the case of Aristotle and the Stoa, he extracted material from *Arius Didymus*.⁶ By contrast, in ps.Plutarch’s epitome usually no non-*Aëtian* material can be found, with the exception of editorial additions and distortions due to shortening.

Both texts differ from each other in the disposition of the material as well. Stobaeus combined many *Aëtian single* chapters—by adding material from several other sources mentioned

⁵ For this identification and against new objections, see Mansfeld and Runia (1997) 84–87 and 333–338. See also further in this volume, ch. 6.

⁶ Diels (1879) 69–88; Mansfeld and Runia (1997) 238–265. [On Arius Didymus and Stobaeus see now the article by K. Algra, above ch. 2. Editors]

above—into new *combined* chapters, which were dedicated to an overarching topic. Generally speaking, we must distinguish two alternative procedures: *sequential connection* und *coalescence*.⁷

Ps.Plutarch, by contrast, seems in general to have preserved the Aëtian structure of chapters—irrespective of the shortening within the chapters.⁸ Thus, the reconstruction of the text of the common source, i.e. Aëtius, must be performed with the detailed and originally Aëtian disposition of ps.Plutarch as a guideline throughout, as Diels demonstrated in his synoptic edition. However, a reconstruction or synopsis of this kind is possible only if Stobaeus' combined chapters are first deconstructed into their original parts. Therefore, their content must be—as much as possible—assigned to ps.Plutarchean, i.e. Aëtian, chapters. The remainder of the text must be excluded from the reconstruction due to the fact that it goes back to sources not belonging to the Aëtian tradition. Needless to say, this preliminary analysis takes Stobaeus as its starting point, whereas the reconstruction of the Aëtian context has to be based rather on ps.Plutarch.

On this basis, it is possible to identify the Stobean procedure for the composition of the combined chapter 'On the void, place and space' (1.18) which contains our Aristotelian section. In ps.Plutarch, there are four single chapters corresponding to Stobaeus' combined chapter, and those four chapters represent the Aëtian structure:⁹

1.18:	Περὶ κενοῦ	'On the void'
1.19:	Περὶ τόπου	'On place'
1.20:	Περὶ χώρας	'On space'
2.9:	Περὶ τοῦ ἐκτὸς τοῦ κόσμου εἰ ἔστι κενόν	'On whether the extra-cosmic space is a void'

In composing his chapter 1.18, Stobaeus did not consistently apply *sequential connection*, i.e. he did not always adhere to the Aëtian chapter themes. Instead he repeatedly combined the *placita* of a philosopher or a school—insofar as they are included in the four chapters of Aëtius—by *coalescence* (and where appropriate he supplemented them from other sources). The degree and the limits of this *coalescence* can be illustrated by the following three cases:

⁷ Mansfeld and Runia (1997) 217–218. Following their lead we understand the terms as follows. *Sequential connection* occurs when Aëtian single chapters are combined to one general chapter, but the internal structure still remains untouched. *Coalescence* takes place when, within the confines of a general chapter, the thematic order of the Aëtian single chapters is replaced by an arrangement by philosophers. For this purpose, all *placita* of one and the same philosopher that are relevant for the overarching theme of the general chapter are combined into an amalgam.

⁸ Mansfeld and Runia (1997) 184–187.

⁹ See the concordance at Mansfeld and Runia (1997) 214–216; here 215. For a preliminary reconstruction of the texts of 1.18–20 and 2.9 see Mansfeld (2014) 195–199; for 2.9 see also Mansfeld and Runia (2009) 416–427.

- Strato: the two definitions of Strato combined by Stobaeus in 1.18.1b, p. 156.4–6 Wachsmuth, on void and on place, are to be assigned to chapters 1.18 and 1.19 of Aëtius, even if this cannot be proved due to the omission of these views by ps.Plutarch.
- Stoa: Stobaeus (1.18.1d, pp. 156.27–157.3 Wachsmuth) combined the report of ‘Zeno and his school’ on the void with the Stoic distinction between void, place and space. In Aëtius, this report is found in the chapter on space (ps.Plutarch 1.20). However, the *placita* ‘of the Stoics’ and of Posidonius (1.18.4b, p. 160.11–14 Wachsmuth; ps.Plutarch 2.9) on the extra-cosmic void have remained separated from each other.
- Plato : Stobaeus (1.18.4c, pp. 160.17–161.6 Wachsmuth), deleting the name ‘Aristotle’, added the Plato–Aristotle *placitum* on the ‘extra-cosmic void’ (ps.Plutarch 2.9) to the Plato *placitum* (ps.Plutarch 1.19), which in ps.Plutarch (and also in the lost Aëtius text) is located at a considerable distance from the Plato–Aristotle *placitum*. Finally, Stobaeus added a quotation from the *Timaeus*.

Thus, for the Stobean chapter 1.18, partial *coalescence* is ensured. Diels, however, because he wished to reconstruct the Aëtian text by means of Stobaeus, concealed the *coalescence* up to a certain point by placing the headings of the three ps.Plutarchean (i.e. Aëtian) single chapters 1.18–20 in the corresponding part of the Stobean column.¹⁰ This is to say that he equipped Stobaeus’ text with an Aëtian division. Actually, these three single chapter headings are transmitted as such only in ps.Plutarch, whereas Stobaeus coalesced them into a single heading, as Wachsmuth’s edition of the Stobean text shows (vol. 1, p. 155–161).¹¹ Due to Stobaeus’ procedure of *coalescence* in 1.18, a thematic subdivision of his chapter is not legitimate.

In order to determine the sources summarised by Stobaeus in the Aristotelian amalgam contained in his chapter 1.18, all four corresponding ps.Plutarchean chapters must be searched for corresponding Aristotelian *placita*. This results in three ps.Plutarchean Aristotle *placita* P[i] – P[iii]. However, before one can reasonably confront this text with Stobaeus, it is necessary to provide a critical text of these three *placita* by examining the indirect ps.Plutarch transmission.

¹⁰ Diels (1879): 315–318.

¹¹ The heading printed by Wachsmuth is confirmed by the index in ms. L and the summary in Photius; see Wachsmuth’s apparatus ad loc.

2. The ps.Plutarchean correspondences

2.1. *P*[*i*]: from 1.18 ('On the void'; 883F)

The Aristotelian report of a Pythagorean tenet is abridged to such a degree that it appears as a doctrine by Aristotle himself. The text of ps.Plutarch is transmitted both directly and by Qusṭā ibn Lūqā's Arabic translation:¹²

(1) Ἀριστοτέλης τοσοῦτον εἶναι τὸ κενὸν ἐκτὸς τοῦ κόσμου, ὥστ' ἀναπνεῖν τὸν οὐρανόν. (2) εἶναι γὰρ αὐτὸν πύρινον.	(1) Aristotle (says) that the void beyond the cosmos is so great that the heaven can breathe it in, (2) for the heaven is fiery.

P[*i*] is also transmitted by ps.Galen's epitome of ps.Plutarch:¹³

(1) Ἀριστοτέλης δὲ τοσοῦτον εἶναι κενὸν ἔξω τοῦ οὐρανοῦ ὥστ' ἀναπνεῖν εἰς αὐτὸ τὸν οὐρανόν. (2) ἔνδοθεν γὰρ εἶναι τόπον πύρινον.	(1) Aristotle (says) that the void beyond the heaven is so great that the heaven can breathe out into it, for within there is a fiery place.

Even though ps.Galen is perfectly capable of tampering with the text of ps.Plutarch,¹⁴ he must in principle be considered as an independent witness for ps.Plutarch.¹⁵ In some cases, the text of ps.Galen is even confirmed by some fragments of an early papyrus-codex from Antinoopolis, which contains passages from the ps.Plutarchean *Placita*.¹⁶

In the present case, the evidence seems to be varying. For sentence (1) the direct transmission should be preferred. In its first part the localisation of the void (ἐκτὸς τοῦ κόσμου) corresponds with the chapter heading of ps.Plutarch 2.9 (Περὶ τοῦ ἐκτὸς τοῦ κόσμου εἰ ἔστι κενόν). Accordingly, ἐκτὸς τοῦ κόσμου and not ps.Galen's ἔξω τοῦ οὐρανοῦ must be considered as the original localisation. Furthermore, the next part of the sentence can be traced back to the underlying passage in Aristotle¹⁷ only as transmitted by ps.Plutarch, (ὥστ' ἀναπνεῖν τὸν οὐρανόν), *not*

¹² Lachenaud (1993) 94; Daiber (1980) 128–129.

¹³ *Historia philosopha* §30; text by Diels (1879) 616.20–21. [On ps.Galen see now the article by M. Jas in this volume, ch. 4. Editors]

¹⁴ Mansfeld and Runia (1997) 148.

¹⁵ Mansfeld and Runia (1997) 151: 'the original exemplar of P utilized and appropriated by G cannot be wholly reduced to the tradition represented by our Byzantine mss.'

¹⁶ Mansfeld and Runia (1997) 126–130.

¹⁷ Also preserved by Stobaeus *S*[*i*]; *Phys.* Δ 6.213^b 25–26 ... καὶ ἐπεισιέναι αὐτὸ (*scil.* τὸ κενόν) τῷ οὐρανῷ ἐκ τοῦ ἀπείρου ... ὡς ἀναπνέοντι ...

as transmitted in ps.Galen (ὥστ' ἀναπνεῖν εἰς αὐτὸ τὸν οὐρανόν). Whereas in Aristotle the verb ἀναπνεῖν naturally means 'breathe *in*', only the text of the direct transmission of ps.Plutarch can cover both aspects; in ps.Galen, by contrast, the verb is clearly intended to mean 'breathe *out*', as the addition of εἰς αὐτὸ (*scil.* εἰς τὸ ἔξω τοῦ οὐρανοῦ κενόν) clearly shows. That is why ps.Galen does not say anything about the main topic—the intrusion of the void into the cosmos. Accordingly, the extant version of ps.Galen must be dependent on our direct transmission of ps.Plutarch, which, when considered in isolation, does not explicitly indicate the direction of ἀναπνεῖν, and thereby makes possible ps.Galen's misunderstanding.

In sentence (2), the situation is different: Against the text of the ps.Plutarch manuscripts (εἶναι γὰρ αὐτὸν [*scil.* τὸν οὐρανόν] πύρινον), ps.Galen's version of the Pythagorean *placitum* (ἐνδοθεν γὰρ εἶναι τόπον πύρινον) corresponds exactly to Aristotle's. Ps.Galen features a reference to a fiery place inside the cosmos which is absent from the direct transmission, but corresponds to the Philolaic doctrine of a central fire as reported by Aristotle elsewhere.¹⁸ Therefore, sentence (2) as preserved by ps.Galen ascribes to the breathing activity of the heaven the function of cooling the central fire (as assumed by the Pythagoreans).

Ascribing this report to the doxographical tradition is also plausible, since the cooling function corresponds to Philolaus' theory of human breathing.¹⁹ On the other hand, it cannot possibly have been interpolated by ps.Galen, since sentence (1) of the *placitum* as transmitted both by ps.Plutarch and by ps.Galen no longer indicates that it is reporting a Pythagorean doctrine, but rather an Aristotelian one. Within the Aristotelian doctrine of the natural places of elements, however, the assumption of a fiery place in the centre would be entirely absurd.

By contrast, there is no difficulty if we assume that the text extant in ps.Galen (ἐνδοθεν γὰρ εἶναι τόπον πύρινον) goes back to a different version of ps.Plutarch and was subsequently boiled down to the version transmitted by the direct tradition (εἶναι γὰρ αὐτὸν [*scil.* τὸν οὐρανόν] πύρινον), perhaps in order to harmonise this seemingly Aristotelian *placitum*²⁰ with the one in 2.11 as transmitted by ps.Plutarch (... πύρινον εἶναι τὸν οὐρανόν).

These considerations yield the following original version of *P[i]*:²¹

¹⁸ Aristotle, *De caelo* 2.13 293a21.

¹⁹ Philolaus Test. 44A27 D.-K., from *P. Lond.* 137, Col. XVIII, 19–29; on this text see Huffman (1993) 289–306.

²⁰ According to Diels (1879) 23.

²¹ Mansfeld in his text of this chapter, (2014) 196, agrees that the text of ps.Galen should be preferred in section (2), but also retains his reading εἰς αὐτό in section (1).

(1) Ἀριστοτέλης τοσοῦτον εἶναι τὸ κενὸν ἐκτὸς τοῦ κόσμου, ὥστ' ἀναπνεῖν τὸν οὐρανόν. (2) ἔνδοθεν γὰρ εἶναι τόπον πύρινον.	(1) Aristotle (says) that the void beyond the cosmos is so great that the heaven can breathe it in, (2) for within there is a fiery place.

2.2. *P[ü]*: from 1.19 ('On place'; 884A)

The second *placitum* is transmitted only by the Ps.Plutarch manuscripts and by Qusṭā ibn Lūqā's arabic translation:²²

Ἀριστοτέλης (<i>scil.</i> τόπον εἶναι) τὸ ἔσχατον τοῦ περιέχοντος συνάπτον τῷ περιεχομένῳ.	Aristotle (says) that it (<i>scil.</i> place) is the inner surface of the surrounding body, contiguous to that which it surrounds.

2.3. *P[iii]*: from 2.9 ('Whether what is outside the cosmos is a void or not'; 888A)

In the case of the third *placitum*, the text as transmitted by Eusebius and Qusṭā ibn Lūqā differs on a crucial point both from the text as transmitted by the ps.Plutarchean manuscripts and—or so it seems—from ps.Galen. According to Eusebius *Praeparatio Evangelica* 15.40.4²³, whose text has, surprisingly, been confirmed by Qusṭā ibn Lūqā,²⁴ ps.Plutarch attributes to Aristotle (as well as to Plato) the denial of void:

Πλάτων, Ἀριστοτέλης μήτ' ἐκτὸς τοῦ κόσμου διάκενον εἶναι μήτ' ἐντός.	Plato, Aristotle (say that) neither without nor within the cosmos is there a void.

According to the manuscripts of ps.Plutarch, however, he would have attributed to Aristotle that he accepted void (and only to Plato that he denied it; see the mss. readings documented by Diels²⁵):

Ἀριστοτέλης ἔλεγεν εἶναι κενόν. Πλάτων μήτ' ἐκτὸς τοῦ κόσμου μήτ' ἐντὸς μηδὲν εἶναι κενόν.	Aristotle stated that there is void. Plato (says that) neither without nor within the world is there void.

²² Lachenaud (1993) 95; Daiber (1980) 130–131.

²³ Mras (1956) 411,18.

²⁴ Daiber (1980) 146–147.

²⁵ Diels (1879) 338; Lachenaud (1993) 109.

Ps.Galen, finally, does not mention Aristotle in his treatment of that subject, attributing the rejection of void to Plato only:²⁶

Πλάτων δὲ μήτε ἔκτος εἶναι τοῦ κόσμου μήτε ἐντὸς κενόν, ἔκτος δὲ μικρόν τι εἰς ὃ ἀναπνεῖν.	But Plato (says that) there is a void neither outside nor within the cosmos, but outside, there is a small [<i>scil.</i> void] into which it breathes.

Given that Aristotle clearly denies the existence of void in the fourth book of the *Physics*, we must assume that in the ps.Plutarchean original the denial of void was ascribed to both Plato *and* Aristotle, whereas the reversal of Aristotle's doctrine must be due to an interpolation.²⁷ This interpolation might have been motivated by the attempt to adapt chapter 2.9 to the Aristotelian *placitum* P[i] of ps.Plutarch 1.18, which in its shortened versions implies, wrongly, that Aristotle assumed the existence of the void. In any case, Diels was right to restore the Plato–Aristotle *placitum* P[iii] of ps.Plutarch 2.9 as follows:²⁸

Πλάτων, Ἀριστοτέλης μήτ' ἔκτος τοῦ κόσμου κενὸν εἶναι μήτ' ἐντός.	Plato, Aristotle (say that) neither without nor within the cosmos is there a void.

3. Stobaeus and Aëtius

3.1. Synopsis: Stobaeus and Ps.Plutarchus (restitutus)

In order to discern the Aëtian content in Stobaeus, we can now compare the individual parts of his Aristotelian amalgam with the corresponding *placita* in the text of ps.Plutarch, as we have restored it:

From Stobaeus 1.18 Περὶ κενοῦ καὶ τόπου καὶ χώρας S[i]: Ἀριστοτέλης ἐν τετάρτῳ Φυσικῆς ἀκροάσεως γράφει [213b 22–24], εἶναι δὲ φασιν οἱ Πυθαγόρειοι <u>κενόν</u> , καὶ ἐπεισιέναι	From ps.Plutarchus (restitutus) 1.18, 1.19 and 2.9. P[i] From 1.18 Περὶ κενοῦ (1) Ἀριστοτέλης τοσοῦτον <u>εἶναι</u> τὸ <u>κενόν</u> ἔκτος τοῦ κόσμου, <u>ὥστ'</u> <u>ἀναπνεῖν τὸν οὐρανόν</u> . (2) ἔνδοθεν γὰρ εἶναι τόπον πύρινον.

²⁶ *Historia Philosopha* §57; Diels (1879) 623.11–12.

²⁷ Diels (1879) 9; Lachenaud 1993) 109; Mansfeld and Runia (1997) 156 and 178–179 with n. 190.

²⁸ Diels (1879) 9. For the contents of the doxa Mansfeld and Runia in their *specimen reconstructionis*, (2009) 425, and Mansfeld (2014) 199 read μήτ' ἔκτος τοῦ κόσμου μήτ' ἐντός μηδὲν κενὸν εἶναι. This difference is not material to the argument in the present context.

αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος ὡς ἀναπνέοντι. S[<i>ii</i>]: ἐν δὲ τῷ Περὶ τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει τὸν μὲν οὐρανὸν εἶναι ἓνα, ἐπεισάγεσθαι δ' ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοὴν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας αἰεί. S[<i>iii</i>]: (1) καὶ ἐν ἄλλοις λέγει, τόπον εἶναι <u>τὸ τοῦ περιέχοντος</u> <u>πέρας</u> ἀκίνητον, (2) ἢ ἐν ᾧ μένει τε καὶ κινεῖται τὰ σώματα, πλήρη μὲν, ὅταν πανταχόθεν περιέχῃ τὸ σῶμα, κενὸν δέ, ὅταν μηθέν ἔχῃ τὸ παράπαν ἐν ἑαυτῷ. (3) τόπον μὲν οὖν ἀναγκαῖον ὑπάρχειν καὶ σῶμα, κενὸν δὲ οὐδαμῶς, εἰ μὴ μόνον πρὸς νόησιν· ἀναιρετικὴν γὰρ εἶναι τὴν κατ' ἐντελέχειαν [Primavesi, mss. ἐνδελέχειαν] αὐτοῦ φύσιν τῆς τε τῶν ὄντων συμπαθείας καὶ τῆς τῶν σωμάτων ἀλληλουχίας. (4) τὰς δὲ κινήσεις γίνεσθαι τὰς κατὰ τόπον ἀντιπερισταμένων ἀλλήλοις τῶν σωμάτων. (5) ἄπειρον δὲ οὐθέν ἀπολείπει οὔτε κατὰ τὸ πλήθος οὔτε κατὰ τὸ μέγεθος.	P[<i>ii</i>] From 1.19 Περὶ τόπου Ἀριστοτέλης (<i>scil.</i> τόπον εἶναι) <u>τὸ</u> <u>ἔσχατον τοῦ περιέχοντος</u> συνάπτον τῷ περιεχομένῳ. P[<i>iii</i>] From 2.9 Περὶ τοῦ ἐκτὸς τοῦ κόσμου εἰ ἔστι κενόν Πλάτων, Ἀριστοτέλης μήτ' ἐκτὸς τοῦ κόσμου κενὸν εἶναι μήτ' ἐντός.

Three points are common to both witnesses. First, Aristotle's report on the Pythagoreans as quoted from the *Physics* by Stobaeus (S[*i*]) shares with the first sentence (1) of ps.Plutarch's *placitum* P[*i*] the characteristic doctrine of an extra-cosmic void (κενόν) and of a heaven (οὐρανός) that breathes this void in (ἀναπνεῖν). Second, in S[*iii*] there is a definition of place (τόπος), the contents of which correspond to the definition of place in P[*ii*]. Third, in sentence (3) of S[*iii*], Stobaeus reports the denial of the (actual) existence of void by Aristotle. A denial of the (extra-cosmic as well as inner-cosmic) void by Aristotle is also asserted in P[*iii*]. However, there are also substantial discrepancies:

- In sentence (1) of $P[i]$ the Pythagorean doctrines quoted by Stobaeus directly from Aristotle's *Physics* are strongly abbreviated and ascribed to Aristotle himself.
- Sentence (2) of $P[i]$ (a fiery place inside the cosmos) has no equivalent in Stobaeus $S[i]$ – $[ii]$.
- The specific contents of $S[ii]$ (breath and time as two further objects of inhalation; the bringing about of differences within the cosmos by the once inhaled void) are missing in $P[i]$.
- The wording of the definition of place in sentence (1) of $S[iii]$ does not correspond to the definition in $P[ii]$.
- The rejection of the void by Aristotle alone as reported in sentence (3) of $S[iii]$ differs from rejection of the extra- and the inner-cosmic void by both Aristotle and Plato as formulated in $P[iii]$. Furthermore, the reason given in $S[iii]$ is directed only against the assumption of an *inner*-cosmic void.
- The sentences (2), (4) and (5) of $S[iii]$ have no equivalent in ps.Plutarch.

With regard to the discrepancy between Stobaeus and ps.Plutarch, it seems quite inappropriate that Diels took over the Stobaeus' Aristotelian paragraph as a whole in his synoptic edition of Aëtius, and subsumed it without any further internal differentiation under the chapter heading 'On the void' supplied by ps.Plutarch (i.e. Aëtius), which is obviously too narrow. Diels himself does not seem to be entirely convinced of this procedure. For in his *Prolegomena*²⁹ and apparatus criticus,³⁰ he suggests that a part of Stobaeus' Aristotelian paragraph (which he does not further specify) might go back to Arius Didymus. This assumption has been convincingly refined by Mansfeld and Runia to the hypothesis that both $S[i]$ and $S[ii]$ can be traced back to Aëtius, whereas part $S[iii]$ is to be ascribed to Arius Didymus.³¹

But before we can wholeheartedly embrace this solution we must clarify the discrepancy between Stobaeus and ps.Plutarch.³² We must determine for each divergence whether it may be due to a different handling of one and the same Aëtian source, or whether Stobaeus replaced the Aëtian version by another text. This text might then come from Arius Didymus, since it concerns Aristotelian *placita*.

²⁹ Diels (1879) 75 n. 2.

³⁰ Diels (1879) apparatus to 316b14.

³¹ Mansfeld and Runia (1997) 252.

³² Mansfeld and Runia (1997) 251: 'a real puzzle'.

3.2. $S[i]$ and the first sentence of $P[i]$

First, it can be shown that Stobaeus' quotation from the *Physics*, i.e. $S[i]$, goes back to Aëtius, whereas ps.Plutarch has abbreviated this quotation and thereby produced $P[i]$. Ps.Plutarch has reduced the reference as preserved by Stobaeus, ($S[i]$: 'Ἀριστοτέλης ἐν τετάρτῳ Φυσικῆς ἀκροάσεως γράφει), to the mere name of the philosopher ($P[i]$: 'Ἀριστοτέλης). Furthermore, he has stripped the sentence preserved by Stobaeus ($S[i]$: εἶναι δέ φασιν οἱ Πυθαγόρειοι κενόν) of the reference to the Pythagoreans, so that the subject of his infinitive construction is 'Aristotle' himself ($P[i]$: 'Ἀριστοτέλης [*scil.* γράφει] ... εἶναι τὸ κενόν). It is obvious that these differences go back to a secondary abridgment, since $S[i]$ is confirmed both with regard to the passage cited and to the attribution of the doctrine to Pythagoreans by Aristotle's *Physics*.

The remainder of the first sentence of $P[i]$ can also be traced back to this abridgment. In $S[i]$, the physical process assumed by the Pythagoreans is first described, in an objective way, as an activity of the void which enters the cosmos from outside; then it is clarified that the Pythagoreans themselves regarded the process as an activity of the heaven itself, which breathes in the extra-cosmic void. In ps.Plutarch, by contrast, the objective report (ἐπεισιέναι αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος) has not been preserved. By consequence, the subjective reason (ὥς ἀναπνέοντι) was deprived both of its syntactical base (*scil.* τῷ οὐρανῷ) and of its explanatory function, so that it had to be rephrased. The epitomator replaced the conjoined participle introduced by ὥς with an infinitive construction introduced by ὥστε ($P[i]$: ὥστ' ἀναπνεῖν τὸν οὐρανόν: '(so) that the heaven can breathe').

By this apparently slight intervention, the argument was turned upside down: whereas in $S[i]$ the breathing of the heaven seems to cause (according to the Pythagoreans) the ingress of the void, in $P[i]$ this breathing seems to be caused by the void. In consequence, the epitomator felt the urge to emphasise those characteristics of the void which make this breathing activity possible. In order to do so, he drew on the very part of $S[i]$ which he had excluded (ἐπεισιέναι αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος). For this passage shows that only because the void moves into the heaven *from the outside*, viz. it is an *extra-cosmic* void by nature, the heaven is able to breathe.

Furthermore, because the *extra-cosmic* void appears to be infinite (if it can be identified with the infinite 'breath' also mentioned in this passage), the breathing of the heaven has a sufficient reservoir. These two characteristics the epitomator integrated into the infinitive construction

concerned with the existence of void (εἶναι τὸ κενόν): to it he added the adverbial addition ‘outside of the cosmos’ and, in addition, the predicate noun τοσοῦτον (‘the void is so much’), now serving as the point of reference for the consecutive clause already mentioned (ὥστ’ ἀναπνεῖν τὸν οὐρανόν ‘(so) that the heaven can breathe’).

It seems unnecessary to presume that this change was meant to imply that the extra-cosmic void is quantitatively limited. Such a suggestion would obviously be incompatible with the ‘infinite breath’ mentioned in S[i] (provided that this ‘breath’ can be equated with the extra-cosmic void). In an article focusing on this chapter Algra has assumed a discrepancy of this kind by reading this passage within the framework of the Posidonian doctrine of a limited extra-cosmic void, on which see Aëtius, *Placita* 2.9,3:³³

Stobaeus 1.18.4 ^b , p. 160,13–14 Wachsmuth Ποσειδώνιος ἔφησε τὸ ἐκτὸς τοῦ κόσμου οὐκ ἄπειρον, ἀλλ’ ὅσον αὐτάρκες εἰς διάλυσιν.	ps.Plutarchus, <i>Placita</i> 2.9, 888A; p. 109 Lachenaud Ποσειδώνιος οὐκ ἄπειρον, ἀλλ’ ὅσον αὐτάρκες εἰς τὴν διάλυσιν, [ἐν τῷ πρώτῳ Περὶ κενοῦ].

‘Posidonius said that the extra-cosmic [scil. void] is not unlimited, but only as large as is sufficient for the dissolution [of the cosmos]’.

According to Algra, the alleged presence of the Posidonian doctrine would be due to contamination: ‘I would therefore tentatively suggest that the ps.Plutarchean version of Aëtius 1.18 presents us with a double contamination: the name label Aristotle was attached to a Pythagorean tenet reported by Aristotle which was in its turn contaminated with the Posidonian doxa concerning the void being just large enough for the conflagration of the cosmos’.³⁴ Of course, Algra’s claim concerning the abridgement of an Aristotelian report on a Pythagorean *tenet* that became a reputed doctrine of Aristotle himself is absolutely correct. But the problem which Algra wanted to solve by means of the second, Posidonian part of his hypothesis is only an apparent one, inasmuch as our passage (in contrast to the quoted Posidonian *placitum*) is perfectly compatible with the infinity of the void. For the quantitative limitation normally expressed by τοσοῦτος tends to be absent in the construction τοσοῦτον εἶναι ... ὥστε, since this construction rather states that the thing in question, be it large or small, is at least large enough for a specific consequence to happen: the upper limit remains simply undetermined. This usage is well illustrated by Socrates’

³³ *Doxographi Graeci* p. 338 Diels; Posidonius F. 84 and 97 Edelstein–Kidd.

³⁴ Algra (1993) 484–485.

description of divine omnipotence in Xenophon's *Memorabilia* 1.4.18: γνώσει τὸ θεῖον ὅτι τοσοῦτον καὶ τοιοῦτόν ἐστιν ὥσθ' ἅμα πάντα ὁρᾶν καὶ πάντα ἀκούειν καὶ πανταχοῦ παρεῖναι καὶ ἅμα πάντων ἐπιμελεῖσθαι ('Then you will know that such is the greatness and such the nature of the deity that he sees all things and hears all things alike, and is present in all places and heedful of all things.'). It would be quite implausible to extract from this passage an impious thesis about the deity's constraints; but it would seem equally implausible to think, with Algra, that one can find in our passage a Posidonean thesis of a finite void, which would have replaced the Pythagorean view of its infinity.

We may conclude that in the *first* sentence of $P[i]$ the epitomator has presented the immense size and the extra-cosmic localisation of the void as the factors which make the heaven's breathing-in this void possible in the first place. But here $S[i]$ ends, so that the *second* sentence of $P[i]$ must originate in a different text, which we will identify in section 3.3. But before that we should ask who created the abridged version extant in ps.Plutarch. Aëtius himself knew that the doctrine of the extra-cosmic void attributed to Aristotle in the first sentence (1) of $P[i]$ is in fact a tenet of Pythagoras. This follows, in the first place, from the first *placitum* in ps.Plutarch 2,9 (which is independent of $S[i]$):

Οἱ μὲν ἀπὸ Πυθαγόρου ἐκτὸς εἶναι τοῦ κόσμου κενόν, εἰς ὃ ἀναπνεῖ ὁ κόσμος καὶ ἐξ οὗ.	Pythagoras and his followers (say that) beyond the world there is void, into and out of which the world has its respiration.

But the Plato–Aristotle *placitum* $P[iii]$ in ps.Plutarch 2.9 points into the same direction. Its original text has already been shown to be preserved in Eusebius and Qusṭā ibn Lūqā:³⁵

Πλάτων Ἀριστοτέλης μήτ' ἐκτὸς τοῦ κόσμου κενὸν μήτ' ἐντός.	Plato, Aristotle (say that) neither without nor within the world is there any void.

Due to the shortening in the first sentence of $P[i]$, the text of the *Placita* becomes inconsistent with $P[iii]$ (from Ps.Plutarch 2.9). In 1278/79 AD, a scribe of Qusṭā ibn Lūqā's Arabic translation became aware of this inconsistency.³⁶ In a similar way, the deformation of the Plato–Aristotle

³⁵ See text above at n. 23.

³⁶ Daiber (1980) 361–362.

placitum in the Greek manuscripts of ps.Plutarch 2.9 might be due to an attempt at getting rid of the self-contradiction. It is much more plausible to ascribe the introduction of this self-contradiction to ps.Plutarch and his abridging method of epitomizing, rather than to Aëtius himself.

Furthermore, the attribution of the quotation's original wording as preserved in Stobaeus to Aëtius is also supported by the fact that Stobaeus apparently switched sources (as was diagnosed by Mansfeld and Runia)³⁷ at the break between S[i]–[ii] and S[iii]. This is already suggested by the vague reference ἐν ἄλλοις at the beginning of S[iii], which stands in strong contrast to the precise references in S[i] and S[ii]. The contrast is all the more striking since the reference in S[i] ('in the fourth book of the *Physics*') refers to the same book, and, in substance, even to the same chapter (Δ 6) of the Aristotelian *Physics* to which the text of S[iii] goes back almost throughout, as we will see.

As we have said earlier, Stobaeus took his Aristotelian *placita* partly from Aëtius, partly from Arius Didymus. Furthermore, S[iii] has replaced the Aëtian passage preserved in P[ii] and P[iii], as we will see. If, then, S[iii] originates in Arius Didymus, as already assumed by Mansfeld and Runia, only Aëtius remains as a source for S[i]–[ii].³⁸ In this case, the shortening in the first sentence of P[i] (as compared to S[i]) goes back to ps.Plutarch. So it seems that there are exceptions to the general rule according to which ps.Plutarch—at least when dealing with *longer* Aëtian texts—'either transcribes or excises'.³⁹

3.3. S[ii] and the second sentence of P[i]

Whereas the *first* sentence of the Aristotelian *placitum* P[i] represents a paraphrase of an Aëtian quotation from the *Physics*, the *second* sentence of P[i] must belong to a different text. For it is not possible that this second sentence is the epitomized continuation of the Aëtian quotation S[i] as it is shown by the extant text of *Physics* Δ 6. The treatment of the sentence by Algra cannot be entirely satisfactory, because he presupposes the corrupt wording of ps.Plutarch manuscripts (εἴηαι γὰρ αὐτὸν [*scil.* τὸν οὐρανὸν] πύρινον).⁴⁰ He then goes on to identify this alleged reference to a fiery heaven with the Stoic doctrine of *ekpyrosis* and traces back its mention in our passage once again

³⁷ Mansfeld and Runia (1997): 252.

³⁸ Mansfeld and Runia (1997): 252.

³⁹ Mansfeld and Runia (1997): 189: 'What is important to note is that P never takes the trouble to paraphrase a longer text in his own words; he either transcribes or excises.'

⁴⁰ Algra (1993).

(as he did in the case of the first sentence) to a contamination with the Posidonian *placitum* transmitted in ps.Plutarch 2.9.⁴¹

In actual fact, the authentic ps.Plutarchean wording of the second sentence of *P[i]*, as we have already seen, has been preserved by ps.Galen: ἔνδοθεν γὰρ εἶναι τόπον πύρινον. The well-attested Pythagorean assumption of a central fire burning inside the cosmos has been used in the second sentence of *P[i]* to justify the Pythagorean doctrine of a cosmic breathing reported in the first sentence. Now Aëtius himself reported the latter doctrine twice, as Stobaeus shows: once in *S[i]* and then again in *S[ii]*. Therefore, the *justification* of this doctrine as transmitted in the second sentence of *P[i]* could belong in principle both to the quotation from the *Physics* in *S[i]* and to the quotation from ‘On the Pythagoreans’ in *S[ii]*. But since chapter Δ 6 of the *Physics*, there is nothing corresponding to the second sentence of *P[i]*, the only other possible point of reference in Aëtius for this sentence is the quotation from ‘On the Pythagoreans’ in *S[ii]* (unless one wants to postulate a third Aristotelian report of a Pythagorean *placitum* in Aëtius that was omitted in both ps.Plutarch and Stobaeus). In consequence, ps.Plutarch himself omitted *S[ii]* because this passage did not contain any information additional to the *Physics* ‘quotation in *S[i]* epitomized in *P[i]*. Yet the justification following *S[ii]* in Aëtius he preserved, connecting it directly to his epitome of *S[i]*, i.e. to the first sentence of *P[i]*. This connection was possible due to the similarity of *S[i]* and *S[ii]*. Thus, the second sentence of the ps.Plutarchean Aristotle *placitum* (as preserved by ps.Galen) represents the end of the Aëtian quotation from the Aristotelian book ‘On the Pythagoreans’, i.e. of the Aristotelian fragment 201 R³.⁴²

<i>S[ii]</i> ἐν δὲ τῷ Περὶ τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει τὸν μὲν οὐρανὸν εἶναι ἓνα, ἐπείσασθαι δ’ ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοήν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας αἰεῖ· <i>P[i]</i> (sentence 2) ἔνδοθεν γὰρ εἶναι τόπον πύρινον.	<i>S[ii]</i> And in the first book of his writing ‘On the philosophy of Pythagoras’, he writes that the heaven is one, and that it pulls in time as well as breath from the infinite, as well as the void, which always separates the places of things from another; <i>P[i]</i> (sentence 2) for there is a fiery place inside.

⁴¹ Algra (1993): 484: ‘Neither Aristotle nor any other source implies that this breathing had anything to do with the fiery nature of the οὐρανός. The Posidonian doxa of 2.9, on the other hand, does contain the tenet of a finite void as well as a reference to fire (viz. the conflagration of the cosmos).’

⁴² Due to the omission of *P[i]* sentence 2 by Stobaeus, its provenance has passed unnoticed in previous research.

Given our current resources, it is no longer possible to decide whether the extant wording of the second sentence of *P[i]* (as preserved by ps.Galen) goes back to Aëtius or whether it is the result of shortening by ps.Plutarch (as it was the case in the first sentence of *P[i]*). Irrespective of this, the second sentence of *P[i]*, even as preserved by ps.Galen, coheres much better with the quotation of ‘On the Pythagoreans’ in *S[iu]* than with the first sentence of *P[i]*. For when combined with the former it supplements the reason for the heaven’s breathing activity and thus completes the quotation *S[iu]* in a reasonable way, while in the latter the possibility for the heaven to breathe had already been derived from the quality of the extra-cosmic void (because of ps.Plutarch’s revision of the quotation *S[i]* from the *Physics*), so that the fiery nature of the heaven (apart from being nonsensical) is not needed as a further reason.

But *why* did Stobaeus omit the reason (*P[i]* sentence 2) that followed *S[iu]* in the Aëtian text, whereas he quoted the Aëtian texts *S[i]* and *S[iu]* in full? In order to answer this question we have to analyse the subsequent text *S[iiu]*. For this text could be perceived as a suitable replacement not only for the two ps.Plutarchean *placita P[iu]* and *P[iiu]*—as far as the latter is concerned with Aristotle—, but also for *P[i]* sentence 2.

3.4. *S[iiu]* as a coherent excerpt from the Aristotelian *Physics*

The text *S[iiu]* can be traced back to four chapters of the Aristotelian *Physics*. Following the definition of place taken from *Physics* Δ 4, it contains a collection of doctrines from *Physics* Δ 6–7 (exposition and critique of the theory of void) as well as a critique of the infinite, which is developed along the lines of *Physics* A 4. The cue for using *Physics* Δ 7 and *Physics* A 4 was provided by *Physics* Δ 6, as we will now see.

(1) Definition of place (Z. 15–16)		< Δ 4, 212 ^a 20–21
(2) Full / empty place (Z. 16–18)		< Δ 6, 213 ^a 15–18
(3) Continuum (Z. 18–22)		< Δ 6, 213 ^a 31–b2
(4) Locomotion (Z. 22–24)	< Δ 7, 214 ^a 26–30	(< Δ 6, 213 ^b 4–14)
(5) No infinite exists (Z. 24–25)	< A 4, 187 ^b 7–9	(< Δ 6, 213 ^b 22–27)

(1) Definition of place

Stobaeus p. 156.15–16 Wachsmuth: καὶ ἐν ἄλλοις λέγει,	Aristotle, <i>Ph.</i> Δ 4 212a20–21: ὥστε τὸ τοῦ περιέχοντος πέρας

τόπον εἶναι τὸ τοῦ περιέχοντος πέρας ἀκίνητον. And in other writings he says that <i>place</i> is the unmoved limit of the surrounding [body] ...	ἀκίνητον πρῶτον, τοῦτ' ἔστιν ὁ τόπος. The unmoved inner limit of the surrounding [body]: that is place.

(2) Another definition of the term place

Stobaeus p. 156.16–18 Wachsmuth: ... ἢ ἐν ᾧ μένει τε καὶ κινεῖται τὰ σώματα, πλήρη μὲν, ὅταν πανταχόθεν περιέχῃ τὸ σῶμα, κενὸν δέ, ὅταν μηθέν ἔχῃ τὸ παράπαν ἐν ἑαυτῷ. ... or (<i>scil.</i> that <i>place</i> is that thing) in which the bodies remain and move, being full when it encompasses the body on all sides, but empty when it contains nothing within itself at all.	Aristotle, <i>Ph.</i> Δ 6 213^a15–18: οἶον γὰρ τόπον τινὰ καὶ ἀγγεῖον τὸ κενόν τιθέασιν οἱ λέγοντες, <u>δοκεῖ δὲ</u> <u>πλήρες μὲν εἶναι, ὅταν ἔχῃ τὸν</u> <u>ὄγκον οὗ δεκτικόν ἐστιν, ὅταν δὲ</u> <u>στερηθῇ, κενόν.</u> For those who hold that the void exists regard it as a sort of place or vessel that is supposed to be 'full' when it holds the bulk that it is capable of containing, but 'void' when it is deprived of that.

The paraphrase differs from the original in two ways. First, the paraphrase ascribes a diaeretic opposition between 'full' and 'empty' to Aristotle, which, according to the original, is asserted only by the theorists of void (for in the case of Aristotle, for whom there is no true emptiness, such an diaeretic opposition would be wholly out of place). Second, the predicates 'full' (πλήρες) and 'empty' (κενόν) are *neuters* in Aristotle, so that the diaeretic opposition of 'full' and 'empty' does not, as in the paraphrase, directly apply to place (τόπος), but only to the 'vessel' (ἀγγεῖον). Both deviations point in the same direction: Aristotle's critique of the void is exploited for a fuller picture of the Aristotelian notion of place.

(3) There is no interruption of the continuum of bodies by empty space

Stobaeus p. 156.18–22 Wachsmuth: τόπον μὲν οὖν ἀναγκαῖον ὑπάρχειν καὶ σῶμα, κενὸν δὲ οὐδαμῶς, εἰ μὴ μόνον πρὸς νόησιν· ἀναιρετικὴν γὰρ εἶναι τὴν κατ' ἐντελέχειαν [Primavesi.– ἐνδελέχειαν the	Aristotle, <i>Ph.</i> Δ 6 213^a31–^b2: οὐκ οὖν τοῦτο δεῖ δεικνύναι, ὅτι ἐστὶ τι ὁ ἀήρ, ἀλλ' ὅτι <u>οὐκ ἔστι</u> <u>διάστημα ἕτερον τῶν σωμάτων,</u> <u>οὔτε χωριστὸν οὔτε ἐνεργεία ὄν, ὃ</u> <u>διαλαμβάνει τὸ πᾶν σῶμα ὥστε</u> <u>εἶναι μὴ συνεχές ..., ἢ καὶ εἴ τι ἕξω</u>

transmission] αὐτοῦ φύσιν τῆς τε τῶν ὄντων συμπαθείας καὶ τῆς τῶν σωμάτων ἀλληλουχίας. It is necessary that <i>place</i> and body exist, but a void does not exist in any way, except theoretically; for in the mode of actuality (<i>entelecheia</i>) its nature (<i>scil.</i> of the void) is suitable for abolishing the affinity (<i>sympatheia</i>) of the existents and the mutual conjunction (<i>allelouchia</i>) between the bodies.	τοῦ παντός σώματος ἔστιν ὄντος <u>συνεχοῦς</u> . It is not then the existence of air that needs to be proven, but the non-existence of an interval, different from the bodies, either separable or actual—an interval which divides the whole body so as to break its continuity, ... or even perhaps as something outside the whole body which remains continuous.

Aristotle himself is not expounding his own doctrine here (as suggested by the paraphrase), but rather setting out his agenda for the still pending refutation of the void. For this refutation, he will have to disprove the existence of immaterial spatial pieces which would interrupt the continuum of the ‘whole body’, viz. of the *inner-cosmic* voids, in the first place; the problem of the extra-cosmic void he will then treat separately. By contrast, in the paraphrase the existence of the void is denied in general terms. The Aristotelian qualification, according to which we must refute the assumption of a *separable* and *actual existing* (οὔτε χωριστὸν οὔτε ἐνεργεῖα ὄν) inner-cosmic void, has been simplified in the paraphrase to the concession that void is existent only in a thought experiment (πρὸς νόησιν).

Furthermore, Aristotle’s qualification according to which only the existence of void *in the mode of actuality* (ἐνεργεῖα ὄν) needs to be refuted, is taken up again in the following sentence of the paraphrase, where the void is hypothetically characterized as being ‘in the mode of complete reality’ (κατ’ ἐντελέχειαν). The Aristotelian expression ἐνεργεῖα ὄν shows that in the paraphrase we must emend κατ’ ἐνδελέχειαν to κατ’ ἐντελέχειαν (thus correcting a common scribal error). Finally, the emphasis Aristotle gives to the continuum of the whole cosmic body has been reformulated in the paraphrase into an appeal to the *affinity* (συμπάθεια) and *mutual conjunction* (ἀλληλουχία) of all bodies: Hellenistic terminology has displaced the Aristotelian one.⁴³ It is true that the author of our paraphrase prefaced the argument as a whole with a claim of his own (‘It is necessary to assume

⁴³ For συμπάθεια cf. Posidonius fr. F106 E.-K.; for ἀλληλουχεῖν SVF 2.532 Von Arnim, from Philo.

place and body'). Yet this claim betrays once again his endeavour to integrate some aspects of the Aristotelian refutation of void into the Aristotelian theory of place.

(4) Explanation of locomotion

Stobaeus p. 156.22–24 Wachsmuth: τὰς δὲ κινήσεις γίνεσθαι τὰς κατὰ τόπον ἀντιπεριισταμένων ἀλλήλοις τῶν σωμάτων But the movements of place occur when bodies exchange their places with each other.	Aristotle, <i>Ph.</i> Δ 7 214^a26–30: οὐδεμία δ' ἀνάγκη, εἰ κίνησις ἔστιν, εἶναι κενόν ..., ἀλλὰ δὴ οὐδὲ τὴν κατὰ τόπον κίνησιν· ἅμα γὰρ ἐνδέχεται ὑπεξίεναι ἀλλήλοις. But movement does not at all necessitate void ... not even locomotion, for bodies may mutually make room for one another.

The transition from the preceding third (*continuum*) to the present fourth part (*locomotion*) in the paraphrase reflects the sequence of both topics in Aristotle. Having refuted, in Δ 6 213^a31–b2, the existence of void by referring to the continuity of bodies (~ part 3 of the paraphrase), in Δ 6 213^b4–14 Aristotle immediately reports the attempt to use locomotion as an argument for the existence of void. In the latter passage, however, our paraphrase takes only the *topic* from Δ 6: instead of dwelling on the argument in favour of void as reported in Δ 6 the paraphrase moves directly to the *refutation* of this argument in Δ 7, 214^a26–30, from where it adopts Aristotle's own theory of locomotion. That is why in the paraphrase there no hint that in the original context Aristotle used of this theory for a refutation of an argument in favour of void: Aristotle's theory of locomotion is simply adopted as further evidence for Aristotle's theory of place.

(5) There is no infinity

Stobaeus p. 156,24–25 Wachsmuth: ἄπειρον δὲ οὐθὲν ἀπολείπει οὔτε κατὰ τὸ πλῆθος οὔτε κατὰ τὸ μέγεθος He does not concede anything infinite, either with regard to quantity or with regard to size.	Aristotle, <i>Ph.</i> Α 4 187^b7–9: εἰ δὴ τὸ μὲν ἄπειρον ἢ ἄπειρον ἄγνωστον, τὸ μὲν κατὰ πλῆθος ἢ κατὰ μέγεθος ἄπειρον ἄγνωστον πόσον τι. If the unlimited <i>qua</i> unlimited is unknowable, then the unlimited with regard to number or to magnitude, is an unknowable quantity.

Whereas all preceding parts of S[*iii*] concern the closely related topics ‘place’ and ‘void’ and are taken from *Physics* Δ 4 and Δ 6–7, the concluding fifth part reports the rejection of the infinite, and it does so in terms which closely resemble those of *Physics* A 4. This surprising switch of books betrays again the strategy which we have observed in the treatment of locomotion: In the fourth part of the paraphrase the report of the use of locomotion as an argument in favour of void (Δ 6) was replaced by Aristotle’s criticism of this argument (Δ 7), as we have seen. In the same way, Aristotle’s report of the Pythagorean doctrine on the infinite (Δ 6, 213b22–27)⁴⁴ has been replaced by his general critique of the assumption of an infinite in A 4.

Since parts 2–5 all go back to one and the same chapter of the Aristotelian *Physics* (Δ 6), and since the paraphrase has even preserved the original sequence of topics, this sequence is to be assumed also for the *source* of Stobaeus. For it would be wildly implausible to assume that Stobaeus himself collected these four parts from different sources and then somehow restored the correct Aristotelian order. Actually, the vagueness of his reference at the beginning of S[*iii*] (ἐν ἄλλοις = ‘elsewhere’) shows that Stobaeus was not aware of the fact that he provides in S[*iii*] a text that follows, except the introductory definition of place, at every turn the disposition of *Physics* Δ 6, whence his Aristotelian quote in S[*i*] in fact also originated.

But of more significance for our question is the *purpose* of the consistent adaption of *Physics* Δ 6 present in the parts 2–5, as it has become apparent from our preceding interpretation. It should be fairly obvious, by now, that Stobaeus’ source is exploiting Aristotle’s discourse on void in *Physics* Δ 6 solely in order to harvest additional information on Aristotle’s *concept of place*. The natural starting point for this kind of activity is, of course, the Aristotelian *definition* of place (in *Physics* Δ 4). Therefore, it seems clear that the definition of place quoted in the first part of the paraphrase has to be assigned to the same secondary source, not least because in Stobaeus it is syntactically connected to the second part. It follows that Stobaeus already found the entire text S[*iii*] as a unitary whole in his source (which does, of course, does not exclude some individual interventions by Stobaeus himself).

⁴⁴ It is this very passage that is the ultimate source of S[*i*], the opening of Stobaeus subsection on Aristotle; but S[*i*] has been taken from an intermediate source.

3.5. The replacement of the Aëtian Material by S[*iii*]

Let us assume that Stobaeus, as the method of *coalescence* present in this text suggests, started by compiling all the Aristotelian *placita* relevant to ‘place’:

From Aëtius ‘On the void’ (1.18 Περί κενού)

S[<i>i</i>]: Ἀριστοτέλης ἐν τετάρτῳ Φυσικῆς ἀκροάσεως γράφει, εἶναι δέ φασιν οἱ Πυθαγόρειοι κενόν, καὶ ἐπεισιέναι αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος ὡς ἀναπνέοντι. S[<i>ii</i>]: ἐν δὲ τῷ Περί τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει τὸν μὲν οὐρανὸν εἶναι ἓνα, ἐπεισάγεσθαι δ’ ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοὴν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας αἰεῖ. P[<i>i</i>] (sentence 2): ἔνδοθεν γὰρ εἶναι τόπον πύρινον.	S[<i>i</i>]: Aristotle writes <i>in the fourth book of the Physics</i>: ‘And the Pythagoreans say that there is a void and that an infinite breath enters the heaven because of its inhalation.’ S[<i>ii</i>] And in the first book of his writing <i>On the philosophy of Pythagoras</i> he writes that the heaven is one, and that it pulls in time as well as breath from the infinite, and the void that separates the places of things from another; P[<i>i</i>] (sentence 2) for there is a fiery place inside.

From Aëtius ‘On place’ (1.19 Περί τόπου)

P[<i>ii</i>]: Ἀριστοτέλης (<i>scil.</i> τόπον εἶναι) τὸ ἔσχατον τοῦ περιέχοντος συνάπτον τῷ περιεχομένῳ.	P[<i>ii</i>]: Aristotle (says that place) is the ultimate surface of the surrounding body, contiguous to that which it surrounds.

From Aëtius ‘On what is outside?’ (2.9 Περί τοῦ ἐκτὸς)⁴⁵

P[<i>iii</i>]: Πλάτων, Ἀριστοτέλης μήτ’ ἐκτὸς τοῦ κόσμου κενὸν εἶναι μήτ’ ἐντός.	P[<i>iii</i>]: Plato, Aristotle (say that) neither without nor within the cosmos is there any void.

Yet in the end, Stobaeus kept only texts S[*i*] and S[*ii*], whereas he replaced both the Aristotelian definition of place P[*ii*] and the Plato–Aristotle *placitum* [P[*iii*]] from the chapter on the extra-

⁴⁵ We prefer here the shorter chapter heading found in Eusebius and some of the mss. of ps.Galen.

cosmic void by the large and coherent report about the philosopher's view on place, void and the infinite, i.e. by *S[*iii*]*.⁴⁶

There is, it should be noted, a competitive relationship between the two definitions of place in *S[*iii*]* and in *P[*ii*]*:

From <i>S[<i>iii</i>]</i>: Stobaeus p. 156,15–16 Wachsmuth καὶ ἐν ἄλλοις λέγει τόπον εἶναι <u>τὸ τοῦ περιέχοντος</u> <u>πέρας ἀκίνητον</u> (cf. Aristotle <i>Ph.</i> Δ 4 212^a20–21: ὥστε <u>τὸ τοῦ περιέχοντος πέρας</u> <u>ἀκίνητον</u> πρῶτον, τοῦτ' ἔστιν ὁ τόπος).	<i>P[<i>ii</i>]</i>: ps.Plutarch 1.19 (Περὶ τόπου), 884A, p. 95 Lachenaud Ἀριστοτέλης <u>τὸ ἔσχατον</u> τοῦ περιέχοντος <u>συνάπτον</u> τῷ περιεχομένῳ (cf. Aristotle, <i>Ph.</i> Δ 5 212^b18–20: ἔστι δ' ὁ τόπος οὐχ ὁ οὐρανός, ἀλλὰ τοῦ οὐρανοῦ τι <u>τὸ ἔσχατον</u> καὶ <u>ἀπτόμενον</u> τοῦ κινητοῦ σώματος πέρας ἡρεμοῦν.⁴⁷

On the one hand, both definitions differ *in their wording*, as Diels rightly has pointed out: 'nec definitio loci ex Aristot. phys. IV 4 p. 212^a20 sumpta accurate concinit cum Plutarcho 19 2 [cf. Ar. 212b 18]'. For the wording of *P[*ii*]* corresponds only to a limited extent (τοῦ περιέχοντος) with the general definition of *place* quoted in *S[*iii*]* from *Physics* Δ 4, while for the most part it corresponds to the definition of *the cosmic place* cited by Diels from *Physics* Δ 5 (cf. τὸ ἔσχατον, [συν]άπτον). This might be an indication that *P[*ii*]* is not a free adaption of the philosopher's original definition (as cited in *S[*iii*]*), which we then could ascribe to ps.Plutarch, but that ps.Plutarch himself already found this definition in Aëtius: the latter, viz. his source, might have extracted it from *Physics* Δ 5 generalising Aristotle's definition of the cosmic place.

On the other hand, in the light of the factual agreement of both definitions, their respective distribution in ps.Plutarch and Stobaeus can hardly be explained by the fact that *both* definitions were placed side by side in Aëtius, and that ps.Plutarch happened to prefer one and Stobaeus the other. For Stobaeus replaced the definition of place *P[*ii*]* quoted by Aëtius (and preserved by ps.Plutarch) with the definition of place from *Physics* Δ 4, which he took from a different source. Whereas Diels 1879 regards both *P[*ii*]* and *S[*iii*]* as genuine Aëtian pieces and thus prints *S[*iii*]* in its

⁴⁶ It should be noted, however, that later at 160.19–20 he writes out the placitum [*Piii*] under the name of Plato only.

⁴⁷ The text as in FGJIP. – the last two words are missing in E, Versio Arabo-Lat., Simpl., Themist.

entirety in the Aëtian chapter ‘On the void’—with the result that that both definitions of place seem to belong to two Aëtian lemmata (from two different Aëtian chapters)—, in truth only *one* Aëtian lemma preserved by ps.Plutarch faces a non-Aëtian alternate lemma that replaces the former in Stobaeus. Here, it is to be assumed with Mansfeld and Runia that the source of Stobaeus is Arius Didymus, given that it is an Aristotelian lemma.⁴⁸

But why did Stobaeus replace one definition by another, nearly synonymous one? The reason for this has become apparent by our analysis of S[*iii*]. For we have seen that in S[*iii*] we have a compilation from the Aristotelian *Physics*, which was already found by Stobaeus in his source and which—in a telling deviation from its Aristotelian origins—concentrates *throughout* on the topic ‘place’. The very fact that he adopted this compilation *as a whole* rendered the definition of place offered by Aëtius unnecessary for Stobaeus.

The unity of S[*iii*] now proven implies that the reasons for ascribing the definition of place from its first part not to Aëtius but to Arius Didymus, apply to the whole text of S[*iii*]. On that basis, it is now also possible to answer the question why Stobaeus went so far as to replace the definition of place P[*ii*] found in Aëtius with the almost synonymous definition from *Physics* Δ 4. From the outset, he had no interest for this definition on its own, but for the much more general treatment of the Aristotelian notion of place available in S[*iii*]. Therefore, the overall treatment of place in S[*iii*] is his replacement for P[*ii*], or better, for P[*ii*] *inter alia*, since S[*iii*] has also replaced the Aristotelian sentence quoted by Aëtius (P[*i*] sentence 2) about the central *fiery place* of the Pythagoreans. We thus gain a possible motive for why Stobaeus omits the second sentence of P[*i*]: for in a preliminary compilation of all relevant Aristotelian *placita* that Aëtius provided, the Pythagorean tenet about a fiery place (P[*i*] sentence 2) would have been placed, as is shown in the overview, directly in front of the Aristotelian definition of *place* (P[*ii*]). Furthermore, the Aëtian quotation S[*iii*] from ‘On the Pythagoreans’ has been supplied with a reference, but not with the additional warning that this is not an Aristotelian doctrine, but rather a Pythagorean one. Thus, the second sentence of P[*i*], which is relevant for us, could at first glance simply appear to be an Aristotelian doctrine about place: it would therefore seem natural to Stobaeus that this sentence was also dispensable along with the definition of place P[*ii*].

⁴⁸ Mansfeld and Runia (1997): 252. The excerpts that have been identified for Arius Didymus in Stobaeus relate exclusively to the doctrines of Aristotle and the Stoics.

4. Conclusion

On the basis of the above considerations we conclude that the Aristotelian fragment 201 R³ goes back to Aëtius and has to be restored as follows.

S[ii] ἐν δὲ τῷ Περὶ τῆς Πυθαγόρου φιλοσοφίας πρώτῳ γράφει τὸν μὲν οὐρανὸν εἶναι ἓνα,
ἐπεισάγεσθαι δ' ἐκ τοῦ ἀπείρου χρόνον τε καὶ πνοήν καὶ τὸ κενόν, ὃ διορίζει ἐκάστων τὰς χώρας
αἰεὶ· *P[ii]* ἔνδοθεν γὰρ εἶναι τόπον πύρινον.

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Towards a better text of ps.Plutarch's *Placita Philosophorum*:
Fresh evidence from the *Historia philosopha* of ps.Galen

Mareike Jas

Note change required to Appendix 1 (German)

Abstract. A closer examination of the tradition of ps.Galen's *Historia philosopha* reveals that Diels underestimated the significance of Nicolaus of Rhegium's Latin translation of the *Historia philosopha* for the task of editing the text. This translation preserves readings that are superior to those of the extant Greek manuscripts. From this it can be inferred that the lost Greek manuscript used by Nicolaus must be independent of the extant Greek manuscripts, because the readings preserved in the translation match readings transmitted in the manuscript tradition of the *Placita philosophorum* such as in the Arabic translation by Qusṭā ibn Lūqā or in Eusebius' *Praeparatio evangelica*. I will also present some key results from a comparison of a chapter of the *Historia philosopha* with the Arabic translation of the *Placita philosophorum*, the first of its kind. In particular, I shall highlight passages where the *Historia philosopha* and the Arabic translation have readings in common, but which differ from those of the extant Byzantine manuscripts of the *Placita philosophorum*.

Key words: ps.Galen, *Historia philosopha*, Nicolaus of Rhegium, Qusṭā ibn Lūqā, *Placita*, *Corpus Galenicum*, Eusebius, Hermann Diels

1. The *Historia Philosopha* and the tradition of the *Placita philosophorum*

The first scholar to make some use of ps.Galen's *Historia philosopha* for reconstructing ps.Plutarch's *Placita philosophorum* was Hermann Diels.¹ In his second book, the *Doxographi*

¹ Diels 1871. Diels edited only the first 25 chapters of the *Historia philosopha* in his dissertation and these chapters – three parts of the chapters 16–24 excluded (see Mansfeld-Runia 1997: 145) – are irrelevant for the tradition of the *Placita philosophorum* by ps.Plutarch and only of marginal relevance for the wider *Placita* tradition.

Graeci published in 1879, Diels edited the whole text of the *Historia philosopha*.² This edition is based on two independent Greek manuscripts: Laurentianus 74.3 (A) and Laurentianus 58.2 (B). According to our present knowledge, however, there are not two but *four* independent Greek manuscripts extant: the two just mentioned and also the manuscripts Baroccianus 131 (O) and Codex Cheltenham 23.007 (C). Diels classified the Baroccianus 131 wrongly as an apographon of A. The manuscript C was known to Diels but presumed lost.³

Given this state of his knowledge, Diels was not able to specify the stemmatic relationship of the manuscripts A and B in greater detail. He had to be content with the statement that B, although younger than A, had to be independent from A, because of some errors which are not shared by A.⁴ In my dissertation I was able to make a pronouncement about the independence of the manuscripts Baroccianus O and Cheltenham C, while noting two other manuscripts (unknown to Diels as well) Harvardianus MS GR 17 (H) and Vaticanus gr. 1878 (V) which belong to the descendants of A.⁵ On the basis of the four independent Greek manuscripts (A, B, C and O) a stemma of the direct Greek manuscript-tradition can now be given.⁶

The Latin version⁷ of the *Historia philosopha* translated by Nicolaus of Rhegium in 1341 was known to Diels, but insufficiently taken into consideration in his edition. He realised that the translation of Nicolaus is closer to B than to A and he was aware of some vestigial signs that the translation selectively results in a better meaning than Greek manuscripts A and B.⁸ To support

² Diels 1879: 595–648.

³ Diels 1879: 235; Diels 1906: 110. Friedrich Köhler, who edited *Hieroclis in aureum Pythagoreorum carmen commentarius* in 1974 was aware of the fact that this text must be present in the manuscript Cheltenham 23.007, but he was unable to discover its location; see Köhler 1974: iii.

⁴ Diels 1879: 234–235.

⁵ Jas forthcoming. In my dissertation I edited only those 51 chapters of *Historia philosopha* (the text contains 133 chapters in total) which could prove the independence of Nicolaus' translation. But it will be necessary also to edit the remaining 82 chapters of the *Historia philosopha*, not only because Diels' edition is only based on two independent Greek manuscripts but also because Diels could not use Qusṭā's Arabic translation, the papyrus fragments of the *Placita philosophorum* (s. Barns-Zilliaceus 1960 and Barns-Zilliaceus 1967) and all the extant Byzantine manuscripts of the *Placita philosophorum*. But in order to reconstruct one text of the doxographical tradition all texts, excerpts, paraphrases and translations must be taken into account, because in every part of the tradition a reading can be preserved that is important for editing the *Historia philosopha*. **REMOVE GREY BACKGROUND** Thus, a new edition of the whole text will lead to a better edition of the *Historia philosopha*. This is of particular interest, because of all the authors who used the *Placita philosophorum*, it was ps.Galen who excerpted material from it to the greatest extent. For this reason the *Historia philosopha* is of also of great importance for the task of editing the *Placita philosophorum*.

⁶ See Appendix 1.

⁷ The Latin translation of Nicolaus is only preserved in the printed edition of 1502 by Hieronymus Surianus.

⁸ Diels 1879: 236: 'Nicolai graecus codex simillimus fuit B. nec desunt antiquioris memoriae quamvis tenuissima vestigia.'

this view he gave four examples in the *Prolegomena* of the *Doxographi Graeci*.⁹ Nevertheless he came to the decision to disregard the translation of Nicolaus completely from ch. 55 onwards and so for more than half of the text.¹⁰ This was noted in the apparatus of ch. 55 with the annotation: *hucusque N interpretationis selectam varietatem adnotavi*.¹¹

From the present perspective it is difficult to understand Diels' conclusion, because his argumentation that the occasional superiority of the Latin translation is solely and exclusively based on some spontaneous emendations of Nicolaus himself, appears to be unsustainable in light even of the limited textual basis that was available to him.

In addition to the 'new' independent manuscripts Baroccianus O and Cheltenham C, I decided to include all of the readings extant in the translation of Nicolaus in an apparatus and so was able to use this evidence in determining a stemma of the Greek and Latin tradition of the *Historia philosopha*. Furthermore, I compared all the readings with the remaining tradition of the *Placita*.¹² Given the relationship between the texts of the *Placita*-tradition, in order to produce an edition of the *Placita philosophorum* or of any epitome which used the *Placita philosophorum* such as the *Historia philosopha*, it is necessary to compare *all* parts of the extant *Placita*-tradition with one another. Only after this preliminary work has been accomplished, are we able to determine the areas where a reading has been transmitted incorrectly and where the correct reading has been preserved. It is entirely possible that a reading has been transmitted incorrectly in the Byzantine manuscripts of the *Placita philosophorum* but has been preserved correctly for example by Eusebius and by ps.Galen, namely in their manuscript tradition.

Therefore, to determine the correct readings of each passage the extant parts of the *Placita*-tradition — namely ps.Plutarch¹³, Qusṭā ibn Lūqā's Arabic translation of the *Placita philosophorum*¹⁴, ps.Galen, Eusebius¹⁵, Theodoret¹⁶, Lydus¹⁷, Cyril¹⁸ and ps.Justin¹⁹ — have to be

⁹ Diels 1879: 236: 'nimium quod c. 29 μίξεις in A B omissum restituit non recondita opus erat doctrina, sed exquisitius erat c. 5 l. 15 ex corrupto εἰς δὲ (sic A B) coniectando εἰς δ' οἱ elicere vel c. 7 p. 234 ἐνδειγμα in ἐν δόγμα emendare, quod untrumque Usenerus quoque invenit. quare quod c. 8 p. 235 vitiose tradebatur κατὰ μὲν ἱσχωράτη duce Nicolao qui vertit secundum zenocratem κατὰ Ξενοκράτη refinxit [...].'

¹⁰ Diels 1879: 236: 'ceteroqui non magna utilitas inde redundat, sed et lecturi ipsi iudicare possent, priori libri parti Nicolai selectam discrepantiam adicere placuit.'

¹¹ Diels 1879: 624.

¹² I use the terms 'Placita' and 'Placita-tradition' to refer to the Aëtian *Placita*-tradition, which include all extant texts that originated in some way in the Aëtian *Placita*, and the term 'tradition of the *Placita philosophorum*' to refer to all extant texts and paraphrases that originated in the *Placita philosophorum* of ps.Plutarch. See Appendix 2.

¹³ Mau 1971; Lachenaud 1993.

¹⁴ Daiber 1980. Hereafter referred to as Qusṭā.

¹⁵ Mras 1954–1956.

compared with one another and – where available – with Stobaeus.²⁰ If all these readings of the *Placita*-tradition are compared with one another, it emerges that the translation of Nicolaus, when compared with the extant Greek manuscripts of the *Historia philosopha*, undeniably has some superior readings.²¹ These readings are of such a nature that they cannot be simple emendations or corrections, but must be due to his Greek manuscript.

Furthermore, when comparing the Greek-Latin-tradition of the *Historia philosopha* with Qusṭā's translation, it becomes apparent that some readings of the *Placita philosophorum* have been preserved only in these two branches of the tradition of the *Placita philosophorum*. But until now, this has not yet been appreciated by scholars for varying reasons. Before I give some examples of how the *Historia philosopha* can lead towards a better text of the *Placita philosophorum* with the assistance of the Latin translation of Nicolaus on the one hand and with Qusṭā's Arabic translation of the *Placita philosophorum* on the other, I would like to present a short overview of Nicolaus of Rhegium's career and his Galenic translations, followed by two further points relating to Qusṭā's Arabic translation.

2. Nicolaus of Rhegium

Nicolaus was born 1280 in Calabria and died around 1350 in Naples. He received the epithet 'grecus', which suggests that he must have belonged to the Greek-speaking part of Calabria.²² From about 1308 until 1343, at the court of Anjou, first under king Carl II. and then after the death of Carl II. in 1309 under king Robert I. Nicolaus translated more than 50 Galenic (or ps.Galenic) texts from Greek into Latin. His translations were based on Greek manuscripts that supposedly originated

¹⁶ Raeder 1904. Due to the fact that Theodoret has extracted a relatively limited amount of material for his work *De graecorum affectionum curatione*, his text needs to be taken into consideration less frequently than that of Stobaeus.

¹⁷ Wünsch 1967.

¹⁸ Burguière-Evieux 1985.

¹⁹ Marcovich 1990.

²⁰ Wachsmuth 1884. I should like to make one further point about Stobaeus and his *Eclogae physicae*: The manuscript tradition is far less well preserved than the manuscript tradition of the *Placita philosophorum* because only the excerpts from the first two books of the Aëtian *Placita* are transmitted virtually in their entirety in the manuscript-tradition, but of the excerpts from books three, four, and five only a few remain. But where corresponding material in Stobaeus is available, this is a key indicator of what has been extracted from Aëtius by ps.Plutarch and can help us determine when a scribal error has occurred. Both authors – ps.Plutarch and Stobaeus – used the same source, and so, if a reading of a part of the tradition of the *Placita philosophorum* corresponds to a reading extant in Stobaeus, then both – ps.Plutarch and Stobaeus – must have extracted the same material from Aëtius, and an error has occurred at some point in the tradition of the *Placita philosophorum*. Therefore, Stobaeus can help us to reconstruct what ps.Plutarch has extracted from his Aëtian manuscript; see Appendix 3.

²¹ See Appendix 1.

²² Weiss 1977: 125.

from southern Italy or Byzantium.²³ These manuscripts were older than the manuscripts that were accessible to the translators from the 16th century onwards, since these translators could for the most part only access manuscripts from the 15th century or later.²⁴ His translations are characterised by a high literalness. Nicolaus himself describes his translation techniques with the words *ipsum librum transtuli vobis fideliter, de verbo ad verbum nihil addens nihil minuens vel permutans*²⁵. Even during his lifetime, he was famous for his accurate and precise translations.²⁶

It is in this literalness of his translations that the main value for modern Galen editions lies.²⁷ First, it enables us to retranslate those Galenic texts which are only transmitted in a Latin translation of Nicolaus.²⁸ Secondly, we can compare readings from his translation with readings transmitted in the extant Greek manuscripts. This comparison enables us to classify his lost Greek model in a stemma beside the extant Greek manuscripts. And with this classification we can reach conclusions on the relationship of his lost Greek model to the extant Greek manuscripts. Thirdly and finally, these readings enable us to give evidence about the quality of his Greek manuscripts in comparison with the readings transmitted in the extant Greek manuscripts. Editors of Galenic texts who include Greek manuscripts as well as the Latin translation of Nicolaus in their editions, have compared both sources and drawn the conclusion that Nicolaus must have had access, at least in some cases, to Greek manuscripts that were superior to the Greek manuscripts extant today.²⁹

This conclusion raises the question whether also in the case of his translation of the *Historia philosopha* Nicolaus used a Greek manuscript that in some aspects was superior to the Greek manuscripts available today. In order to determine whether Nicolaus' translation of the *Historia*

²³ Nutton 2011: 25.

²⁴ Nutton 2007: 164.

²⁵ This can be found in the preface of Nicolaus' translation of Galen's *De utilitate particularum*, see Schöne 1911: 10, no. 22.

²⁶ McVaugh 1997: 7,4–7; McVaugh 2002: 157; McVaugh 2006: 281–283.

²⁷ Fortuna 1997: 29; Berlier 2013: 960; Nutton 2011: 81–82; Boudon-Millot 2013: 999–1000.

²⁸ *De causis procacitatis* and *De empirica subfiguratione*; see Deichgräber 1930; Badong 1937; Hankinson 1998.

²⁹ Vivian Nutton was able to show that for *De motibus* Nicolaus used more than one Greek manuscript: Nutton, Cambridge 2011: 25. Véronique Boudon-Millot has reached the same conclusion for *De Theriaca ad Pisonem*. She could demonstrate that Nicolaus' translation is related to the Greek manuscript Laurentianus 74.5 from the 12th century, but that it has some better readings that are not to be found in the Laurentianus 74.5. Boudon-Millot reasoned that the Latin translation represents a Greek text older than the Laurentianus and independent of the extant Arabic tradition as well: Boudon-Millot 2013: 999–1000. Stéphane Berlier has shown that Nicolaus' translation of Galen's *De usu partium* preserved on several points a better reading than the extant Greek manuscripts and that this translation provides readings where the manuscripts are incomplete or have lacunae. For Berlier this indicates that Nicolaus used a better Greek manuscript than the extant manuscripts of *De usu partium*: Berlier 2013: 971–972.

philosophia was based upon a superior Greek manuscript or not, the unique affiliation of the *Historia philosopha* to two different kinds of traditions provides some hints. On the one hand the *Historia philosopha*, even if it is a ps.Galenic text, is linked to the texts transmitted in the *Corpus Galenicum* due to the fact that someone thought it must be a Galenic text. But on the other hand the *Historia philosopha*, as mentioned above, because it is an epitome of ps.Plutarch's *Placita philosophorum* forms part of the *Placita*-tradition. The affiliation of the *Historia philosopha* to this *Placita*-tradition provides us with an independent and objective tool for assessing readings preserved in Nicolaus' translation. Such an independent and objective tool is unique within the texts transmitted in the *Corpus Galenicum*. Therefore, a comparison with the *Placita*-tradition will enable us to arrive at an objective assessment of the quality of Nicolaus' Greek manuscripts — for the *Historia philosopha* in particular and for the other texts which Nicolaus translated in general.

The comparison of the texts belonging to the tradition of the *Placita philosophorum* with those belonging to the wider *Placita*-tradition such as Stobaeus has shown that at some points in Nicolaus' translation textual material has been transmitted that corresponds to parts of the remaining *Placita*-tradition. However, this material has been transmitted in such a corrupt way in the Greek manuscripts of the *Historia philosopha* or has fallen out so that it was impossible for Nicolaus to correct or emend these readings. Furthermore, contamination with the *Placita philosophorum*, the *Eclogae physicae* or with any of the excerpts can be excluded. There is no evidence in the translation of Nicolaus that he used other texts besides a Greek manuscript containing the *Historia philosopha*. In addition, there are a number of inferior readings which the translation shares with the extant Greek manuscripts and his translation shows some gaps, especially where the transmitted reading in the extant manuscripts is totally incomprehensible. If he had had access to a Greek manuscript containing the *Placita philosophorum*, it would have been easy for him to correct these inferior readings by referring to that manuscript. Likewise, there is no evidence of contamination in the first printed edition of the Latin translation.³⁰ As a consequence Nicolaus must have had access to a Greek manuscript of the *Historia philosopha* that was different and in some cases fuller than the extant Greek manuscripts.

³⁰ Surianus 1502. An awareness of the close relationship between the *Historia philosopha* and the *Placita philosophorum* did not arise before the printed Greek edition of the *Historia philosopha* in 1525, in which we can find the first indications of that relationship, mostly in the form of marginal notes, but also in the form of some textual corrections.

3. The Arabic translation of Qusṭā ibn Lūqā

Qusṭā translated the *Placita philosophorum* at the turn of the first half of the 9th century to the second half.³¹ The translator used a literal translation (*verbum e verbo*) as well as a based on the meaning translation (*sensum e sensu*).³² A comparison with the Greek text of the *Placita philosophorum* reveals that Qusṭā tried to reproduce the text with admirable precision and in most cases appropriately reproduced the content of the Greek sentences.³³ This literalness enables us to reconstruct most of the readings of his Greek manuscript and compare those readings with readings transmitted by the other parts of the tradition of the *Placita philosophorum* and by Stobaeus.

I would like to raise two further points, foreshadowed above, concerning Qusṭā's Arabic translation. Firstly, Diels was aware of the fact that there had once been an Arabic translation, but this translation was thought to be lost.³⁴ This was the reason why he did not take the Arabic translation into account in his *Doxographi Graeci*. Since 1980 we have access to the Arabic translation through Daiber's Arabic-German edition. But due to the fact that there has been no further edition of the *Historia philosopha* since Diels' *Doxographi Graeci* this translation, or, more accurately, the readings preserved in Qusṭā's translation have not been compared with the readings preserved in the *Historia philosopha* until now.

Secondly, Mau and Lachenaud did not use Qusṭā for editing the *Placita philosophorum*. Mau edited the *Placita philosophorum* in 1971, so he could not have had access to the edition of Qusṭā's texts published nine years later. He did have access to Daiber's dissertation³⁵ about Qusṭā's translation, which he mentions in his introduction, but it remained unused.³⁶ Lachenaud edited the *Placita philosophorum* in 1993, so he had full access to Qusṭā, but he used him only for editing the text at a few passages. In his view the translation is irrelevant for an edition of ps.Plutarch's *Placita philosophorum*.³⁷ Lachenaud failed to realise that this Arabic translation belongs in the same way to the tradition of the *Placita philosophorum* as the excerpts and paraphrases

³¹ Daiber 1980: 5–6. For the biography of Qusṭā and the question concerning the authorship of the Arabic *Placita*-translation see Daiber 1980: 3–4.

³² Daiber 1980: 19.

³³ Daiber 1980: 20–23; cf. Daiber 1980: 16–19 and 23–74.

³⁴ Diels 1879: 27–28: '[...] cuius discipulus et aemulus Constantinus Lucae f. Heliopolitanus Plutarchi Placita arabice vertit. versio non iam extare videtur.'

³⁵ Daiber 1968.

³⁶ Mau 1971: viii.

³⁷ Lachenaud 1993: 10–15.

transmitted by the authors mentioned above. Furthermore, also in the case of the other excerpts and paraphrases of the tradition of the *Placita philosophorum*, Mau and Lachenaud failed to use them in an appropriate manner for the purposes of editing the *Placita philosophorum*.

In the following section I will give a first example to show how the superior readings in the Latin translation of Nicolaus can be identified and what this can mean for reconstructing the *Placita philosophorum*. A second example will demonstrate how important it is to include a comparison between readings preserved in the *Historia philosopha* and readings preserved in Qusṭā while editing the *Placita philosophorum*, a comparison as mentioned above that has not been done hitherto.

4. Two examples of an improved text of the *Placita philosophorum*

4.1. First example: the value of Nicolaus

The first example can be found in ch. 75 of the *Historia philosopha* which contains opinions about comets and shooting stars (Περὶ κομητῶν καὶ διαττόντων ἀστέρων³⁸). In the sixth lemma the Greek manuscript tradition of the *Historia philosopha* (hereafter called P^{G(mss.)}) on the one hand, and all the extant text witnesses of the P-tradition (the Byzantine manuscript tradition of the *Placita philosophorum* (hereafter called P^B), the Arabic translation (hereafter called P^Q) as well as Stobaeus (hereafter called S)) on the other, transmit the opinion of Anaxagoras in the following way:

P ^{G(mss.)}	P ^B P ^Q S
Ἀναξαγόρας τοὺς καλουμένους ἄπτοντας ἀπὸ τοῦ αἰθερίου πυρὸς σπινθήρος δίκην καταφέρεισθαι καὶ παραυτίκα σβέννυσθαι.	Ἀναξαγόρας τοὺς καλουμένους διὰπτοντας ἀπὸ τοῦ αἰθέρος σπινθήρος ³⁹ δίκην καταφέρεισθαι διὸ καὶ παραυτίκα σβέννυσθαι.
Anaxagoras (says that) the so-called touching [stars] descend from the ethereal fire like a spark and are immediately extinguished.	Anaxagoras (says that) the so-called shooting [stars] descend from the fire like a spark and therefore are immediately extinguished.

If we now take the translation of Nicolaus, we find the following:

³⁸ *Doxographi Graeci*, p. 630,6–8 Diels; *Plac.* 3.2.9, p. 128, 9 and p. 129, 10–12 Lachenaud; Qusṭā: p. 168, 17–18 and p. 170, 8–9 Daiber; Stob. 1.28, p. 227,5–6 and 1.28.1^a, p. 228,8–10 Wachsmuth; *Fragmente der Vorsokratiker* 59 A 82 D.-K. The chapter heading differs in the tradition of the *Placita philosophorum* and in S, but this does not concern the following example and merely indicates that the quoted chapter heading differs in the various branches of the tradition. P^B transmits: Περὶ κομητῶν καὶ διαττόντων καὶ δοκίδων, S: Περὶ κομητῶν καὶ διαττόντων καὶ τῶν τοιούτων and Qusṭā in the translation of Daiber: *Über das Herabstürzen der Sterne und die längliche Röte, welche im Himmel erscheint, als ob sie eine Rute wäre.*

³⁹ σπινθήρος P^G (S^F) : σπινθήρων P^{BQ} (S^P)

Nicolaus	
<i>Anaxagoras autem vocatas diattontes et aptontes ab ethereo igne ad instar scintille differri deorsum, et confestim extingui ait.</i>	But Anaxagoras says that the so-called shooting and touching [stars] descend from the ethereal fire like a spark and are immediately extinguished.

The main difference between Nicolaus and P^{G(mss.)}, P^B, P^Q and S is his translation *diattontes et aptontes*. As is apparent, *diattontes* corresponds to διάττοντας in P^B, P^Q and S and *aptontes* corresponds to ἄπτοντας in P^{G(mss.)}. How could it be that Nicolaus preserved both readings, whereas the agreement of two P-branches (P^B and P^Q) with S can be seen as a good indication for Aëtius' text? Diels, disregarding Nicolaus, thought that 'G' wrote ἄττοντας as an editorial change instead of διάττοντας. Therefore, ἄπτοντας has been considered by Diels as a scribal error. That is why Diels corrected the text to ἄττοντας.⁴⁰ Without reference to Nicolaus, this could be seen as a good conclusion, but now taking the translation of Nicolaus into account, ἄττοντας cannot be considered as an editorial change of διάττοντας made by the epitomiser 'G'.

If we have a closer look at Diels' apparatus for ch. 75, we are informed that there is a passage in Achilles' *Isagoge* about that kind of designation.⁴¹ Achilles wrote in his chapter about comets without mentioning a name of a philosopher: ἀπὸ δὲ τόπου εἰς τόπον μετερχόμενοι καλοῦνται ἄττοντες καὶ διάττοντες.⁴² From this point of view one might think that Diels was right in correcting ἄπτοντας to ἄττοντας. But we note also that Achilles mentions *two* designations – ἄττοντες καὶ διάττοντες – for the comets, thereby closely resembling Nicolaus' rendering *diattontes et aptontes*.

At this point we have to answer the following questions. Firstly, how could it be that Nicolaus translated two designations and shares this kind of designation with Achilles, whereas 'Aëtius and Achilles are best seen as cousin writings'⁴³? Secondly, might Diels still have been right in correcting ἄπτοντας to ἄττοντας with Achilles' reading in mind?

Normally the evidence of only one designation in P^B, P^Q and in S against P^G would make it probable that Aëtius had only one designation as well, namely διάττοντας. But the evidence of two designations in Nicolaus and in the 'cousin-writing Achilles' makes it more probable that Aëtius at one stage had two designations. This is because Achilles is proof of the fact that within the

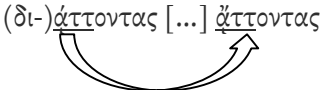
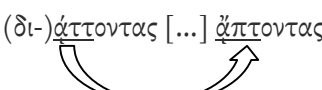
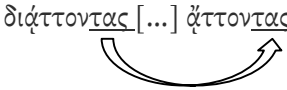
⁴⁰ Diels 1879: 630, 7.

⁴¹ Diels 1879: 629, 20.

⁴² Ach.Tat. *Intr.Arat.* 34, 2, p. 51,21–22 Di Maria.

⁴³ Mansfeld-Runia 1997: 305.

‘anterior doxographical tradition’ on which Achilles and Aëtius depend there existed two designations for comets and that Aëtius too had both designations in his text.⁴⁴ How could it then be that P^{BQ} and S are transmitting only one part of the twofold designation, namely διὰττοντας, and the Greek manuscript tradition of P^G the other part, namely ἄπτοντας, which is perhaps a misspelling of ἄττοντας? This corresponding mistake could have happened by an identical *saut du même au même* in P^B, P^Q and in S. By an identical *saut du même au même* I mean that a scribe of the manuscript to which the P^B-tradition and P^Q belong as well as a scribe of the manuscript to which the extant S-manuscripts belong to jumped independently from the syllable -τας of διὰττοντας to the syllable -τας of ἄττοντας. Within the Greek manuscript tradition of P^G, however, a scribe jumped from ἄττ- of (δι-)ἄττοντας to ἄττ- from ἄττοντας or from ἄττ- of (δι-)ἄττοντας to ἄπτ- from ἄπτοντας without considering the syllable δι- both times.

P ^{G(mss.)}	P ^B P ^Q S
 	

Both words are so similar that such an ‘identical or parallel failure’ in the different branches of the tradition of the *Placita philosophorum* and in the S-branch due to a *saut du même au même* is by no means improbable. This means that only in the P^G-branch and there only in the branch of P^{G(β)}, which is represented in the translation of Nicolaus, the correct text — transmitting two designations — of the *Placita philosophorum* and the text of Aëtius as well has been preserved. Thus, Nicolaus could acquire this reading from his Greek manuscript that took it from the P^{G(β)}-branch, which here transmitted the text of G correctly.

The second question — ἄπτοντας or ἄττοντας — cannot not be solved with reference to Achilles alone. An answer depends on three things. Firstly, each word can be a confusion of the other one. A confusion could have been occurred in the majuscule due to the fact that the Iota subscriptum was an adscriptum in the majuscule. If you write both words in the majuscule – AITONTAE and AITTONTAE — it is obvious that someone could have mixed up the Pi (Π) with Iota-Tau (IT) or the other way around. But also a confusion of ττ and πτ within the minuscule is possible.⁴⁵

⁴⁴ See Appendix 2.

⁴⁵ This confusion can often be found in manuscripts; see Bast 1811: 731.

Secondly, 'shooting stars' are usually called διάττοντες or διάττοντες ἀστέρες, as we find for example in the ps.Aristotelian text *De mundo*⁴⁶, in Plutarch⁴⁷ or in Diogenes Laertius⁴⁸, but Plato at the end of his *Republic* calls the shooting stars ἄπτοντας ἀστέρας.⁴⁹ This could mean that Achilles provides with ἄπτοντες καὶ διάττοντες the most complete designation, because comets could be called either ἄπτοντες ἀστέρες or διάττοντες ἀστέρες.

Thirdly, Aristotle refers in his *Meteorology* to the opinion of Anaxagoras and Democritus with regard to comets and Alexander of Aphrodisias comments on Aristotle's reference. Both of them place emphasis on the fact that if shooting stars occur, a process of 'touching' is involved. Aristotle writes (*Mete.* 342b27–29 (= Vorsokratiker 59 A 81 D.-K.)):

Ἀναξαγόρας μὲν οὖν καὶ Δημόκριτός φασι εἶναι τοὺς κομήτας σύμφασιν τῶν πλανήτων ἀστέρων, ὅταν διὰ τὸ πλησίον ἐλθεῖν δόξωσι θιγγάνειν ἀλλήλων.	Now Anaxagoras and Democritus say comets are a conjunction of planets when because they come near they seem to touch one another.

Alexander comments on this as follows (*in Mete.* 26.11–16 (= Vorsokratiker 68A92 D.-K.)):

περὶ δὲ τῶν κομητῶν Ἀναξαγόρας μὲν καὶ Δημόκριτος λέγουσι τὸν κομήτην λεγόμενον ἀστέρα 'σύμφασιν' εἶναι τῶν πλανήτων ἀστέρων· οὗτοι δὲ εἰσιν ὁ τε τοῦ Κρόνου καὶ ὁ τοῦ Διὸς καὶ ὁ τῆς Ἀφροδίτης καὶ ὁ τοῦ Ἄρεος καὶ ὁ τοῦ Ἑρμοῦ. τούτους γάρ, ὅταν ἐγγὺς ἀλλήλων γένωνται, φαντασίαν ἀποτελεῖν ὡς ἅρα ἄπτονται ἀλλήλων καὶ ἔστιν εἷς ἀστήρ, ὁ καλούμενος κομήτης.	Concerning comets, Anaxagoras and Democritus say that what is called a comet is a conjunction of planets. These are Saturn, Jupiter, Venus, Mars, and Mercury. For when these come near one another, they give an appearance of touching one another and of being a single star, which is called a comet.

What Aristotle and Alexander are saying is that comets are a conjunction of planets and that these come near one another and as a result of this approach they seem to touch one another. To describe the occurrence of *touching one another* Aristotle uses the verb θιγγάνειν whereas Alexander uses the verb ἄπτω, which of course corresponds to the designation ἄπτοντας in the P^G-tradition. The verb ἄπτω used by Alexander to designate the occurrence of *touching one another* (ἄπτονται ἀλλήλων) gives rise to the very real possibility that comets were called ἄπτοντες next to διάττοντες and not necessarily ἄπτοντες next to διάττοντες. For, it seems more plausible to call

⁴⁶ Arist. *Mu.* 395^a31–32: καθ' ὑπόστασιν δὲ σέλα τε καὶ διάττοντες καὶ κομήται καὶ τὰ τούτοις παραπλήσια.

⁴⁷ Plut. *Lys.* 12,5,2 and *Lys.* 12,6,9.

⁴⁸ D.L. 2,9: τοὺς δὲ κομήτας σύνοδον πλανητῶν φλόγας ἀφιέντων: τοὺς τε διάττοντας οἷον σπινθήρας ἀπὸ τοῦ ἀέρος ἀποπάλλεσθαι.

⁴⁹ Pl. *Rep.* 621^b4.

comets with two different designations that take two characteristics into account, namely that they are *shooting stars* (διὰττοντας) and *touching stars* (ἄπτοντας) — in the sense of *touching one another* as transmitted by Aristotle and Alexander —, and not only with one characteristic, namely that they are *shooting ones*, using two quite similar words for it, for the one the composite and for the other the simplex.⁵⁰

Notwithstanding the above, whether we edit ἄπτοντας for the text of G or correct the reading to ἄττοντας, the agreement between Nicolaus and Achilles in transmitting two designations seems to be proof of the fact that in G as well as in P and S, and therefore also in the text of Aëtius, a twofold designation was originally present.

4.2. Second example: the value of Qustā

The second example will demonstrate how important it is to include Qustā in an edition of the *Placita philosophorum*. In ch. 130 ‘*How the plants grow and whether they are animals?*’ (Πῶς αὖξεται τὰ φυτὰ καὶ εἰ ζῶα⁵¹) G’s third lemma contains the opinion of Empedocles (in P^B and P^Q it is the fourth lemma and S does not transmit it).

Ἐμπεδοκλῆς τὰ δένδρα πρῶτα τῶν ζῶων ἐκ τῆς γῆς ἀναφύναί, [5] ὀλίγον περιπολεῖν, διὰ δὲ ἀμετρίαν τῆς κράσεως τὸν τοῦ ἄρρενος καὶ [6] θήλεος περιέχειν λόγον. αὖξεσθαι δὲ ὑπὸ τοῦ ἐν τῇ γῇ θερμοῦ διαιρούμενου, [7] ὥστε γῆς εἶναι μέρη· καὶ γὰρ τὰ ἔμβρυα τὰ ἐν τῇ γαστρὶ τῆς μήτρας εἶναι [8] μέρη. τοὺς δὲ καρποὺς περιττώματα εἶναι τοῦ ἐν τοῖς φυτοῖς ὕδατος καὶ [9] πυρός. καὶ τὰ μὲν ἐλλιπὲς ἔχοντα τὸ ὑγρὸν ἐξικμαζόμενου τούτου τῷ θερεί [10] φυλλοροεῖ, τὰ δὲ πλεῖον παραμένει ἀεὶ φύλλοις τεθηλότα ὥσπερ ἐπὶ τῆς [11] δάφνης καὶ τῆς ἐλαίας. τὰς διαφορὰς τῶν χυμῶν παραλλαγὰς γίνεσθαι [12] τῆς πολυμερείας καὶ τῶν φυτῶν διαφόρως ἐλκόντων τὰς ἀπὸ τοῦ τρέφοντος [13] ὁμοιομερείας	Empedocles says that trees were the first living beings to grow up out of the earth, that they are wandering a little, but due to the imbalance of the mixture they contain the principle of the male and female. (He says) they grow as the result of the heat in the earth being separated, so that they are parts of the earth, for embryos in the womb too are parts of the uterus. Fruits are the residues of water and fire in the plants, and those (trees) with a shortage of moisture shed their leaves when this dries up in the summer, while those with more (<i>sc.</i> moisture) always keep their leaves — the bay and the olive, for example. The varieties of juices are due to different mixtures and to the fact that the plants extract the basic substances in different ways (<i>sc.</i> from

⁵⁰ Specifically ἄττοντες comes from ἀῖσσω and means ‘to shoot, dart, glance’ (LSJ s.v. ἀῖσσω, p. 42b) whereas διαῖσσω as a compound of αῖσσω means ‘to rush or dart’ (LSJ s.v. διαῖσσω, p. 396a), which is virtually the same.

⁵¹ *Doxographi Graeci*, p. 646,24–674,14 Diels; *Plac.* 5.26, p. 186,18–188,3 Lachenaud; Qustā: p. 243,1–26 Daiber; Stob. 1.45, p. 297,12–298,2 Wachsmuth. P^B, P^Q and S transmit the title: Πῶς ἡυξήθη τὰ φυτὰ καὶ εἰ ζῶα’.

ὥσπερ ἐπὶ τῶν ἀμπέλων· οὐ γὰρ αἱ διαφοραὶ τούτων ποιοῦσι τὸν οἶνον διαλλάττοντα, ἀλλὰ τοῦ τρέφοντος ἐδάφους.	the nourishment), as happens with grapevines. For it is not the varieties of the vines that make the wine different, but (sc. varieties of) the nourishing soil.
Ps.Galenus ⁵² : ἀναφῦναι α(A[ἀναφύναι]Ον[prodire Nicolaus]) : ἀναφύοντα ε(CB) 10 πλείον scripsi sec. P ^Q : τέλειον α(AΟν[perfectam Nicolaus]CB)	

Plac. 5.26.4 ⁵³ – Vorsokratiker 31 A 70 D.-K. (= 163 M.-P.) – 571 (A 70) Bollack – cf. A 70a, p. 178 Inwood	
Ps.Plutarchus ⁵⁴ : ἀναφῦναι (P ^Q) ἀναφῦναι φησι Diels (1879) 438 ^a 22 : ἀναδῦναι φησι P ^B Xylander Bernardakis–Lachenaud 10 τὰ δὲ πλείον P ^Q (diejenigen unter ihnen, worin die Feuchtigkeit reichlich (vorhanden ist) Qusta) τὰ δὲ πλείον Wyttenbach–Lachenaud : τὰ δὲ πλείονα P ^B Xylander Bollack αἱ φύλλοις τεθηλότα (P ^Q) om. P ^B Xylander–Lachenaud 14 ἀλλὰ τοῦ τρέφοντος ἐδάφους (Bollack) ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους P ^Q (ut vid.) Wyttenbach Diels (1879) 440 ^a 1–2 Mau Lachenaud : ἀλλ' αἱ ἐκ τοῦ τρέφοντος ἐδάφους Dübner : ἀλλ' ἐκ τοῦ τρέφοντος ἐδάφους Beck (ἐδάφους iam Reiske) : ἀλλ' ἐκ τοῦ τρέφεσθαι ἐδάφοις P ^B (II+III) Xylander : ἀλλ' ἐκ τοῦ τρέφεσθαι ἐδάφονις P ^B (I)	

In this lemma there are many readings in the tradition of P^G as well as in the tradition of P^B and P^Q that differ from one another within their own manuscript tradition but are not directly relevant to the constitution of a text of the *Placita philosophorum*. I will focus only on those readings which leads us towards a better text of P and which have not or only rarely been taken into account in an edition of the *Placita philosophorum*. All in all we find four of those readings in this lemma and I will discuss them one by one as they appear in the text.

(1) The first reading I will discuss is the infinitive ἀναφῦναι in line 4 of P^G, which states that the plants *grow out* of the earth. But in P^B we find ἀναδῦναι, which affirms that the plants *emerge* from the earth. In Qustā we read *nabtahā min al-‘ard*, which can be literally translated as *their growing out of the earth* and therefore leads to the conclusion that P^Q must have had the infinitive ἀναφῦναι like P^G.⁵⁵ The connection between P^G and P^Q is not visible and has not been taken into account in the recent editions of the *Placita philosophorum*. Remarkably Diels without knowing Qustā notes in the apparatus of the text in the *Doxographi Graeci* that the P^G-reading must be the correct one

⁵² There are quite a lot of different readings within the tradition of P^G, but I have only cited those which are relevant for a comparison with P^B and P^Q towards a better text of P.

⁵³ The text of P in the most recent editions of Mau and Lachenaud reads: Ἐμπεδοκλῆς πρῶτα τὰ δένδρα τῶν ζώων ἐκ γῆς ἀναδῦναι φησι, πρὶν τὸν ἥλιον περιπλωθῆναι καὶ πρὶν ἡμέραν καὶ νύκτα διακριθῆναι· διὰ δὲ συμμετρίαν τῆς κράσεως τὸν τοῦ ἄρρενος καὶ τοῦ θήλεος περιέχειν λόγον· αὐξεσθαι δ' ἀπὸ τοῦ ἐν τῇ γῇ θερμοῦ διαιρουμένου, ὥστε γῆς εἶναι μέρη, καθάπερ καὶ τὰ ἔμβρυα τὰ ἐν τῇ γαστρὶ τῆς μήτρας μέρη· τοὺς δὲ καρποὺς περιτετεύματα εἶναι <τοῦ> ἐν τοῖς φυτοῖς ὕδατος καὶ πυρός· καὶ τὰ μὲν ἐλλίπεις ἔχοντα τὸ ὑγρὸν, ἐξικμαζομένου αὐτοῦ τῷ θέρει, φυλλορροεῖν, τὰ δὲ πλείον παραμένειν, ὥσπερ ἐπὶ τῆς δάφνης καὶ τῆς ἐλαίας καὶ τοῦ φοίνικος· τὰς δὲ διαφορὰς τῶν χυμῶν παραλλαγὰς τῆς <γῆς> πολυμερείας καὶ τῶν φυτῶν γίνεσθαι, διαφόρους ἐλκόντων τὰς ἀπὸ τοῦ τρέφοντος ὁμοιομερείας, ὥσπερ ἐπὶ τῶν ἀμπέλων· οὐ γὰρ αἱ διαφοραὶ τούτων χρηστὸν τὸν οἶνον ποιοῦσιν, ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους.

⁵⁴ Here too I have cited only those readings which are relevant for the comparison between P^B, P^Q and P^G.

⁵⁵ Daiber 1980: 242,13f. and 514, at 5.26.4: 438^a22. Daiber translates: *dass die Bäume ... aus der Erde wuchsen* (Daiber 1980: 243). I would like to thank Andreas Lammer for helping me with the Arabic and especially for the literal translations of the Arabic phrases.

for P.⁵⁶ Mau and Lachenaud, however, without considering the translation of Qusṭā or the reading in P^G prefer ἀναδύναί for P^B. It is clear that without Qusṭā both readings ἀναδύναί and ἀναφύναί could be the correct P reading, because the ‘objective medium of control’ S is missing here. With Qusṭā’s translation *grow out* (*nabtahā min al-‘arḍ*) and its agreement with the P^G reading we have a good indication that P^B transmits a mistake and that the original reading in P was the infinitive ἀναφύναί.

(2) The next text-critical problem concerns the reading τὰ δὲ πλείον in line 10.⁵⁷ The whole tradition of P^G transmits τὰ δὲ τέλειον, whereas in P^B we find τὰ δὲ πλείονα. Qusṭā’s translation reads *wa-mā kāna minhā l-ruṭūba fihi kaṭīratan*, which can be translated literally something like *and that of them* [sc. the trees] *in which the moisture is abundant* and seems to indicate that Qusṭā read τὰ δὲ πλείον in P^Q.⁵⁸ The readings in P^B (τὰ δὲ πλείονα) and P^Q (τὰ δὲ πλείον) would appear to suggest that with the text τὰ δὲ τέλειον παραμένει αἰὲν φύλλοις τεθηλότα ὥσπερ ἐπὶ τῆς δάφνης καὶ τῆς ἐλαίας P^G transmits an editorial change of ‘G’. But Bast says in his paleographical commentary that the error of writing τε instead of π within the minuscule is not at all uncommon.⁵⁹ If this is the case and we return τε to π, we get the reading τὰ δὲ πλείον. Since according to Bast this is a mistake that happens within the minuscule, it is plausible that this mistake occurred during the transmission of the text of G and not when composing the epitome. Therefore, if the emendation τὰ δὲ πλείον is accepted, it emerges that P^G and P^Q originally at a certain point of the textual transmission had the same reading, namely τὰ δὲ πλείον.

But how is this reading related to the reading τὰ δὲ πλείονα in P^B? P^{GQ} transmit *those having a shortage of moisture* (τὰ μὲν ἐλλιπὲς ἔχοντα τὸ ὑγρὸν) *when they dry out in the summer shed their leaves, while those having more moisture* (τὰ δὲ πλείον [sc. ἔχοντα τὸ ὑγρὸν]) *remain in a state of blooming with leaves*.⁶⁰ With the reading τὰ δὲ πλείον it is necessary to add ἔχοντα τὸ ὑγρὸν from the τὰ μὲν-sentence, because πλείον or rather τὰ δὲ πλείον refers to this part of the text. By contrast, P^B transmits that *those having a shortage of moisture* (τὰ μὲν ἐλλιπὲς ἔχοντα τὸ ὑγρὸν), *when it dries out in the summer shed their leaves, but the greater part* (τὰ δὲ πλείονα) *remains*. Here, πλείονα or rather

⁵⁶ Diels 1879: 438^a22.

⁵⁷ The whole sentence runs in the reconstructed text of G as follows: τὰ δὲ πλείον παραμένει αἰὲν φύλλοις τεθηλότα ὥσπερ ἐπὶ τῆς δάφνης καὶ τῆς ἐλαίας.

⁵⁸ Daiber 1980: 242.21. Daiber translates as: *diejenigen unter ihnen, worin die Feuchtigkeit reichlich vorhanden ist* (Daiber 1980: 243).

⁵⁹ Bast 1811: 730f.

⁶⁰ P^G: καὶ τὰ μὲν ἐλλιπὲς ἔχοντα τὸ ὑγρὸν ἐξηκμαζομένου τούτου τῷ θέρει [10] φυλλοροεῖ, τὰ δὲ πλείον παραμένει αἰὲν φύλλοις τεθηλότα ὥσπερ ἐπὶ τῆς [11] δάφνης καὶ τῆς ἐλαίας. Qusṭā: *wa-anna <mā> kāna minhā l-ḡawhar al-mā’i fihi qalīlan ida infāšša ‘anhā bi-ḥarārat al-ṣayf intatarat awrāquhā wa-mā kāna minhā l-ruṭūba fihi kaṭīratan badat ṭarīya dā’iman miṭla šaḡarat al-ḡār wa-l-zaytūn wa-l-naḥl wa-mā ašbahahu* (Daiber 1980: 242,19–22).

τὰ δὲ πλείονα refers to the number of plants, which keep their leaves, and not to the proportion of moisture in the plants. Both sentences make sense, but the agreement of P^G with P^Q suggests that what we find in P^B is a mistake due to the assimilation of the grammatical case, namely the assimilation to the preceding article τὰ.

Wytttenbach emended in his P-edition the reading τὰ δὲ πλείονα to τὰ δὲ πλείον. This emendation has been accepted by all later editors. But Diels edited τὰ δὲ τέλειον for G and did not consider the possibility that P^G made a mistake.⁶¹ Mau and Lachenaud, however, because they did not use Qusṭā's translation here, did not see that πλείον is not an emendation of Wytttenbach but rather a genuine reading that should be preferred in the text of P.⁶²

(3) The third text-critical problem can be found in the same sentence. While P^B says that some plants dry out in the summer and as a result shed their leaves, but the greater part *remains* (παραμένει), there follows in P^G after παραμένει the phrase ἀεὶ φύλλοις τεθηλότα, which means that those plants *remain in a state of blooming with leaves*. In Qusṭā we find *wa-mā kāna minhā l-ruṭūba fihī kaṭīratān badat ṭarīya dā'imān*⁶³ (*and that of them in which the moisture is abundant appears always fresh*) in which the words *badat ṭarīya dā'imān* (= *appears always fresh* or as Daiber translated it *immer frisch erscheinen*⁶⁴) correspond to παραμένει ἀεὶ φύλλοις τεθηλότα.⁶⁵ Here the agreement between P^G and P^Q shows that this part of the sentence (ἀεὶ φύλλοις τεθηλότα) has dropped out — for whatever reason — in P^B and it indicates likewise that ἀεὶ φύλλοις τεθηλότα is a genuine P-reading preserved in P^G and P^Q.

Diels could not know that ἀεὶ φύλλοις τεθηλότα is not an addition of the epitomiser G, because he could not consider Qusṭā.⁶⁶ But this was possible for Mau and even more for Lachenaud, but neither of the two editors mentioned P^G or P^Q in their critical apparatus. That is why right up to the most recent edition of Lachenaud the phrase ἀεὶ φύλλοις τεθηλότα has not been taken into account for a P-edition.

(4) The last reading I will discuss in greater detail concerns the last part of the last sentence ἀλλὰ τοῦ τρέφοντος ἐδάφους in line 14. The P^G-lemma ἀλλὰ τοῦ τρέφοντος ἐδάφους shows several

⁶¹ Diels 1879: 647, at 10.

⁶² Lachenaud only notes in his critical apparatus that πλείον is a correction by Wytttenbach (Lachenaud 1993: 187, at C 11), whereas Mau does not even refer to the reading in his critical apparatus (Mau 1971: 151, 20–21).

⁶³ Daiber 1980: 242, 21f.

⁶⁴ Daiber 1980: 243.

⁶⁵ Daiber 1980: 514 at 5.26.4: 439a12.

⁶⁶ Diels 1879: 439^a12: 'G qui addit ἀεὶ φύλλοις τεθηλότα'.

differences with the P^B-lemma ἀλλ' ἐκ τοῦ τρέφεσθαι ἐδάφοις (ἐδάφνοις P^{B(1)}). Firstly, P^B transmits the preposition ἐκ before the article τοῦ. Secondly, P^B shows a nominalised infinitive (τοῦ τρέφεσθαι), while P^G transmits a nominalised participle (τοῦ τρέφοντος). Thirdly, P^{B(II+III)} shows ἐδάφοις and P^{B(1)} ἐδάφνοις instead of ἐδάφους as found in P^G.

From the edition of the *Placita philosophorum* of Reiske in 1778 onwards several corrections have been made to this lemma. Reiske printed in his edition ἐδάφους in accordance with P^G.⁶⁷ Beck accepted Reiske's correction to ἐδάφους and furthermore he printed in accordance with P^G the participle τρέφοντος.⁶⁸ Wytttenbach conjectured that ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους must be the correct reading for the *Placita philosophorum*. Therefore, he replaced the preposition ἐκ by the article αἱ, which refers to the main subject of the sentence αἱ διαφοραί.⁶⁹ The later editors accepted Wytttenbach's conjecture ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους. Only Bollack edited the text in accordance to P^G with ἀλλὰ τοῦ τρέφοντος ἐδάφους.⁷⁰ Concerning Qusṭā's translation *wa-l-turba al-ġādiya lahā* (*but (sc. the differences of) the nourishing soil*).⁷¹ Daiber mentioned that Qusṭā must have read ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους in P^Q or ἀλλ' τοῦ τρέφοντος ἐδάφους like P^G.⁷² Irrespective of whether Qusṭā read the article αἱ or not, we have another agreement with P^G against P^B, which leads to the conclusion that in the case of this Empedocles-lemma P^G and P^Q transmitted the text of the *Placita philosophorum* significantly better than P^B.

5. Conclusion

The two examples that we have given demonstrate that some readings — for various reasons — have not been taken into consideration in the current editions of the *Placita philosophorum* and that these readings will lead to an improved text of P and, as the first example has shown, maybe of Aëtius as well. Concerning the first example it is unlikely that the text of Nicolaus transmits an emendation or correction that is due to Nicolaus himself or due to the scribe of the Greek manuscript that he used. The reading *diattontes et aptontes* must be due to his Greek manuscript because it was part of the transmitted text of G. There is no reason why someone should add a second term for the planets (*diattontes*) at a later date that corresponds precisely to the term found

⁶⁷ Reiske 1778: 606, note 81.

⁶⁸ Beck 1787: 126–127; 286.

⁶⁹ Wytttenbach 1797: 675, at D3.

⁷⁰ Bollack 1969: 571 (A 70), at 12–13.

⁷¹ Daiber 1980: 242, 26. Daiber translated: *und (zwar) des sie ernährenden Bodens* (Daiber 1980: 243).

⁷² Daiber 1980: 514, 5.26.4, at 440^a1–2.

in P^B, P^Q, and S. Contamination would be the only reason for this correspondence between Nicolaus and P^B, P^Q, and S. But in the translation of Nicolaus we find not the slightest indication of contamination between his translation of the *Historia philosopha* and the text of P or S. If the scribe of the Greek manuscript Nicolaus used or Nicolaus himself had had access to a text of P or S while respectively copying and translating the text of the *Historia philosopha* it would surely be possible to find many more passages in the translation of Nicolaus where the text was enriched with material from P or S like has occurred in the later printed editions of the *Historia philosopha*.

The first knowledge of a connection between the *Historia philosopha* and the *Placita philosophorum* can be proved for the year 1538: in a printed edition of the Greek text of the *Historia philosopha* material on the margin can be found that belongs to the *Placita philosophorum*.⁷³ This earliest evidence of the knowledge of the connection — not specified in greater detail — between these two texts occurred about 340 years after the oldest extant Greek manuscript – the Laurentianus 74.3 (A) written at the end of the 12th century – and about three decades after the first printed edition of Nicolaus' Latin translation.⁷⁴ Therefore, it is more plausible that both designations belonged to the text of G. Furthermore, the two designations in Achilles' text and that way that Aristotle himself in his *Meteorology* and Alexander of Aphrodisias as well in his commentary of the Aristotelian *Meteorology* described the opinion of Anaxagoras und Democritus on shooting stars provide evidence for a twofold designation in P and in Aëtius as well. However, it still needs to be clarified, whether the text in G, P or A should follow the designation transmitted in P^{G(β)}, i.e. ἄπτοντας καὶ διάπτοντας, or whether these texts should follow the designation transmitted in Achilles, i.e. ἄπτοντας καὶ διάπτοντας.

The second example which focused on Qusṭā's Arabic translation has shown that, because of the agreement that he shows with the tradition of G, he has preserved some readings of his Greek manuscript that must go back to the text of P. These agreements can demonstrate that differences between the text of G and the P-text are not only due to fact that the author G shortened the P-text and changed some things like P did it with the A-text, but also due to the fact that the Greek

⁷³ *Galenī librorum pars quarta, quorum index VIII; pagina continetur, Basileae ex officina 1538*, ff. 424–438. See also Maas 1960: 8–9, at 10: „Eine gewisse Gewähr gegen Kontamination ist gegeben, wenn ein Werk in einzelnen Überlieferungszweigen unter verändertem Namen weitergeführt wird, so daß den einzelnen Zweigen der sekundären Form die Zweige der primären nicht mehr zugänglich werden.“

⁷⁴ Due to the fact that no Latin manuscript of Nicolaus' translation is still extant we have to count from the first printed edition (Surianus 1502).

manuscript tradition of P (P^B) transmits some mistakes or omissions of words or even parts of sentences like in the case of ἀεὶ φύλλοις τεθηλότα.

Even if it is not always possible to decide whether Qusṭā read an article or not in his Greek manuscript as in the case of the readings ἀλλ' αἱ τοῦ τρέφοντος ἐδάφους or ἀλλ' τοῦ τρέφοντος ἐδάφους, his translation is literal enough that it is possible to determine that Qusṭā did not read the reading transmitted in P^B ἀλλ' ἐκ τοῦ τρέφεσθαι ἐδάφοις (ἐδάφονις P^{B(1)}). In general terms we can say that his translation is so literal that it enables us to find every case of agreement with the P-tradition or even with parts of the P-tradition. And on the basis of these agreements we can draw conclusions about the reading in his Greek manuscript like in the case of ἀναφῦναι or ἀναδῦναι or in the case of τὰ δὲ πλείον or τὰ δὲ πλείονα.

However, it is necessary to examine Qusṭā's translation of each chapter or lemma quite thoroughly and compare every reading with the readings of every branch of the P-tradition and with S as well. This will enable every kind of reading to be identified that will lead verifiably to a better text of the *Placita philosophorum*.

Altogether, in the 51 chapters which I examined in my dissertation one can find in addition to my first example at least one more passage where the translation of Nicolaus will change the text of the *Placita philosophorum* and maybe the Aëtian text as well.⁷⁵ Furthermore, in these 51 chapters there are about 23 passages where the text of the *Placita philosophorum* or the Aëtian text as well should be changed due to the reading preserved by Qusṭā which is either only extant in his translation and must have been transmitted by P^Q or is confirmed entirely or in parts by P^G and on some occasions by S as well.

⁷⁵ Ch. 128 = *Doxographi Graeci*, p. 646,14–15 Diels; Jas forthcoming.

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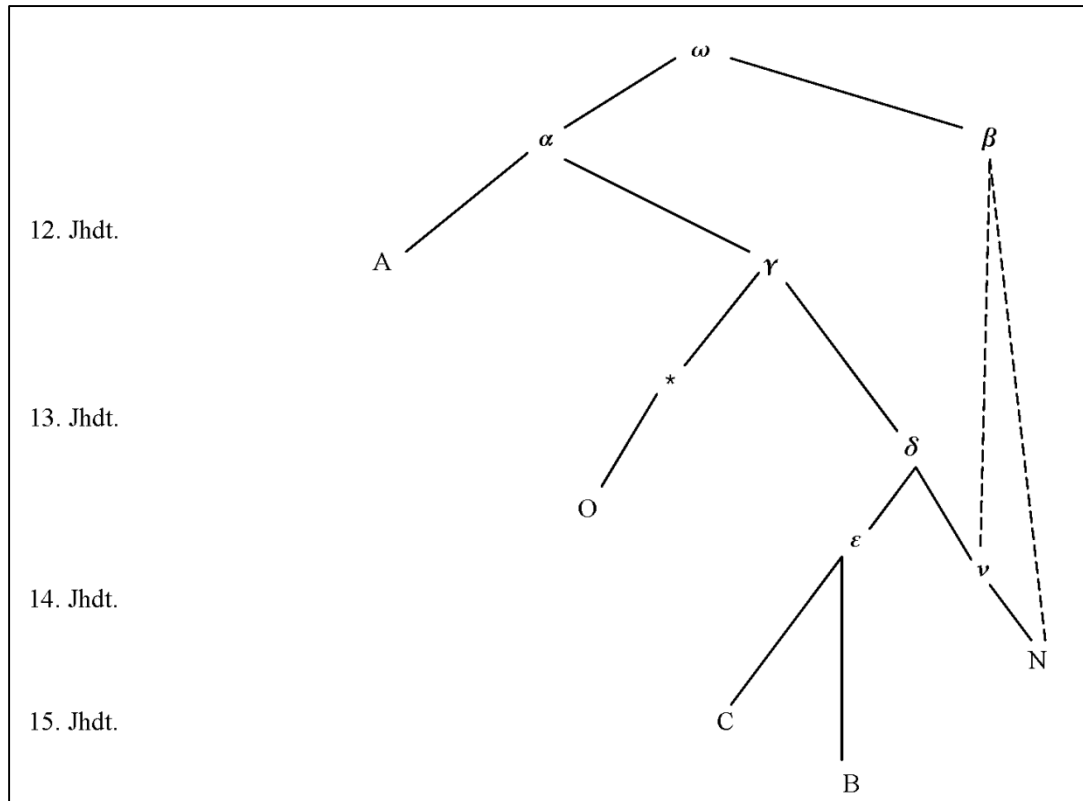
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Appendices

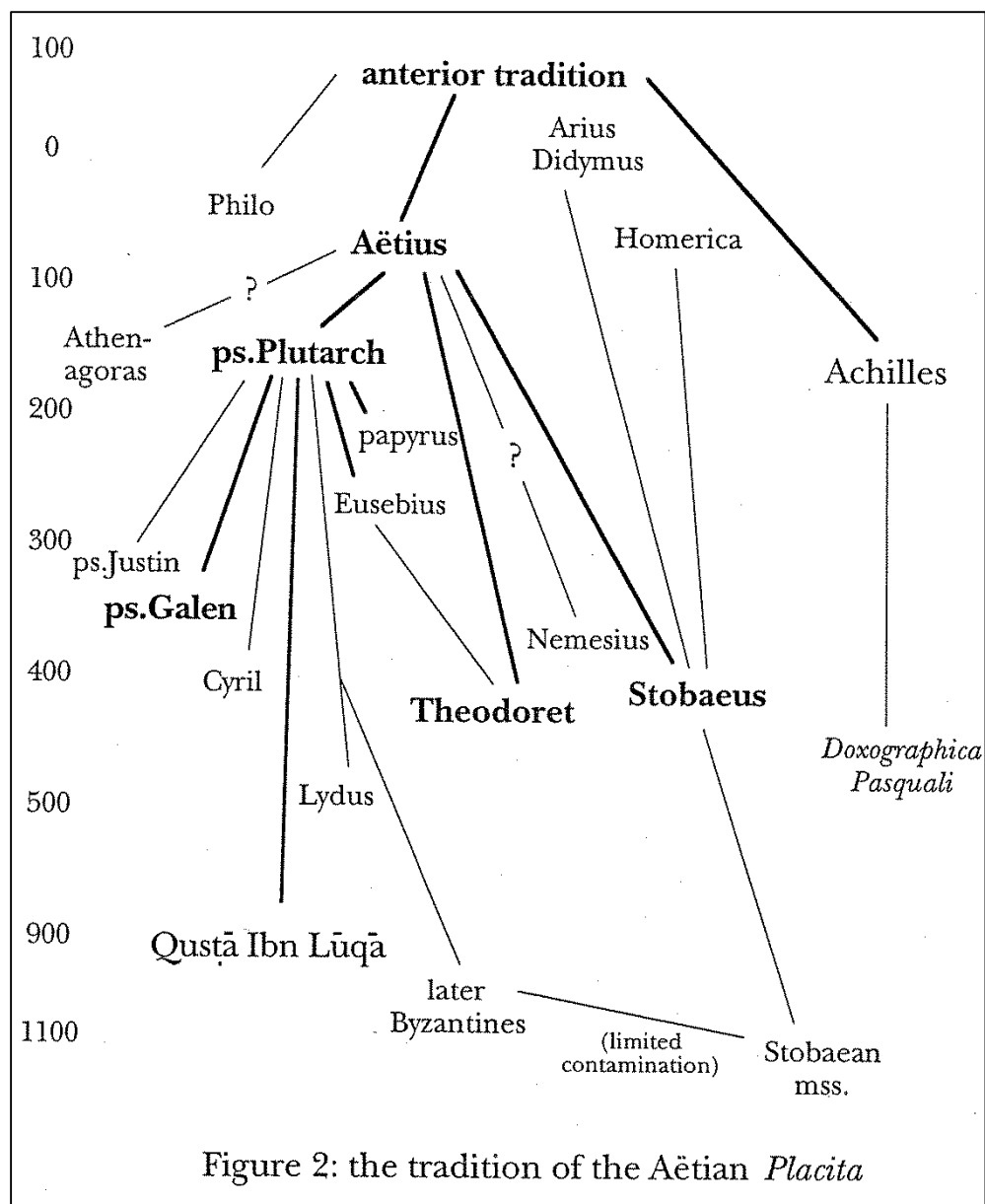
1. Stemma of the direct manuscript tradition of ps.Galen

Change 12. Jhdt. to 12th cent. etc.

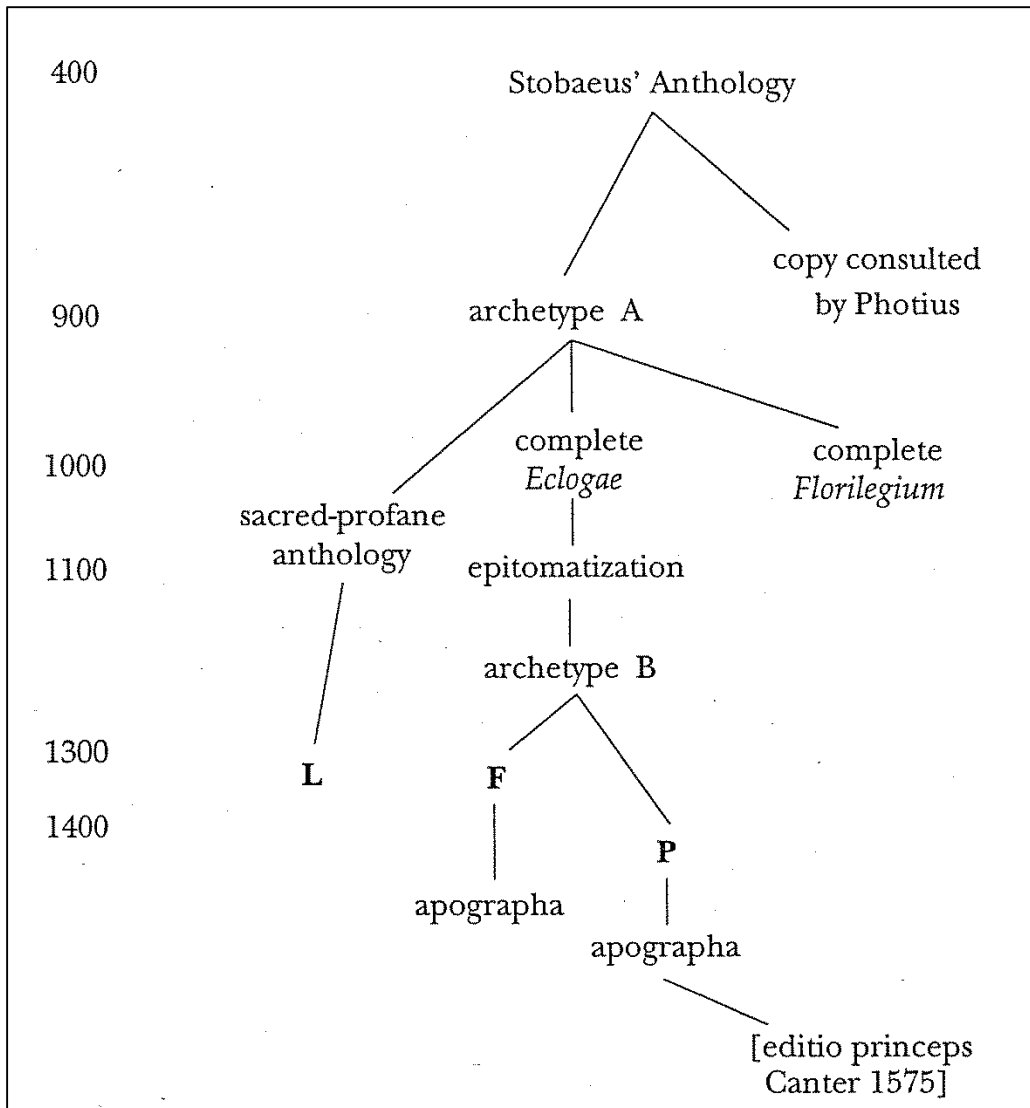


Stemma codicum of the *Historia philosopha*: ω : archetype; A: Laurentianus 74.3; O: Baroccianus 131; ϵ (CB): Laurentianus 58.2 (B), Cheltenham manuscript 23007 (C); N: Nicolaus translation in the Edition of 1502; ν : Nicolaus' Greek manuscript; β : Nicolaus' second Greek manuscript or the manuscript ν used besides δ . Nicolaus' translation shares some readings with ϵ against A and O, that is why it is necessary that his Greek model (ν) and ϵ have a common Greek source, namely δ . But from our point of view it is impossible to decide unambiguously, whether Nicolaus used two Greek manuscripts (ν and β) or his Greek model ν ; for more details concerning this stemma see Jas (forthcoming).

2. Stemma of the ancient doxographical tradition



Source: Mansfeld, Jaap and Runia, D. T., *Aëtiana. The Method and Intellectual Context of a Doxographer*, Vol. I: *The Sources*, Leiden-New York-Köln 1997, p. 328.

3. Stemma codicum of Stobaeus' *Eclogae physicae*.

Source: Mansfeld, J. and Runia, D. T., *Aëtiana. The Method and Intellectual Context of a Doxographer*, Vol. I: *The Sources*, Leiden-New York-Köln 1997, p. 200.

The Text of Stobaeus: The Manuscripts and Wachsmuth's Edition¹

James R. Royse

Abstract: This paper examines Wachsmuth's report of the manuscript evidence for Stobaeus's *Eclogae physicae*. The three chief witnesses are manuscripts F (Naples), P (Paris), and L (Florence). While F and P are straightforward manuscripts of Stobaeus, L is a very complex codex, containing the remains of three separate florilegia. The third of these (which is preserved only fragmentarily) drew heavily on Stobaeus, and preserves many titles of sections and extensive extracts. In order to check the reliability of Wachsmuth's citations, these three manuscripts were collated at selected passages where they contain material from Aëtius. It was found that Wachsmuth's apparatus, while generally accurate, occasionally has mistaken reports of the readings of these manuscripts, and also from time to time fails to report readings of these manuscripts that seem to be significant. A further examination of a manuscript in Munich shows yet further incorrect citations, and also gives some reason to think that it may preserve some genuine readings of Stobaeus.

Keywords: Stobaeus, apparatus, manuscripts, florilegia, citations.

One of the most important sources for our knowledge of the material deriving from Aëtius is book 1 of Stobaeus's *Eclogae physicae*. The last critical edition of Stobaeus appeared more than a century ago (1884), edited by Curt Wachsmuth, *Ioannis Stobaei Anthologii libri duo priores qui inscribi solent Eclogae physicae et ethicae*.² This edition is supplemented (especially for ms. L) by Wachsmuth's earlier studies, which are collected in his *Studien zu den griechischen Florilegien*.³ Wachsmuth's 1884 edition is the oldest edition that must be used for the reconstruction of Aëtius, and so in order to test the reliability of Wachsmuth's edition it seemed worthwhile to check some sample passages of the manuscripts involved.⁴ For such an investigation it is fortunate that the manuscript basis is fairly limited.

¹ I would like to thank David T. Runia and Jaap Mansfeld for their advice and suggestions throughout this research.

² Wachsmuth (1884). Vol. 1 contains lengthy prolegomena and the text of Book 1 of Stobaeus, within which all of the material relevant to Aëtius occurs. Vol. 2 then contains the text of Book 2 of Stobaeus.

³ Wachsmuth (1882).

⁴ This was done at the suggestion of David T. Runia.

The three manuscripts that were examined are:⁵

- F Neapolitanus III D 15 (Farnesinus), 14th century⁶
- P Parisinus gr. 2129, 15th century⁷
- L Laurentianus Pluteus 8.22, 14th century⁸

F and P are manuscripts of Stobaeus's work, and according to Wachsmuth the other extant manuscripts of Stobaeus derive from F and P.⁹ Thus, an examination of them is adequate to check the direct tradition of Stobaeus. On the other hand, L is not actually a manuscript of Stobaeus, but has preserved substantial material from it, including material not found in the direct tradition, i.e., in F and P.

1. Passages to check.

The relevant material here is, of course, the text and titles that derive from (or, at least, may reasonably be thought to derive from) Aëtius. The material to be checked in these manuscripts is of two sorts, the text of various sections and various titles:

1. The text of various sections. These include the extended sections 1.10 and 1.26 (which are found in F and P, but not in L), as well as all the relevant sections found in L (some but not all of which occur also in F and P), which are listed below. All the passages were examined in all three manuscripts (that is, in so far as they exist there), so that we can have additional points of comparison. The sections that were checked are:

Ecl. 1.10 (Wachsmuth, 1:118.18–130.20)

Ecl. 1.13 (Wachsmuth, 1:137.8–140.9)

Ecl. 1.23 (Wachsmuth, 1:200.13–201.20)

Ecl. 1.26, 1^a–5 (Wachsmuth, 1:217.18–223.23)

Ecl. 1.31.1–5 (Wachsmuth, 1:242.19–243.21)

Ecl. 1.38.1–9 (Wachsmuth, 1:252.7–253.21)

Ecl. 1.50.1–35 (Wachsmuth, 1:472.7–477.19)

Ecl. 1.51.2–4 (Wachsmuth, 1:481.17–482.8)

⁵ See Mansfeld and Runia (1997) 198–199.

⁶ Cirillo, (1832) 338–339; Wachsmuth (1884) 1:xxvi; Wachsmuth (1882) 59.

⁷ Omont (1888) 198; Wachsmuth (1884) 1:xxvii.

⁸ Bandini (1764) 367–370; Wachsmuth (1884) 1:xxviii. The signature of this ms. was 'VIII 22,' and is so cited by Wachsmuth and others; however, the official signature is now '8.22.'

⁹ Wachsmuth (1884) 1:xxv–xxx; Wachsmuth (1882) 58–71.

Ecl. 1.52.1–8, 10–18 (Wachsmuth, 1:483.7–484.13; 484.23–486.17)

Ecl. 1.53.1–4 (Wachsmuth, 1:491.8–19)

Ecl. 1.54.1–2 (Wachsmuth, 1:492.13–19)

2. The relevant titles as found in L, which are listed below.

2. The manuscripts

F and P are straightforward witnesses to Stobaeus's work, and thus require no special discussion. L, however, is a very complex manuscript, and so a look at its structure is in order.¹⁰

The text of L occupies ff. 1–189. Preceding f. 1 are two recent folios and an older one, and following f. 189 are again two recent folios. On the older cover page, f. III^v, i.e., the verso of the folio proceeding f. 1, is the following description, written by Antonio Sarti:

Sententias profanorum Scriptorum, praesertim ineditas, ex hisce Ioannis Damasceni
Parallelis excerpsi, descripsi, ac Davidi Ruhnkenio Professori Batavo novam Stobaei
editionem molienti transmittendas curavi ego Antonius Sarti Canonici Basilicae
Laurentianae, die X^oX^oV^oI^o. Iunii ann. M^oD^oC^oC^oL^oX^oX^oI^o.¹¹

The planned edition by Ruhnken never appeared.¹² Sarti's notes were kept at the Library of the University of Leiden, and were utilized (indirectly) in Gaisford's edition of Stobaeus, who included a long appendix on L's readings.¹³ Similarly, these notes formed the basis of a long appendix to Meineke's edition of Stobaeus, which provides a collation of L against the edited text.¹⁴ These two appendixes are very similar.

The text of L contains the remnants of three separate florilegia. The first two of these were recensions of the vast *Sacra parallela*, which is attributed to John of Damascus.¹⁵ This work consisted of citations from Scripture, early Church fathers, Philo, and Josephus. This material was, it seems, arranged in

¹⁰ An overview of the manuscript is found in Ihm (2001) lxiv–lxvi. Curnis (2008) 251–267 has some observations on the use of L in the reconstruction of Stobaeus by editors from Gaisford to Wachsmuth.

¹¹ Wachsmuth (1882) 1, cites this with (surprisingly) some small changes.

¹² Wachsmuth (1882) 1.

¹³ Gaisford (1822) 1:viii–ix, and 4:1–80 ('Appendix ex cod. ms. Florentino Parallelorum sacrorum Ioannis Damasceni,' separately paginated).

¹⁴ Meineke (1855–57) 4:45–46 ('Appendix ex cod. ms. Florentino Parallelorum sacrorum Ioannis Damasceni'). (Wachsmuth (1882) 1, says vol. 2.)

¹⁵ See the overview by Wachsmuth (1882) 2, as well as Holl (1896) 44–45.

three books: the first on God, the second on man, and the third on virtues and vices. The first two books were arranged alphabetically, while the third was arranged in parallel chapters. The original work has not survived intact, but various extracts and recensions of it are found in several dozen manuscripts.¹⁶ Wachsmuth's own studies can be supplemented by the very detailed analysis of the manuscripts of the *Sacra parallela* by Karl Holl,¹⁷ and by the authoritative discussion of the florilegia by Marcel Richard.¹⁸ The citations found in these manuscripts preserve texts that are often of great value for the textual criticism of the authors cited, including texts from lost works.¹⁹

The arrangement of the three florilegia, from which material is found in L, is (roughly) alphabetical, following the arrangement in the first two books of the original *Sacra parallela*. Each citation was placed within a chapter that was devoted to a specific topic (some of these are cited below). These topics were then organized more or less alphabetically by its main term, and the chapters were then placed into groups according to the first letter of those terms, i.e., the stoicheia. Thus, all the chapters devoted to topics that began with the letter A would be placed under the stoicheion A, and so on. The chapter titles were then often collected together into what is called a pinax.²⁰

These three portions of L are:²¹

1. ff. 1^r–45^v: a portion of a recension of the *Sacra parallela* in a form similar to that found in Codex Rupefucaldinus (now Berolinensis Phillippicus 1450). This is called the 'Florilegium L^a' by Holl.²²

ff. 1^r–8^v: a pinax with the titles for stoicheia A–Ω. The first extant title is in fact A κβ':

Περὶ ἀνθρωπαρέσκων, καὶ προσποιητῶς καὶ ὑποούλως διακειμένων. The earlier titles evidently appeared on the preceding page, probably preceded by a preface.²³

ff. 9^r–45^v: the chapters for titles A α'–A κζ' (misnumbered as κη'; see f. 1^r).

¹⁶ The website of the Institut de recherche et d'histoire des textes in Paris (www.pinakes.cnrs.fr) lists 39 mss. as containing some portion of the *Sacra parallela*.

¹⁷ Holl (1896).

¹⁸ Richard (1964).

¹⁹ There is accordingly a considerable literature devoted to the study of the various manuscripts of the *Sacra parallela* and of the later florilegia that derive from it. Scholars of Philo of Alexandria have been especially diligent in collecting the citations from Philo; see my Royse (1991) 26–58, for a discussion of the material, and for some of the problems in its use, notably the creation of spurious fragments through errors in the lemmata.

²⁰ What such a pinax looked like may be conveniently seen in M. Le Quien's edition of Vaticanus gr. 1236, reprinted in MPG 95:1045–70, and in his (very limited) edition of Codex Rupefucaldinus, reprinted in MPG 96:441–63.

²¹ Wachsmuth (1882) 2, says that it is 'divisus in partes quattuor,' namely what Holl calls L^a, L^b, and the two portions of L^c.

²² Holl (1896) 42–68; Richard (1964) 482.

²³ One can see the prefatory material from Vaticanus gr. 1236 in Le Quien's edition, reprinted in MPG 95:1039–44.

2. ff. 46^r–73^v: a portion of another recension of the *Sacra parallela*, which is also preserved in Parisinus gr. 923 and Marcianus gr. Z. 138 (= 596).²⁴ Hence this recension is called the ‘Florilegium PML^b’ by Holl.²⁵

ff. 46^r–51^r: the title of the work,²⁶ followed by a pinax with the titles for stoicheia A–Ω.

f. 51^v: some graffiti.

ff. 52^r–73^v: the chapters for titles A α’–A μγ’.

3. ff. 74^r–189^v: several portions of yet another florilegium, called the ‘Florilegium L^c’ by Holl,²⁷ and the ‘Florilegium Laurentianum’ by Richard.²⁸ This florilegium was composed from several disparate sources: one or more recensions of the *Sacra parallela* (Richard says that the Florilegium Hierosolymitanum was a source, and perhaps the only recension used), the interpolated Pseudo-Maximus (yet another florilegium), extracts from Aelian’s *De animalibus*, and (what is of special interest in the present context) extracts from Stobaeus.²⁹ The surviving portions consist of three sections, which are disarranged. The remains indicate that the original florilegium was found in two volumes, the first containing the stoicheia A–M, preceded by the list of chapter titles for those stoicheia (i.e., its pinax), and the second containing the stoicheia N–Ω, preceded by its pinax.³⁰ These ‘disiecta membra corporis gnomologici,’ as Wachsmuth calls them,³¹ are currently arranged as follows:

ff. 74^r–125^v: the chapters for titles N α–Π ε’. We have here, presumably, the opening portion of the second volume of the original florilegium. Here again many of the chapter titles seem to have disappeared, along with the initial letters (left to be rubricated) of the various texts. Unfortunately, the pinax containing these chapter titles has not survived. However, Wachsmuth (1882) 41–43, reconstructs the original chapter titles, using the texts and the chapter titles found in the various sources of the florilegium.

²⁴ The latter ms. is usually cited in the literature simply as ‘Marcianus gr. 138.’ However, the current shelfmark combines the eighteenth-century number (deriving from Zanetti) with the nineteenth-century number, which was previously cited with ‘coll.’ (i.e., ‘collocazione’).

²⁵ Holl (1896) 68–114; Richard (1964) 482–83.

²⁶ Βίβλος περιέχουσα τὰ τῶν παραλλήλων κεφάλαια ἐκ τῆς θείας γραφῆς συλλεγέμενα καὶ συνταχθέντα κατὰ στοιχείον παρὰ τοῦ ἁγίου ἰωάννου τοῦ δαμασκηνοῦ. The quotation by Bandini (1764) 368B, differs from the actual text in capitalizing a few words and in adding a comma. On the other hand, the citation by Wachsmuth (1882) 2, incorrectly has συλλεγέντων and συνταχθέντων, and omits παρὰ.

²⁷ Holl (1896) 139–59.

²⁸ Richard (1964) 495.

²⁹ See Wachsmuth (1882) 2; Richard (1964) 495. For further discussion see Di Lello-Finuoli (1967).

³⁰ Moreover, the chapters were arranged alphabetically according to the first *two* letters of the key term.

³¹ Wachsmuth (1882) 2.

ff. 126^r–134^r: the list of chapter titles (i.e., the pinax) for the stoicheia A–M. We have here, presumably, the pinax of the first volume of the original florilegium. These pages are written in two columns, and are found in Wachsmuth (1882) 5–37.

ff. 134^v–189^v: the chapters for titles A α'–A μδ', i.e., the first 44 chapters for the stoicheion A. We have here, presumably, the opening portion of the first volume of the original florilegium. Here many (all?) of the chapter titles seem to have disappeared, along with the initial letters (left to be rubricated) of the various texts. Naturally, what the chapter titles were is known from the surviving pinax.

3. The material from Aëtius

Of course, from all this material, what is relevant for our purposes is what derives from Aëtius, almost all of which is found in book 1 of Stobaeus.³² Corresponding to the two sorts of material found in L, there are two sorts of material to be checked here: the places where L preserves chapters of Stobaeus that include texts deriving from Aëtius, and the places where L preserves titles that derive from Aëtius.

Wachsmuth gives a list of the chapters of Stobaeus that are found in L.³³ Of these, the material from Aëtius is the following:

Ecl. 1.13 (Wachsmuth, 1:137.8–140.9)

= L, ff. 165^v 28–166^v 32; chapter A κθ' (Περὶ αἰτίων).³⁴

Ecl. 1.23 (Wachsmuth, 1:200.13–201.20)

= L, f. 111^v 11–26; chapter O ιε' (Περὶ τῆς οὐρανοῦ οὐσίας καὶ διαίρεσεως).

Ecl. 1.31.1–5 (Wachsmuth, 1:242.19–243.21)

= L, ff. 90^r 32–90^v 11; chapter N ζ' (Περὶ νεφῶν ὁμίχλης ὑετῶν δρόσου χιόνος πάχνης χαλάζης).³⁵

Ecl. 1.38.1–9 (Wachsmuth, 1:252.7–253.21)

= L, f. 182^r 16–35; chapter A λη' (Πῶς ἀμπώτιδες καὶ πλήμμυραι γίνονται).³⁶

Ecl. 1.50.1–35 (Wachsmuth, 1:472.7–477.19)

³² Mansfeld and Runia (1997) 198; a 'few scraps' are found in book 4.

³³ Wachsmuth (1884) 1: xv.

³⁴ Wachsmuth correctly notes that 'inscriptionem om. L,' i.e., within the text of the chapter itself; however, the title is found in the pinax (f. 126^r).

³⁵ L omits πάχνης, which is found in Photius. (The word was omitted at a line break.) Also, L in fact reads ἱετῶν for ὑετῶν.

³⁶ This is the title as printed by Wachsmuth, who notes that 'titulum om. FP et L.' I.e., L omits the title within the text of the chapter itself. In the pinax (f. 126^v) L has: Περὶ τοῦ πῶς ἀμπωτὶς καὶ πλημμύραι [sic] γίνονται. That L prefixes περὶ τοῦ is correctly noted by Wachsmuth. He had earlier ((1882) 8) cited the title as having ἀμπωτὶς. But he prints ἀμπώτιδες from ps.Plutarch, *Placita*, 3.17.

= L, ff. 164^r 6–164^v 29; chapter A κζ' (Περὶ αἰσθήσεως καὶ αἰσθητῶν καὶ εἰ ἀληθεῖς αἱ αἰσθήσεις).³⁷

Ecl. 1.51.2–4 (Wachsmuth, 1:481.17–482.8)

= L, f. 165^v 5–10; chapter A κη' (Πόσαι εἰσὶν αἱ αἰσθήσεις καὶ ποίας οὐσίας καὶ ἐνεργείας ἐκάστη).³⁸

Ecl. 1.52.1–8, 10–18 (Wachsmuth, 1:483.7–484.13; 484.23–486.17)

= L, ff. 110^r 4–19, 110^r 23–110^v 11; chapter O ιδ' (Περὶ ὁράσεως καὶ κατοπτρικῶν ἐμφάσεων).³⁹

Ecl. 1.53.1–4 (Wachsmuth, 1:491.8–19)

= L, f. 166^v 1–6; chapter A λ' (Περὶ ἀκοῆς).⁴⁰

Ecl. 1.54.1–2 (Wachsmuth, 1:492.13–19)

= L, f. 111^v 27–31; chapter O ις' (Περὶ ὁσφρήσεως).⁴¹

The titles in L for the stoicheia A–M, as found at ff. 126^r–134^r, are edited by Wachsmuth (1882) 5–37. Of these the relevant ones are the following. Note that (as Wachsmuth (1882) 5 n. 1, says) at the end of almost all of these titles is found ἐν ᾧ κεφάλαια (with the last word written with a compendium); following his example, I have not repeated those words.

1. A κζ' Περὶ αἰσθήσεως καὶ αἰσθητῶν καὶ εἰ ἀληθεῖς αἱ αἰσθήσεις
L, f. 126^r B 24–25 = Stobaeus, *Ecl.* 1.50 (Wachsmuth, 472, 4–5)
Wachsmuth (1882) 7.
2. A κη' Περὶ τῶν αἰσθήσεων πόσαι εἰσὶν καὶ ποίας οὐσίας καὶ ἐνεργείας ἐκάστη
L, f. 126^r B 26–27 = Stobaeus, *Ecl.* 1.51 (Wachsmuth, 481, 2–3)
Wachsmuth (1882) 7.
3. A κθ' Περὶ αἰσθητῶν
L, f. 126^r B 28 = Stobaeus, *Ecl.* 1.13 (Wachsmuth, 137, 8)
Wachsmuth (1882) 7.
4. A λ' Περὶ ἀκοῆς
L, f. 126^r B 29 = Stobaeus, *Ecl.* 1.53 (Wachsmuth, 491, 6)
Wachsmuth (1882) 7.
5. A λη' Περὶ τοῦ πῶς ἄμπωτις καὶ πλημμύραι γίνονται

³⁷ The title is found in the pinax of L (f. 126^r).

³⁸ The title is found in the pinax of L (f. 126^r).

³⁹ This title is taken from Photius.

⁴⁰ The title is found in the pinax of L (f. 126^r).

⁴¹ L has, as Wachsmuth notes, the title: Περὶ ὁσφρήσεων. Wachsmuth follows Photius.

L, f. 126^v A 15–16 = Stobaeus, *Ecl.* 1.38 (Wachsmuth, 252, 5)

Wachsmuth (1882) 8.

6. A ν' Περὶ ἀνάγκης θείας, καθ' ἣν ἀπαραιτήτως τὰ κατὰ τὴν τοῦ θεοῦ γίνεται
βούλησιν

L, f. 126^v B 6–7 = Stobaeus, *Ecl.* 1.4 (Wachsmuth, 70, 15–16)

Wachsmuth (1882) 9.

7. A νβ' Περὶ ἀνέμων

L, f. 126^v B 9 = Stobaeus, *Ecl.* 1.32 (Wachsmuth, 248, 2)

Wachsmuth (1882) 9.

8. A νγ' Περὶ ἀναπνοῆς καὶ παθῶν

L, f. 126^v B 10 = Stobaeus, *Ecl.* 1.60 (Wachsmuth, 499, 17)

Wachsmuth (1882) 9.

9. A π' Περὶ ἀρχῶν καὶ στοιχείων τοῦ παντός

L, f. 127^r B 15 = Stobaeus, *Ecl.* 1.10 (Wachsmuth, 118, 18)

Wachsmuth (1882) 11.

10. A πς' Περὶ ἀστρῶν οὐσίας καὶ σχημάτων κινήσεως τε καὶ ἐπισημασίας

L, f. 127^r B 27–28 = Stobaeus, *Ecl.* 1.24 (Wachsmuth, 201, 22–23)

Wachsmuth (1882) 11.

11. A ρδ' Περὶ ἀφροδίτης οὐρανίας καὶ ἔρωτος θείου

L, f. 127^v A 11 = Stobaeus, *Ecl.* 1.9 (Wachsmuth, 111, 9)

Wachsmuth (1882) 12.

12. B ις' Περὶ βροντῶν ἀστραπῶν κεραυνῶν πρηστήρων τυφῶνων

L, f. 128^v A 20–21; = 1.29 (Wachsmuth, 231, 10–11)

Wachsmuth (1882) 16.

13. Γ η' Περὶ γάλακτος

L, f. 128^v B 22; = 1.27 (Wachsmuth, 225, 21)

Wachsmuth (1882) 17.

14. Γ θ' Περὶ γενέσεως καὶ φθορᾶς

L, f. 128^v B 23 = Stobaeus, *Ecl.* 1.20 (Wachsmuth, 170, 2)

Wachsmuth (1882) 17.

15. Γ ι' Περὶ τῆς γενέσεως τῶν ζώων· ἐν ᾧ καὶ ταῦτα· Περὶ συλλήψεως· Περὶ τοῦ
εἰ σώμα τὸ σπέρμα· Εἰ καὶ θήλεια προίενται τὰ σπέρματα· Ἐν πόσῳ
χρόνῳ διαρθροῦται τὸ ἔμβρυον· Ἀπὸ ποίου ἄρχεται μορίου
μορφοῦσθαι τὸ ἔμβρυον· Πῶς ἄρα γεννᾶται καὶ θήλεα· Πῶς τέρατα
γίνεται· Πόθεν γίνονται τῶν γονέων αἱ ὁμοιώσεις ἢ τῶν προγόνων·
Πῶς ἄλλοις ὅμοιοι γίνονται οἱ γεννώμενοι καὶ οὐ τοῖς γονεῦσι· Διατί
πολλάκις γυνὴ συνουσιάζουσα οὐ συλλαμβάνει· Περὶ στειρῶν
γυναικῶν καὶ ἀνδρῶν· Διαιτί αἱ ἡμίονοι στεῖραι· Πῶς δίδυμα γίνεται
καὶ τριδίδυμα· Εἰ τὸ ἔμβρυον ζῶν· Πῶς τρέφεται τὰ ἔμβρυα· Τί

πρώτον τελεσιουργεῖται ἐν τῇ γαστρί· Διατί τὰ ἐκταμηνιαία γόνιμα·
Περὶ ζώων γενέσεως, πῶς ἐγένοντο ζῶα καὶ φθαρτά

L, f. 128^v B 24–129^r A 10 = Stobaeus, *Ecl.* 1.42 (Wachsmuth, 294, 2; 295, 3–15; 296, 6–17)

Wachsmuth (1882) 17; see also 76–77.⁴²

16. Γ ια' Πόσα γένη ζώων καὶ εἰ πάντα λογικὰ καὶ αἰσθητά· ἐν ᾧ καὶ ταῦτα· Ἐν πόσῳ χρόνῳ μορφοῦνται τὰ ζῶα ἐν γαστρὶ ὄντα· Ἐκ ποίων στοιχείων ἕκαστον συνίσταται τῶν ἐν ἡμῖν γενικῶν μερῶν· Πότε ἄρχεται ἄνθρωπος τῆς τελειότητος

L, f. 129^r A 11–15 = Stobaeus, *Ecl.* 1.43 (Wachsmuth, 297, 2–3)

Wachsmuth (1882) 17–18; see also 77.⁴³

17. Γ ιβ' Περὶ γεύσεως

L, f. 129^r A 16 = Stobaeus, *Ecl.* 1.55 (Wachsmuth, 494, 3)

Wachsmuth (1882) 18

18. Γ ις' Περὶ γῆς, εἰ μία καὶ πεπερασμένη καὶ ποίου μεγέθους καὶ περὶ θέσεως αὐτῆς

L, f. 129^r A 24–25 = Stobaeus, *Ecl.* 1.33 (Wachsmuth, 248, 13–14)

Wachsmuth (1882) 18.

19. Γ ιζ' Περὶ σχήματος γῆς

L, f. 129^r A 26 = Stobaeus, *Ecl.* 1.34 (Wachsmuth, 248, 17)

Wachsmuth (1882) 18.

20. Γ ιη' Περὶ τοῦ πότερα μένει ἡ γῆ ἢ κινεῖται

L, f. 129^r A 27 = Stobaeus, *Ecl.* 1.35 (Wachsmuth, 248, 20)

Wachsmuth (1882) 18.

21. Γ ιθ' Περὶ σεισμῶν γῆς

L, f. 129^r A 28 = Stobaeus, *Ecl.* 1.36 (Wachsmuth, 249, 3)

Wachsmuth (1882) 18.

22. Δ ζ' Περὶ τοῦ ὅτι ὁ θεὸς δημιουργὸς τῶν ὄντων καὶ διέπει τὸ ὅλον τῷ τῆς προνοίας λόγῳ καὶ ποίας οὐσίας ὑπάρχει

L, f. 129^v A 15–17 = Stobaeus, *Ecl.* 1.1 (Wachsmuth, 23, 2–4)

Wachsmuth (1882) 20.

⁴² Wachsmuth follows Elter (1880) 73–74, who shows that this long title has been interpolated into L's pinax from ps.Plutarch, *Placita*, 5.11–19. See Mansfeld-Runia (1997) 267.

⁴³ As with the preceding title, Wachsmuth follows Elter in seeing this long title as an interpolation into L's pinax from ps.Plutarch, this time from *Placita*, 5.20–23. See again Mansfeld-Runia (1997) 267.

23. Δ λ' Περὶ δίκης παρὰ θεοῦ τεταγμένης ἐποπτεύειν τὰ ἐπὶ γῆς γινόμενα ὑπὸ
τῶν ἀνθρώπων τιμωροῦ οὔσης τῶν ἀμαρτανόντων
L, f. 130^r A 8–10 = Stobaeus, *Ecl.* 1.3 (Wachsmuth, 52, 17–19)
Wachsmuth (1882) 22.
24. Δ λδ' Περὶ δόξης
L, f. 130^r A 20 = Stobaeus, *Ecl.* 1.59 (Wachsmuth, 498, 2)
Wachsmuth (1882) 22.
25. Ε ζ' Περὶ εἰμαρμένης καὶ τῆς τῶν γινομένων εὐταξίας
L, f. 130^v A 15–16 = Stobaeus, *Ecl.* 1.5 (Wachsmuth, 74, 10–11)
Wachsmuth (1882) 24.
26. Η β' Περὶ ἡλίου οὐσίας καὶ μεγέθους, σχήματός τε καὶ τροπῶν καὶ ἐκλείψεως
καὶ σημείων καὶ κινήσεως
L, f. 132^r A 12–14 = Stobaeus, *Ecl.* 1.25 (Wachsmuth, 207, 13–15)
Wachsmuth (1882) 29.
27. Θ α' Περὶ θαλάσσης· ἐν αὐτῷ καὶ περὶ ναυτιλίας καὶ ναυαγίου, καὶ διάφορα
περὶ τῶν κατὰ θάλασσαν, καὶ τῶν ἔξω σοφῶν δόξαι περὶ θαλάσσης
πῶς συνέστη καὶ πῶς ἐστὶ πικρά
L, f. 132^r A 24–28; Stobaeus, *Ecl.* 1.37 (Wachsmuth, 252, 2)
Wachsmuth (1882) 29; as in L.
28. Ι γ' Περὶ ἰδεῶν
L, f. 132^v A 1 = Stobaeus, *Ecl.* 1.12 (Wachsmuth, 134, 7)
Wachsmuth (1882) 31.
29. Ι ζ' Περὶ ἱριδος, περὶ ἄλλω καὶ παρηλίου καὶ ῥάβδων
L, f. 132^v A 12–13 = Stobaeus, *Ecl.* 1.30 (Wachsmuth, 238, 21)
Wachsmuth (1882) 31.
30. Κ θ' Περὶ κενοῦ καὶ τόπου καὶ χώρας
L, f. 132^v B 22 = Stobaeus, *Ecl.* 1.18 (Wachsmuth, 155, 16)
Wachsmuth (1882) 32.
31. Κ ι' Περὶ κινήσεως
L, f. 132^v B 23 = Stobaeus, *Ecl.* 1.19 (Wachsmuth, 162, 2)
Wachsmuth (1882) 32.
32. Κ ιγ' Περὶ κόσμου καὶ εἰ ἔμψυχος καὶ προνοία διοικούμενος καὶ ποῦ ἔχει τὸ
ἡγεμονικὸν καὶ πόθεν τρέφεται
L, f. 132^v B 29–31 = Stobaeus, *Ecl.* 1.21 (Wachsmuth, 181, 16–18)
Wachsmuth (1882) 32.
33. Κ ιδ' Περὶ κόσμου τάξεως· ἐν αὐτῷ καὶ τάδε· Εἰ ἔν τὸ πᾶν· Ἀπὸ ποίου πρώτου
στοιχείου ἤρξατο κοσμοποιεῖν ὁ θεός· Τίς ἡ αἰτία τοῦ τὸν κόσμον
ἐγκλιθῆναι· Εἰ ἔστι κενὸν ἐκτὸς τοῦ κόσμου· Τίνα δεξιὰ τοῦ κόσμου
καὶ τίνα ἀριστερά

L, f. 133^r A 1–6 = Stobaeus, *Ecl.* 1.22 (Wachsmuth, 195, 2; 198, 18)

Wachsmuth (1882) 32–33; see also 74–75.

34. K ιε' Περὶ κομητῶν καὶ διαττόντων καὶ τῶν τοιούτων

L, f. 133^r A 7–8 = Stobaeus, *Ecl.* 1.28 (Wachsmuth, 227, 5–6)

Wachsmuth (1882) 33.

35. M ι' Περὶ μίξεως καὶ κράσεως

L, f. 133^v B 13 = Stobaeus, *Ecl.* 1.17 (Wachsmuth, 152, 2)

Wachsmuth (1882) 35.

Now, the remaining titles (that is, those for the chapters N α–Π ε-) are, for the most part, reconstructed. Some of the titles are found in the text of L, but at most places they are missing, although a blank space of a few lines is left. What seems to have happened is that the titles were left to be rubricated later (or by another scribe), but the rubrication never occurred, perhaps because the titles had already been listed in the pinax.⁴⁴

36. N ζ' Περὶ νεφῶν, ὀμίχλης, ἱετῶν, δρόσου, χιόνος, χαλάζης

L, f. 90^r, 32–33 = Stobaeus, *Ecl.* 1.31 (Wachsmuth, 242, 19–20)

Wachsmuth (1882) 41.

37. O ιδ' Περὶ ὀράσεως καὶ κατοπτρικῶν ἐμφάσεως

missing after L, f. 110^r, 3 = Stobaeus, *Ecl.* 1.52 (Wachsmuth, 483, 5)

Wachsmuth (1882) 43; not in L.

38. O ιε' Περὶ τῆς οὐρανοῦ οὐσίας καὶ διαιρέσεως

missing after L, f. 111^v, 10 = Stobaeus, *Ecl.* 1.23 (Wachsmuth, 200, 13)

Wachsmuth (1882) 43; not in L.

39. O ις' Περὶ ὀσφρήσεων

L, f. 111^v, 26 = Stobaeus, *Ecl.* 1.54 (Wachsmuth, 492, 11)

Wachsmuth (1882) 43.⁴⁵

⁴⁴ See Holl, *Sacra parallela*, 42–43, who states that the rubricator is without doubt identical with the scribe.

⁴⁵ Note that here Wachsmuth cites the title as περὶ ὀσφρήσεως. He is there following the reading found in Photius; see the apparatus of his edition of Stobaeus, where he correctly notes that L has ὀσφρήσεων.

4. Results of examination

My study of the three manuscripts consisted of the examination of P and F at Paris and Naples, respectively, and L first through the excellent digital images⁴⁶ and then during an examination of selected passages (including any places where the images left any doubt) in Florence. While I did not, of course, give the attention to these manuscripts that would be required for an actual critical edition, I am confident about the results as reported here.

Let me report first on the titles as found in L, and then on the various sections as found in F, P, and L. In the collations, 'W.' stands for 'Wachsmuth,' and unless otherwise noted refers to his 1884 edition of Stobaeus. And note that I use L* and P* for the original reading of L and P, and L^{corr} and P^{corr} for the correction.

4.1. The titles in L.

The discrepancies that I found are:

- #15. θήλεια W. : θήλειαι L
 ἐκταμηνιαία W. : ἐπταμηνιαία L
- #22. θεός W. : ὁ θεός L
- #33. τάδε W. : τάδὲ L*, τάδε L^{corr}
- #36. ὑετῶν W. (Ecl. 242.19), ὑετοῦ W. (Wachsmuth (1882) 41) : ἱετῶν L

Note that for #39 Wachsmuth (1882) 43, has ὁσφρήσεως (as, according to Henry, in Photius), but in the apparatus to his edition of Stobaeus correctly notes that L has ὁσφρήσεων.

4.2. The sections in F, P, and L.

Here is a list of what seem to me to be among the most interesting of the discrepancies that were found.⁴⁷

They are cited according to Wachsmuth's edition.

- W. 120.12: ὁμομήτορα : ὁμομητέρα F P* (P^{corr} ὁμομητόρα) (W. cites P* for ὁμομήτερα)
- W. 120.16: θεοῖς : θεός F (W. says θεοὶ)
- W. 121.4: ὁ : ὅ P (W. says οὐ)
- W. 123.4: δ' : δὲ F (W. misses)
- W. 123.5: δ' : δὲ P (W. misses)
- W. 125.15: ἀμετέρα : ἀμέτερα F (W. misses this for F; correctly cites it for P)
- W. 127.4: οὔσα : οὔσαι F (W. says οὔσαι [I give this as one example where accents are incorrectly cited])
- W. 128.6–7: γενητῶν : γεννητῶν F P (W. misses)
- W. 128.14: οἱ μὲν οὔν : ὁ μὲν P (W. correctly reports the omission of οὔν, but misses the ὁ)

⁴⁶ These are available on the website of the Biblioteca Laurenziana (mss.bmlonline.it).

⁴⁷ Of course, a lot of these are textual minutiae. But much of what is reported by Wachsmuth is textual minutiae.

- W. 129.22: γίγνεται : γίνεαι F (W. misses)—one of quite a few such examples
- W. 130.5: τέσσαρα : τέτταρα F P (W. misses)
- W. 138.10: λέγοντα : λέγονται F P* (P^{corr} λέγοντα) (W. just says that P has λέγονται;
so he misses the reading in F and the correction in P)
- W. 139.3: τὸν : τὸν F (with no correction) (W. says τὸν was corrected from τήν)
- W. 201.4: γενητὸν : γεννητὸν F (W. misses)
- W. 201.13: δὲ ἀντ. : δ' ἀντ. F P (W. misses)
- W. 220.12: συμβαίνειν : συμβαίνει P (W. misses)
- W. 221.17: δ' : δὲ P (W. misses)
- W. 222.1: δὲ : δ' F (W. misses)
- W. 222.20: ἀστέρα : ἀέρα P (just as at 222.16) (W. misses)
- W. 243.5: W. here cites F P, although neither has this material; 'FP' should just be
'L.'
- W. 472.16: W. φιλήβω : φιλήμω L (W. misses)
- W. 472.19: W. δὲ : δὴ L (W. misses)
- W. 473.15: δὲ : om. P (W. misses)
- W. 476.15: W. παρὰ : περὶ L (W. says παρὰ)
- W. 476.16: W. παρὰ : περὶ L (W. says παρὰ)
- W. 482.3: συμβάλλουσιν : βάλλουσιν P (W. misses)
- W. 484.10: W. εὐδιάχυτον : ἀδιάχυτον L (W. misses)
- W. 484.11: W. συνεντεινομένου : συνεντεινομένου F P L (this is a misprint in the text of
W.; note that Meineke [1:357.7–8] has συνεντεινομένου)
- W. 492.16–17: W. πνεύματος : πνευμονος L (sic, no accent) (W. misses)

4.3. Other manuscripts of Stobaeus

Although Wachsmuth asserts that all the other manuscripts of Stobaeus derive from F and P, and thus presumably can be ignored, there are occasional references to some other manuscripts (besides, of course, L, which is cited but is not properly a manuscript of Stobaeus). In fact, these references are rather puzzling. In the material that I checked these other manuscripts are called a codex Vaticanus (or just 'Vat.') and a codex Augustanus (or just 'Aug.'). The latter would be a manuscript now in Munich. One might think that Wachsmuth would explain these references somewhere in the edition, but I have looked in vain for any such explanation. However, in his (earlier) *Studien* Wachsmuth cites a statement by an earlier editor, Arnold Hermann Ludwig Heeren, who refers to these manuscripts (but again without numbers).⁴⁸ Later in the *Studien* Wachsmuth asserts that both these manuscripts (the 'Vaticanus'

⁴⁸ Wachsmuth (1882) 58, citing Heeren (1792–1801) 1:xliv–xlv. On Heeren's edition see Mansfeld and Runia (1997) 44–48.

and, through a misprint, the ‘Augustinus’) derive from F (and can thus, presumably, be ignored).⁴⁹ Now, Heeren elsewhere in his preface does inform us that the Vatican manuscript is in fact Vaticanus gr. 201.⁵⁰ But Heeren calls the other manuscript simply ‘Augustanus.’⁵¹ Fortunately, though, it is straightforward to discover that it is now Monacensis gr. 396.⁵²

In fact, it seems that Wachsmuth’s citations of these two mss. are simply taken from earlier editions, namely those of Heeren and Gaisford.⁵³ In any case, I checked the Munich manuscript (i.e., Aug.) at the places where it is cited in Wachsmuth’s edition over the material that I examined in F, P, and L. Here are the citations:

- W. 125.13: ἐπεφθέγγοντο : W edits this instead of ἐπιφθέγγοντο (FP) or ἐφθέγγοντο (ps.Plutarch, *Placita*, 1.3), and says ‘corr. Aug.’ Aug. in fact has ἐπεφθέγγοντο (sic). (Heeren cites Vat. for ἐπεφθέγγοντο; Gaisford cites Vat. and Aug. for ἐπεφθέγγοντο.)
- W. 128.11–12: κατ’ ἀριθμὸν : W edits this but notes that Aug. has κατὰ τὸν ἀριθμὸν, as indeed it does. (Heeren also edits κατ’ ἀριθμὸν, and then cites simply ‘l. κατὰ τὸν ἀριθμὸν’; Gaisford edits κατὰ τὸν ἀριθμὸν, citing Aug.)
- W. 138.10: τό τε ἐξ οὗ : W. says that Vat. and Aug. omit τε, but in fact Aug. reads τε as in W.’s text. (Heeren cites Vat. as omitting τε; Gaisford cites Vat. and Aug. as omitting τε.)
- W. 139.12: <Οἱ> Στωϊκοὶ : W. says that Vat. and Aug. have this entire phrase, and at least Aug. has it. But then should the brackets be present? (Heeren says that ‘οἱ recte addunt’ Vat. and Aug. ; Gaisford also cites Vat. and Aug. as having Οἱ στωϊκοί.)
- W. 140.2: ὦν : W. cites ὦν from FP and ὦν from L, but then cites ὦν from Aug., which he follows. In fact, though, Aug. has ὦν, just as F. (Heeren edits ὦν with a note to the effect that Vat. and Aug. have ὦν; Gaisford edits ὦν with no note at all.)
- W. 221.15: μηνιαίους : W. notes that Gaisford reads μηνιαίας ‘ex Aug.’ Indeed, this is the reading of Aug., which Gaisford edits, citing Aug. (Heeren cites Aug. for μηνιαίας.)

⁴⁹ Wachsmuth (1882) 71.

⁵⁰ Heeren (1792–1801) 1:xxxiii; see further 1:xxxiii–xxxv for Heeren’s discussion of Vat.

⁵¹ Ibid., 1:xxxii–xxxiii.

⁵² The website of the Institut de recherche et d’histoire des textes in Paris (www.pinakes.cnrs.fr) lists this among 63 mss. as containing Iohannes Stobaeus’s ‘Anthologium.’

⁵³ The critical notes to Heeren’s text must be supplemented by the list of variant readings in his (1792–1801) 2.2:3–132. T. Gaisford (1850) 1:xiii, does not give the numbers of the manuscripts, which are cited as simply A. and V. We are, though, informed that A is ‘olim Augustanus, nunc Monacensis.’ Gaisford ((1850) 1:i) was able to examine the Munich manuscript, but seems to have relied on Heeren for the citations from the Vatican one.

W. 253.25–26: καὶ τοὺς χυλοὺς : This lies outside the material from Aëtius (it's in a passage attributed to Arius Didymus), but I checked it anyway. FP read κατὰ τοὺς χυλοὺς, but W. edits καὶ τοὺς χυλοὺς, citing it from Aug. And that is the reading. (Heeren cites Aug. for καὶ. which Gaisford edits, citing Aug.)

If Wachsmuth is correct in maintaining that Vat. and Aug. derive from F,⁵⁴ then presumably the correct readings found in those manuscripts arose through conjecture by the scribes. For example, at W. 139.12 the scribe of Aug. would have seen only τωῖκοι in F (with no article and the sigma left to be rubricated), and so would have added the article and the sigma by conjecture. That seems plausible enough. The other readings cited here perhaps also require nothing more than an alert scribe who is prepared to improve his text. On the other hand, it also seems possible that there has been some contamination from a textual tradition that is independent of F and P, and that preserved some authentic readings of Stobaeus.⁵⁵

5. Conclusions

The results of this examination may be summarized by stating that, on the one hand, Wachsmuth's work is very accurate, and at times shows a remarkable attention to the fine details of the manuscripts, but that, on the other hand, it does contain some errors in readings that are cited and failures to record readings that are (or at least seem to be) significant. A thorough investigation of the manuscripts would present a more accurate picture of the shortcomings. It should, of course, be kept in mind that the present examination looked at only a small portion of the text of Stobaeus. But it seems likely that our sample is nonetheless representative of whatever problems might exist in Wachsmuth's edition as a whole.

⁵⁴ Wachsmuth (1882) 71.

⁵⁵ Gaisford (1850) 1:1, says that Vat. and Aug. '[c]eteris fortasse minus vitiis inquinati sunt.'

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Theodoret as a Source for the Aëtian *Placita*¹

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Abstract. The role of Theodoret as a source for Aëtius has been questioned, or even denied, by Lebedev, Frede, Gourinat and Bottler. No one of course doubts that there must be a source P/S shared by ps.Plutarch and Stobaeus. But one can also prove in two steps that there must be a source T/S shared by Theodoret and Stobaeus. There are in fact 20 lemmata which Theodoret shares with Stobaeus, but are absent in ps.Plutarch, out of a total of about 100 lemmata which he records, i.e. about 20% of the whole. As a next step one can prove that the P/S source and the T/S source cannot be distinguished from each other so must be identical. This has not been done before. Diels' critics are refuted, and his original intuition that all three witnesses should be used to reconstruct a text of the *Placita* in a single column is vindicated. The fact that no one but Theodoret mentions Aëtius is due to the popularity of ps.Plutarch's epitome. It is perhaps a pity that the work was not attached to a famous name as in the case of the other work and the epitome by ps.Galen. It might then even have survived unscathed. Giving the author another name is rather futile and there are good grounds for adhering to the scholarly tradition initiated by Diels. A brief appendix discusses recent papers by Lebedev and Schubert.

Keywords: Aëtius, Theodoret, ps.Plutarch, Stobaeus, Clement of Alexandria, Eusebius, Hermann Diels, principle of least effort, quasi-chapter, blocks of chapters

1. Doubts concerning Theodoret's Role

In his monumental *Doxographi Graeci* of 1879 Hermann Diels reconstructed a doxographical treatise that has proved to be of fundamental importance for the history and historiography of Greek philosophy. He attributed this treatise, to be called *Placita*, to an otherwise unknown author, Aëtius, who is cited by the prolific fifth-century ecclesiastical author Theodoret of Cyrrhus († ca. 470 CE) in his apologetic treatise *Therapy of Greek Diseases*. Diels proved that a tract falsely attributed to Plutarch of Chaeronea, entitled *On the Physical Doctrines Held by the Philosophers*, is the shorter version (epitome) of a work that is also excerpted, in a literal and far more generous way but without reference to a source, in the first Book (almost entirely)² of the colossal *Anthology*

¹ The subject of this paper has been the theme of a lecture entitled *Théodore source d'Aétios* at the Centre Léon Robin of Paris on April 9 2016. I am grateful to Jean-Baptiste Gourinat and Gérard Journée for the invitation, and to them and the other members of the corona for the discussion. A slightly different version, lacking the Appendix with its references to Lebedev (2016) and Schubert (2017), has been published as 'Theodoret of Cyrrhus's *Therapy of Greek Diseases* as a source for the Aëtian *Placita*' in *The Studia Philonica Annual* 28 (2016) 151–168. I have also formulated a few sentences more precisely, added n. 38, added a sentence in (2016) n. 58, now n. 53, and rewritten (2016) n. 59, now n. 54. Thanks are due to Han Baltussen, Tiziano Dorandi, Edward Jeremiah, Lorenzo Perilli, and Christian Vassallo for removing typos and infelicities of the original version, and to Gregory E. Sterling for permission to publish the paper again in the present volume.

² Lemmata corresponding to ps.Plut. *Plac.* 5.30 are as far away as Stob. *Anth.* 4.36.29–31 and 4.50a.30.

of the fifth-century author Stobaeus (John of Stobi), the so-called *Eclogae Physicae*. The greater part of this ps.Plutarch, in its turn, was epitomized in a treatise falsely attributed to Galen, based on a text that was sometimes better. That numerous paragraphs in ps.Plutarch and Stobaeus are largely identical, or complementary, had long been seen by scholars, but the reconstruction in two parallel columns of the common source now baptized Aëtius, with ps.Plutarch's text to the left and Stobaeus' excerpts to the right, was new. Diels moreover was the first to argue that Theodoret, too, had used this earlier source for his *Therapy*, and he quoted what he had identified as relevant parallel passages in an exemplary way underneath the right-hand column of his reconstructed text. All this is well known, or should be, and has therefore been set out here as briefly as possible.³

Though Diels' theory has held sway for almost 150 years, it has also come under attack. No one, as far as I know, has doubted the validity and reconstructability, in some sense or other, of the P/S source, but T's use of this source has been impugned, and the possibility of his independent contribution to its reconstruction *more Dielsiano* rejected, or at the very least strongly doubted.⁴

In the first place, it has been argued that T's very modest abstracts from the account of the so-called atheists at CAG 2.112–113, 3.4 and 6.6 derive from P's ch. 1.7.1–4, and not from A. For T explicitly says that he is quoting 'Plutarch', that is, our P.⁵ And because Clement of Alexandria's *Stromata* and Eusebius' *Praeparatio evangelica* have been proved to be T's main (but of course not his only) sources inclusive of his numerous quotations,⁶ it is further argued that T quotes from P's chapter indirectly, that is, from Eusebius (hereinafter E), who in Books 14 and 15 of the *PE* reproduced large chunks of P's text, and explicitly attributes the theological ch. 1.7 to 'Plutarch'. Moreover, one of these atheists, Diagoras, is cited with the wrong ethnicon, namely as a Milesian (Μιλήσιος) instead of the correct Melian (Μήλιος). This corruption is not only in P's text as cited by E, but also in our Byzantine manuscripts of P's treatise.⁷ So much was already granted by Diels.⁸ So,

³ See Mansfeld and Runia (1997). Hereinafter P will stand for ps.Plutarch, G for ps.Galen, S for Stobaeus, T for Theodoret, E for Eusebius, and A for Aëtius, while P/S source is short for the richer source epitomized by P and pillaged by S. The siglum 'PS-Placita instead of <<Aëtius>>' was introduced by Lebedev (1984) 14 n. 1; Bottler (2014) followed suit.

⁴ Doubts have been expressed and difficulties mentioned by Lebedev (1984) and (1988)—and now again at Lebedev (2016), see Appendix—, by Frede (1999), Gourinat (2011) esp. 177–187, and Scholten (2015) 114–122; the latter argues that not all problems have been or even can be solved, but still comes down in favour of the Aëtius hypothesis. Very strong doubts have been formulated by Bottler (2014) 511–522 and *passim* (e.g. *ibid.* 53 'gerade Theodoret bleibt trotz der *Aëtiana* 1997 ein Problemfall'), though *ibid.* 493 she surprisingly welcomes T as an ally because of the omission of φυσικῶν in his title of reference for P at CAG 4.31 (E and the mss. of P have Περὶ τῶν ἀρεσκόντων τοῖς φιλοσόφοις φυσικῶν δογμάτων, 'On the physical doctrines held by the philosophers'; the author, moreover, is going to teach the *physikos logos*, see A at P pr.1.1), and oddly believes that in its original form P's compendium included ethics ('ethische Inhalte'). *Ibid.* 24–27 she misreads the choice examples of *problems* in physics and ethics in the third paragraph of the proem of the treatise as an incomplete table of contents.

⁵ See e.g. Diels' reference in the apparatus at DG 297 and Frede (1999) 140.

⁶ See Schulte (1904) 52–60, 85–96, the 'apparatus fontium' in Raeder (1904) and now that of Scholten (2015), also *ibid.* 103–122 with references to the literature.

⁷ Diels DG 14 calls this the 'vulgata' of P, but wrongly claimed that G's correct reading is confirmed in one ms. of P, see Gourinat (2011) 172. The mistake is also found in the translation into Arabic, which has come to light since Diels' days, Daiber (1980).

⁸ Diels DG 10 argued that the section on the atheists is quoted from E ('quae 2.112 et 3.4 de atheis ... narrat ... Eusebio surrepta'), and *ibid.* 48 that for P 1.7.1–4 T did not utilize or even refer to P directly, but knew him via E.

to vary the argument of Diels' critics, T would not have used A here, but either indirectly, via E, or directly cited P.

That in these passages T indeed derives from P either indirectly or directly may be readily conceded, but that he never used A elsewhere does not follow. In the first place, G has preserved the correct ethnicon Μήλιος for Diagoras, which must derive from his better text of P, and Diels, followed by the later editors of P, Mau and Lachenaud, therefore rightly restored it to his critical text of P, for which G, so to speak, is one of the manuscript sources.⁹ So 'Diagoras the Milesian' is irrelevant in respect of the larger issue, namely T's connection with A. In the second place, and more importantly, that T uses P for the atheists does not entail that he also uses P in other passages, where in view of the undeniable and substantial parallels with P and S the use of A should be assumed according to Diels.¹⁰

I submit that we appeal to what we may call the principle of convenience, or law of the least effort. T, a busy cleric composing a major treatise, made abstracts from what could be cannibalized most easily, provided that what was on offer was sufficient for his purpose. Clearly the substantial account of the atheists in the first half of P ch. 1.7 *apud* E, from which in fact he abstracted very little, was more than sufficient for his needs. But in other cases the abstracts from P provided by E were not sufficient, because there are gaps in E, and T here clearly wanted more. Other evidence was available, equally capable of being summarized at one's convenience, and with as little effort.

T comprises clusters of material corresponding to issues in P Books 1, 2 and 4.¹¹ I shall call such *capita selecta* in the *Therapy* 'quasi-chapters', because they consist of selections of data distributed over paragraphs that are paralleled in individual chapters or (mostly) blocks of successive chapters in P, which are devoted to specific issues. Quite often T indicates that such a quasi-chapter is to begin by prominently citing the subject at issue at the outset, or even by formulating a quasi-heading. He never reproduces an entire chapter content, but chooses, omits, rephrases, abridges, and summarizes, as a rule epitomizing even more drastically than P. Sometimes he also changes the lemmata order a little bit, for instance at CAG 4.14 as compared with P and S for ch. 1.18.

Let us look at Book 1 of the *Placita* first.¹² T comprises material corresponding to P chs. 1.9 on 'matter' (CAG 4.13–14, introduced by 'and as for the matter', καὶ τὴν ὕλην), 1.18 on 'void' (immediately

⁹ Frede's scruples (1999) 141–142 are superfluous.

¹⁰ See Frede (1999) 139–141.

¹¹ See the list at Mansfeld and Runia (1997) 274–275.

¹² According to Diels (*DG* 45, 170) the material at CAG 4.5–12 belongs with A ch. 1.3, 'On the principles' (*archai*). It is found in Book 4 'On matter and the cosmos', the title of which reveals that we are dealing with more than the principles alone. It comes immediately before the account of matter and the void at CAG 4.13–14 and is partly cited in the *DG*, apparatus to A 1.3, but I have not included it in the present overview. In the forthcoming edition of the Aëtian *Placita* we argue that this material for the most part does not derive from A, but from a source (or more than one) related to the *Stromateis* of another ps.Plutarch (preserved for us by E, and conveniently printed at *DG* 579–583). We can only be reasonably certain about ch. 1.3.14 (Democritus) at S *Ecl.* 1.10.14 and T CAG 4.9, and 1.3.17 (Metrodorus) at S *Ecl.* 1.10.14 and T CAG 4.9, as deriving from A, and may perhaps add 1.3.19 (Ecphantus) at S *Ecl.* 1.10.16a and T CAG 4.11, 1.3.23 (Xenocrates) at S *Ecl.* 1.10.12. Note that T at CAG 4.5–12 contains more information on teacher-pupil relationships and successions (*diadochai*) of philosophers, and on esp. the Eleatics, than P and S at ch. 1.3; Schulte (1904) 70–72, too, attributes this (and similar material elsewhere in the *Therapy*) to a source different from A. At CAG 4.13 T switched from one sequence of abstracts to another one, just as at 5.24 (p. 129.3 Raeder) he switched from an analogue of P 4.2–5 on the soul to an abstract from Clem. *Strom.* 8.4.10.3–5 on the question whether or not plants are 'animals', ζῷα, preferring this cousin account to an analogue to P 5.26. Diels *DG* 170–171, followed

following at CAG 4.14, and introduced by ‘and as for the void’, τὸ δὲ κενόν), and 1.25 + 1.27–29 on ‘necessity’, ‘fate’ and ‘chance’ (much later on at CAG 6.13–15). At CAG 4.13–14 T, passing over the analogue of eight chapters in P, thus immediately went from ‘matter’ to ‘void’. The presence of these excerpts in Book 4 is appropriate, for the title of Book 4 is ‘On matter and cosmos’ (Περὶ ὕλης καὶ κόσμου). Two books down he excerpted and rewrote the matter parallel to a block of one plus three chapters on ‘necessity’, ‘fate’ and ‘chance’ (introduced by ‘as for the chance’, τὴν τύχην). This is consistent, too, for the title of Book 6 is ‘On divine providence’ (Περὶ τῆς θείας προνοίας), a subject that includes fate and chance as a matter of course. Consequently, after writing out in CAG Book 4 his series of excerpts corresponding to chapters in P Book 2 (for which see immediately below), for CAG Book 6 he had to go back in order to be able to use material parallel to what is in the later part of P Book 1, all according to his own schedule as discernible from his Book titles. Of these six chapters in CAG Books 4 and 6 parallel to what is in P only ch. 1.9 (plus ch. 1.10, not used by T) was abstracted by E. So for the contents of P chs. 1.18 on ‘void’ and 1.25 + 1.27–29 on ‘necessity’, ‘fate’ and ‘chance’ T had to consult either P’s original epitome or some other source as surmised by those who believe that T failed to consult A, or indeed A itself as posited by Diels and those who follow him.

For Book 2 of the *Placita* T comprises material corresponding to four blocks of quasi-chapters that follow immediately upon the quasi-chapter on void corresponding to P 1.18 at CAG 4.14, all to be found (as is only to be expected) in Book 4 ‘On matter and the cosmos’. These blocks deal with, respectively and in succession: (1) the cosmos and some of its properties at CAG 4.15–16, introduced by ‘as for the cosmos’, τὸν κόσμον (~ P 2.1–4); (2) the stars and some of their properties at CAG 4.17–20, introduced by ‘as for the stars’, τοὺς ἀστέρους (~ P 2.13–14); (3) the sun and some of its properties at CAG 4.21–22 (~ P 2.20–22)¹³ and (4) the moon and some of its properties at CAG 4.23 (~ P 2.25–27), introduced at CAG 4.21 by ‘as for the sun and the moon as well’, καὶ μέντοι καὶ τὸν ἥλιον καὶ τὴν σελήνην, and again by the quasi-heading καὶ περὶ σελήνης at CAG 4.25. The material corresponding to the chapters in between has been passed over. At CAG 4.24 this account tapers off in the form of (5) a list of themes, namely shapes, with quasi-heading ‘on shapes’, σχημάτων περί (cf. P 2.27), ‘and (on) eclipses’, quasi-heading καὶ ἐκλείψεων, (cf. P 2.24 and 2.29), and (6) a quasi-chapter on distances,¹⁴ quasi-heading καὶ διαστημάτων inclusive of a brief summary of the issue of P 2.31. Almost all the chapters of P Book 2 have been reproduced by E, with the exception of chs. 2.1–2, 2.12, 2.19, and 2.23. Of these five chapters, absent from E, the quasi-chapters corresponding to P 2.1–2 are found in T and of course cannot have been excerpted from P at E.

Book 3 was not excerpted by our industrious cleric, but at CAG 5.17–24 plus 5.48 he again includes material corresponding to chapters in P from Book 4, namely the block of chs. 4.2–7 (the material parallel to ch. 4.6 was passed over): ‘on soul’, ‘on substance of soul’, ‘on parts of the soul’ (quasi-heading CAG 5.19: καὶ μέντοι καὶ περὶ τὴν ταύτης διαίρεσιν), ‘on the regent part’ (quasi-heading CAG 5.22: ὅσα δὲ καὶ περὶ τῆς τοῦ ἡγεμονικοῦ χώρας διηγήθησαν) and ‘on the indestructibility of soul’. Consistence again, for the title of CAG Book 5 is ‘On the nature of man’ (Περὶ φύσεως ἀνθρώπου), so this is where these abstracts belong. Of these five chapters E reproduced only two, namely P chs. 4.4–5 ‘on parts of the soul’ and ‘on the regent part’. For chs. 4.2–3, ‘on soul’ and ‘on the substance of soul’, and for ch. 4.7, ‘on the indestructibility of soul’, T had to look elsewhere, and to consult either

by Mansfeld and Runia (1997) 284 with n. 36, practically excluded the other *archai* list at CAG 2.9–11, in the Book entitled ‘On the principle’ (Περὶ ἀρχῆς). See further my paper ‘Archai lists in doxographical sources: Ps.Plutarch, Stobaeus, Theodoret and another Ps.Plutarch’, this volume ch. 8.

¹³ CAG 4.22 on the size of the sun is anticipated at 1.97, where Anaximenes is added to Anaximander. See next n. and text thereto.

¹⁴ CAG 4.24 on cosmic distances is loosely anticipated at 1.96. See previous n. and text thereto.

P's original epitome, or some other source as surmised by those who believe that he failed to consult A, or indeed A itself as posited by Diels and those who follow him. At any rate T started excerpting his source at the beginning of a passage corresponding to P ch. 4.2 (not, as we have seen, to be found in E), and of course simply went on from there, conveniently excerpting material corresponding to P chs. 4.4–5 from this same source, rather than from E's reproduction of these two chapters,¹⁵ and of course also using it for his material corresponding to the issue of P ch. 4.7 not reproduced in E.

2 Proof of Theodoret's Role as a Source

Now if T excerpted evidence that is not in P—*apud*—E from an independent text of P's treatise, his contribution to the reconstruction of A, *pace* Diels, can be only minimal, namely at best for a couple of details of the *constitutio* of the Greek text. It has certainly to be granted that Diels' discussion of T in relation to P and S¹⁶ is not sufficiently clear about the mutual relationships between these three source authors. Though Frede pointed out several cases of agreement between T and S pointing at a shared source,¹⁷ he, too, was not sufficiently precise on these matters, and his overview of the evidence is not complete. David Runia, in the chapter on Theodoret in the first volume of *Aëtiana* more than fifteen years ago and in his more recent paper answering Frede's remarks about Theodoret, was not sufficiently precise and detailed either.¹⁸ This is also to be noticed in his comments to the reconstruction of the text of A Book 2.¹⁹

Fortunately, it can be proved beyond reasonable doubt that T had access to a source very similar to but different from P. What is more, it is clear that he did share this source with S. We can therefore not only speak of a P/S source, but must also distinguish an S/T source. This has not been observed before. There are no less than *twenty* lemmata, or paragraphs in the micro-context of twelve individual quasi-chapters in T, which T shares with S but which are *absent from P* (not counting cases that may be related to ch. 1.3, see n. 10). Since T's quasi-chapters comprise a little over one hundred lemmata, this amounts to a little less than twenty percent.

Here is the list of these paragraphs, with for ease of reference Diels' numbering as in the *DG* of the parallel chapters and lemmata of *Placita* Book 1 (three chapters), Book 2, where relatively the most extracts are found (six chapters),²⁰ and book 4 (three chapters):

1.9.7 'The Stoics declare matter to be body'.

S 1.11.5b οἱ Στωικοὶ σῶμα τὴν ὕλην ἀποφαίνονται.

¹⁵ Cf. Frede (1999) 141.

¹⁶ *DG* 45–47.

¹⁷ Frede (1999) 139, 141.

¹⁸ Mansfeld and Runia (1997) ch. 5, Runia (2009).

¹⁹ Mansfeld and Runia (2009), see notes at the list of twenty examples below.

²⁰ Frede (1999) 139 points at 'clusters' in *CAG* 4.13–24 (~ P 1.9, 1.18), *CAG* 5.17–24 (~ P 2.1–4, 2.13–14, 2.20–22, 2.25–27, 2.29, 2.31), and *CAG* 6.13–15 (~ P 1.25–29), which comprise parallels to S that are lacking in P. But he wrongly included 2.20.7–8a, possibly misled by Diels *DG* 46 (no parallel in T for 2.20.8a, but one for Democritus at 2.20.7 in P). Bottler (2014) 44–49 omits to look for examples of agreement between T and S against P, and *ibid.* 511–512 only compares T with those passages where P and S can be combined. Of the sixteen S/T–against–P lemmata in Books 1 and 2 on the list cited immediately below, the only books of A she discusses (limiting herself to lemmata shared by P and S and the immediate parallels thereto), she *ibid.* 302–305 only adverts to chs. 2.4.1–2, though without noticing the point made here.

T CAG 4.14 οἱ Στωϊκοὶ δὲ σῶμα.

1.18.4 'Strato (says that) there is no void outside the cosmos, but that it is possible for it to occur inside'.

S 1.18.1b Στράτων ἐξωτέρῳ μὲν ἔφη τοῦ κόσμου μὴ εἶναι κενόν, ἐνδοτέρῳ δὲ δυνατόν γενέσθαι.

T CAG 4.14 ὁ δὲ Στράτων ἔμπαλιν ἔξωθεν μὲν μηδὲν εἶναι κενόν, ἐνδοθεν δὲ δυνατόν εἶναι.

1.27.2 'Chrysippus (says that) what is fated does not differ from what has been necessitated. Fate (he says) is an everlasting, continuous and ordered movement in accordance with an articulated nexus of its parts'.

S 1.5.15 *** μὴ διαφέρειν τοῦ εἰμαρμένου τὸ κατηναγκασμένον, *** κατ' ἐπιπλοκὴν τῶν μερῶν συνηρημένην.

T CAG 6.14 καὶ Χρύσιππος δὲ ὁ Στωϊκὸς μηδὲν διαφέρειν εἶπε τοῦ εἰμαρμένου τὸ κατηναγκασμένον, εἶναι δὲ τὴν εἰμαρμένην κίνησιν αἰδίων ξυνεχῆ καὶ τεταγμένην.

1.27.5 'Zeno the Stoic (says) in his *On nature* (that fate is) a force that imparts movement to matter in the same unchanging manner. It makes no difference (he adds) to call it providence and nature'.

S 1.5.15 Ζήνων ὁ Στωϊκὸς ἐν τῷ Περὶ φύσεως δύναμιν κινητικὴν τῆς ὕλης κατὰ ταῦτα καὶ ὡσαύτως, ἦντινα μὴ διαφέρειν Πρόνοιαν καὶ Φύσιν καλεῖν.

T CAG 6.14 Ζήνων δὲ ὁ Κιτιεὺς δύναμιν κέκληκε τὴν εἰμαρμένην κινητικὴν τῆς ὕλης, τὴν δὲ αὐτὴν καὶ Πρόνοιαν καὶ Φύσιν ὠνόμασεν.

2.4.1 'Pythagoras and Heraclitus (say that) the cosmos is generated in thought, but not in time'.²¹

S 1.21.6c Πυθαγόρας φησὶ γενητὸν κατ' ἐπίνοιαν τὸν κόσμον, οὐ κατὰ χρόνον. + 1.21.6f 'Ἡράκλειτος οὐ κατὰ χρόνον εἶναι γενητὸν τὸν κόσμον, ἀλλὰ κατ' ἐπίνοιαν.

T CAG 4.16 καὶ οἱ μὲν κατ' ἐπίνοιαν γενητόν, οὐ κατὰ χρόνον.

2.4.6 'Anaximander, Anaximenes, Anaxagoras, Archelaus, Diogenes and Leucippus (say that) the cosmos is destructible'.

S 1.20.1f 'Αναξίμανδρος, 'Αναξιμένης, 'Αναξαγόρας, 'Αρχέλαος, Διογένης, Λεύκιππος φθαρτὸν τὸν κόσμον.

T CAG 4.16 καὶ οὗτοι μὲν φθαρτόν.

2.13.4 'Democritus (says that they, sc. the stars, are) rocks'.

S 1.24.1e Δημόκριτος πέτρους.

T CAG 4.17 καὶ Δημόκριτος δὲ τοῦτον κρατύνει τὸν λόγον (sc. as to πέτρους).

2.13.7 'Anaximander (says that they, sc. the heavenly bodies, are) wheel-like condensations of air, filled with fire, partly expelling flames from vents'.

S 1.24.1g 'Αναξίμανδρος πιλήματα ἀέρος τροχοειδῆ, πυρὸς ἔμπλεα, κατὰ τι μέρος ἀπὸ στομίων ἐκπνέοντα φλόγας.

T CAG 4.17 ὁ δὲ 'Αναξίμανδρος συστήματα ἅττα τοῦ ἀέρος ἔφη, τροχοειδῶς πεπιλημένα, πυρὸς ἔμπλεα εἶναι, ἀπὸ τινων στομίων ἀφιέντα τὰς φλόγας.

2.13.13 'Aristotle (says that they, sc. the heavenly bodies, are made) from the fifth body'.

S 1.24.1m 'Αριστοτέλης ἐκ τοῦ πέμπτου σώματος γεγενῆσθαι τὰ ἄστρα.

T CAG 4.18 ὁ δὲ γε 'Αριστοτέλης τοῦ πέμπτου σώματος εἶρηκε συγγενεῖς.

2.20.9 'Thales (says) that the sun is earthy'.²²

S 1.25.3b Θαλῆς γεώδη τὸν ἥλιον.

T CAG 4.21 Θαλῆς δὲ γεώδη.

²¹ Cf. Mansfeld and Runia (2009) 352.

²² Cf. Frede (1999) 141.

2.20.10 'Diogenes (says that) the sun (is) pumice-like, and that rays from the ether fix themselves into it'.²³

S 1.25.3c Διογένης κισηροειδῇ τὸν ἥλιον, εἰς ὃν ἀπὸ τοῦ αἰθέρος ἀκτίνες ἐναποστηρίζονται.

T CAG 4.21 κισηροειδῇ δὲ Διογένης.

2.21.2 'Empedocles (says that the sun) that appears in virtue of the reflection (is) equal to the earth (in size)'.²⁴

S 1.25.3e Ἐμπεδοκλῆς ... — ἴσον δὲ τῇ γῇ τὸν κατὰ τὴν ἀνταύγειαν.

T CAG 4.22 Ἐμπεδοκλῆς δὲ ἴσον τῇ γῇ.

2.25.2–3 'Anaximenes, Parmenides and Heraclitus (say that) the moon is fiery'.²⁵

S 2.26.1a + 1b Ἀναξιμένης πυρίνην τὴν σελήνην. Παρμενίδης πυρίνην.

T CAG 4.23 Ἀναξιμένης δὲ καὶ Παρμενίδης καὶ Ἡράκλειτος ἐκ μόνου συνεστάναι πυρός.

2.25.8 'Thales said that the moon is earthy'.²⁶

S 1.26.1c Θαλῆς γεώδη τὴν σελήνην ἀπεφύνατο.

T CAG 4.23 γεώδη μὲν γὰρ αὐτὴν ὁ Θαλῆς φησιν.

2.26.3 'Aristotle (says that the moon is) smaller (in size) than the earth'.²⁷

S 1.26.1h (Ἀριστοτέλης) ἐλάττονα τῆς γῆς εἶναι τῷ μεγέθει.

T CAG 4.23 οἱ δὲ γε ἐλάττονα.

4.2.2 'Alcmaeon (says) that it (sc. soul) is a nature that is self-moved according to eternal motion, and for this reason he assumes that it is immortal and resembles the divine beings'.

S 1.49.1a Ἀλκμαίων φύσιν αὐτοκίνητον κατὰ αἰδίων κίνησιν καὶ διὰ τοῦτο ἀθάνατον αὐτὴν καὶ προσεμμερῇ τοῖς θεοῖς ὑπολαμβάνει.

T CAG 5.17 Ἀλκμᾶν [sic] δὲ αὐτὴν αὐτοκίνητον εἴρηκεν.

4.2.4 'and similarly (sc. to the view of Pythagoras) Xenocrates as well'.

S 1.49.1a ὁμοίως δὲ καὶ Ξενοκράτης.²⁸

T 5.17 ξυνεφώνησε δὲ τῷ λόγῳ καὶ Ξενοκράτης.

4.3.4 'Parmenides and Hippasus and Heraclitus that it (sc. the soul) is fire-like'.

S 1.49.1a Παρμενίδης δὲ καὶ Ἰππασος πυρώδη.

T CAG 5.18 Παρμενίδης δὲ καὶ Ἰππασος καὶ Ἡράκλειτος πυρώδη ταύτην κεκλήκασιν.

4.3.6 'Heraclides defined the soul as light-like'.²⁹

S 1.49.1b Ἡρακλείδης φωτοειδῇ τὴν ψυχὴν ὥριστο.

T CAG 5.18 ὁ δὲ Ἡρακλείδης φωτοειδῇ.

4.5.11 'Pythagoras Anaxagoras Plato Xenocrates Cleanthes (say that) the intellect enters from outside'.³⁰

²³ Cf. Frede (1999) 141.

²⁴ Cf. Mansfeld and Runia (2009) 2.537.

²⁵ Cf. Frede (1999) 141; Mansfeld and Runia (2009) 577 is unclear.

²⁶ Cf. Frede (1999) 141.

²⁷ Cf. Mansfeld and Runia (2009) 2.589.

²⁸ Cf. Frede (1999) 141.

²⁹ Cf. Frede (1999) 141.

³⁰ Rejected by Frede (1999) 145. It has to be admitted that this lemma looks like a stray item (also because T passed over its companion lemma, preserved in S). Diels' positioning (he wrote in the apparatus *ad loc.* 'dubium an hoc capitulum ad c. 5 referendum') of the two lemmata of S 48.7 in the right-hand column of ch. 4.5 as 4.5.11–12 is arbitrary. In the forthcoming edition of the Aëtian treatise they are to be placed in a separate chapter, because they are not found in S's chapter 1.49 'on soul' but separately, in S 1.48 'on *noûs*'. This sufficiently explains the displacement of the echo of S 48.7.1 at CAG 5.28, four of T's paragraphs down

S 1.48.7 Πυθαγόρας, Ἀναξαγόρας, Πλάτων, Ξενοκράτης, Κλεάνθης θύραθεν εἰσκρίνεσθαι τὸν νοῦν.

T CAG 5.28 καὶ οἱ περὶ Πλάτωνα δὲ καὶ Πυθαγόραν θύραθεν τοῦτον εἰσκρίνεσθαι λέγουσιν.

Diels, discussing extra ingredients of T as compared with both P and S,³¹ failed to insist on these twenty cases where S and T agree against P, although this would have established T as a third source for A beyond reasonable doubt. For T, as we know, did not use S for what he provides beyond P, because in his doxographical abstracts he does not follow S's chapter order (and certainly not that of his coalesced sections of lemmata from various chapters),³² but one that is a *strict analogue* of that of P. S's abstracts, moreover, are unattributed and mixed with other anonymous material (identified by Diels as Arius Didymus and fragments of Commentaries on Homer), while T's abstracts, at least at CAG 5.16, are attributed to a definite source.

There are also more limited forms of agreement between S and T against P, further confirming the existence and importance of the S/T source. I have pointed out above that T, passing over the material concerned with the soul's motion parallel to P 4.6, continued with that parallel to P 4.7, which is concerned with its indestructibility. Apart from a poor remnant of its first lemma³³ this chapter is not extant in S. Its beginning is mutilated in P and his tradition, which presumably we would not even suspect if we did not have a parallel account. In P the first lemma reads 'Pythagoras Plato (say that) the soul is indestructible, for on departing from the body it returns to the Soul of the universe, (which is) of the same kind'. In itself this is an unobjectionable example of a Middle Platonist and/or Neopythagorean reception of Plato's psychology. What happened in reality, however, is that a name-label has dropped out, a not so infrequent incident in doxographical literature: the name-label 'Heraclitus', as becomes clear when we compare T's text.³⁴ Just as he provably did at the beginning of his block of chapters on the soul, abstracting references to Alcmaeon and Xenophanes that are absent from P but present in S so must derive from the S/T source, so here at its end, again taking his information from the S/T source, he preserved the distinction between the tenet of 'Heraclitus' in the second lemma from that of the authorities in the first. In T's first lemma there is a whole string of names, which I do not hesitate to attribute to the S/T source as well: 'Pythagoras and Anaxagoras and Diogenes and Plato and Empedocles and

from his account of soul: in the source used by him the evidence on *noûs* was at some distance from that on soul. Gourinat (2011) 146 n. 5 strongly protests against Diels' decision, which in his view 'constitue sans doute le pire exemple des faiblesses de sa [sc. Diels] méthode de reconstruction', but he does so for the wrong reason. Diels would have failed to acknowledge that T in this context (CAG 5.28 and its immediate environment) replaced P's Hellenistic material with Neoplatonist evidence he believed to be equivalent, and which he preferred. 'Diels fausse ainsi notre vision des pratiques de composition de Stobée, de ses orientations philosophiques et de celles de sa source'. But just like Diels he has missed the parallel in T. The tenet itself is also found at Cic. *Div.* 1.70 and Philo *Somn.* 1.30 and *Opif.* 67, so near enough in time to the S/T source. Nevertheless acceptance of the Aëtian provenance of the phrase about the origin of *noûs* at CAG 5.11 is in no way essential to my argument.

³¹ DG 46–47.

³² Cf. below, n. 40.

³³ 1.49.7c Πλάτων ἄφθαρτον ... τὴν ψυχὴν.

³⁴ CAG 5.23 καὶ Πυθαγόρας μὲν καὶ Ἀναξαγόρας καὶ Διογένης καὶ Πλάτων καὶ Ἐμπεδοκλῆς καὶ Ξενοκράτης ἄφθαρτον εἶναι τὴν ψυχὴν ἀπεφώνησαντο· ὁ δὲ Ἡράκλειτος τὰς ἀπαλλαττομένας τοῦ σώματος εἰς τὴν τοῦ παντὸς ἀναχωρεῖν ψυχὴν ἔφησεν, οἷα δὴ ὁμογενὴ τε οὔσαν καὶ ὁμοούσιον. This was of course seen by Diels, see his examples DG 64; also Mansfeld and Runia (1997) 192–193.

Xenocrates declared that the soul is indestructible'. In P these authorities are Plato and Aristotle, the only name-labels the epitomist apparently thought it worthwhile to preserve.

In ch. 2.1.2 (a chapter that, as we remember, is not reproduced in E) P has 'Thales and his followers (Θαλῆς καὶ οἱ ἄπ' αὐτοῦ) (say that) the cosmos is unique', while S 1.22.3b has a whole string of name-labels, and reads 'Thales, Pythagoras, Empedocles, Ecphantus, Parmenides, Melissus, Heraclitus, Anaxagoras, Plato, Aristotle, Zeno (say that) the cosmos is unique'. The parallel phrase in T CAG 4.15 reads 'Thales and Pythagoras and Anaxagoras and Parmenides and Melissus and Heraclitus and Plato and Aristotle and Zeno', so T leaves out 'Empedocles' and 'Ecphantus'. Nevertheless S and T on these details agree against P.

In the next lemma, ch. 2.1.3, P has 'Democritus and Epicurus and his teacher Metrodorus³⁵ (say that there are) infinitely many *kosmoi* in the infinite space throughout the entire surrounding area'. Here S at 1.22.3b, continued, again lists a whole array of name-labels in support of the infinitely many *kosmoi*, namely 'Anaximander, Anaximenes, Archelaus, Xenophanes, Diogenes, Leucippus, Democritus, Epicurus'. The parallel phrase in T CAG 4.15, also continued, has 'Anaximander and Anaximenes and Archelaus and Xenophanes and Diogenes and Leucippus and Democritus and Epicurus were of the opinion that there are many and infinitely many'. This time the name-labels in S and T are the same, and they are again agreed as against P.³⁶

For both these lemmata of ch. 2.2 S and T reproduce the S/T source much more faithfully than P, epitomizing as usual, reproduces the P/S source.³⁷

So for exactly the same material P not only used the P/S source but also and simultaneously the S/T source, and T not only the S/T source but also and simultaneously the P/S source. This of course immediately proves that the S/T source cannot be distinguished from so is identical with the P/S source.³⁸ With the exception of his use of P ch. 1.7 from E at CAG 2.112–113, 3.4 and 6.6 and of other sources for much of the material analogous to P 1.3 and 5.26,³⁹ T everywhere else used this richer source epitomized by P and pillaged by S. The series of successive blocks of chapters on the cosmos, the stars, the sun, the moon and the rest in CAG Book 4.15–24 exactly mirrors the order of the corresponding blocks of coherent chapters in P Book 2.⁴⁰ T's quasi-chapters are as a rule shorter or even much shorter than P's chapters, and so, most of the time, are his individual lemmata. But we have seen that quite a few of these quasi-chapters include material within their diaeretic and/or diaphonic micro-cosmos that is absent from P but paralleled in S. And in those unfortunately rather numerous cases where entire sections of S, abridged away by Byzantine scribes or redactors, are missing, ingredients in T's quasi-chapters, from lemmata to name-labels, that are not paralleled in the parallel chapters of P as well, should be accepted as deriving from the richer P/S/T source. Here I need not add a detailed list of these further items, for in the forthcoming edition this

³⁵ The phrase about Metrodorus, not paralleled in S and T and therefore bracketed by Diels, seems to be a later addition in P.

³⁶ Similarly at ch. 1.29.1 both S (σύμπτωμα, καὶ προαιρέσεως) and T (ξύμπτωμα φύσεως ἢ προαιρέσεως) have words not found in P's lemma.

³⁷ On 2.1.1–2 see Mansfeld and Runia 2.309: 'P has abridged these lemmata rather drastically'. Bottler (2014) 281–283 is unclear.

³⁸ The presence of the name-label Heraclitus in T and S for A 1.9.2 as against P, where it is absent, is a comparable instance of different abstractions from the same source, as Jean-Baptiste Gourinat has pointed out to me.

³⁹ See above, text after n. 10, and n. 11 and text thereto.

⁴⁰ This, as already pointed out, is not the case with S, who quite often rearranges and coalesces his material; see Runia at Mansfeld and Runia (1997) 213–238.

evidence will be incorporated in the reconstruction, just as it was already incorporated by Diels.⁴¹ It is the failure to recognize the importance of the structure of the chapter in P, or parallel quasi-chapter in T, qua complex doxographical entity,⁴² that is in part responsible for the misguided criticism directed at the attempts of Mansfeld and Runia to reconstruct the P/S/T source from its triad of contributing sources by merging their lemmata and locking them together in a single column as, so to speak, the teeth of a zipper. One should not only, and certainly not in the first place, think in terms of individual lemmata, but throughout consider these chapters and quasi-chapters both individually and qua blocks as self-subsistent and coherent entities.

3. Aëtius Vindicated

Theodoret can only be a source *for* Aëtius if and only if Aëtius is a source *of* Theodoret. So what can we say about Aëtius, whose existence has been denied and whose name as cited in the *Therapy of Greek Diseases* has sometimes been believed to be an error for a better known ‘Arius’,⁴³ namely the author Arius Didymus, not mentioned by T elsewhere? No one ever mentions Aëtius except T.

We must look again at the three passages in T where Aëtius is mentioned together with two other authors.⁴⁴

At CAG 2.95 he puts ‘Plutarch and Aëtius’ on the same level qua ‘teachers of the doxai of the philosophers’, while explicitly distinguishing their works from that of Porphyry, ‘who added the biography of each philosopher to his doxai’. At CAG 4.31 he again couples Plutarch and Aëtius and distinguishes them from Porphyry, though less explicitly. Without doubt this shows that according to T the treatises of ‘Plutarch’ (i.e. our P, ps.Plutarch) and Aëtius were comparable, or even similar, as to structure, and in this respect different from Porphyry’s. The difference is one of sub-genre. We have to argue from the known to the unknown, or from the better known to the less well known. To judge from what we do know about the structure and contents of P, the communality between ‘Plutarch and Aëtius’ is not only a matter of the absence of ‘lives’, but also one of variety and inclusiveness (the doxai of *the* philosophers). A further difference of ‘Plutarch’ from Porphyry but known to us, though not mentioned by T, is that the latter did not go beyond ‘Plato and his times’,⁴⁵

⁴¹ I list these items with Diels’ numbers as in the *DG*: chs. 2.2.4, 2.26.4, 4.3.13, 4.3.14, 4.4.2, 4.4.3, 4.4.5, 4.7.6, 4.7.7, 4.7.8. Cf. *DG* 45–46, Runia at Mansfeld and Runia (1997) 286–288, and Gourinat (2011) 171 n. 181. T’s extra name-label Hippocrates plus doxa ‘in the brain’ for ch. 4.5.1 should also be added.

⁴² As is abundantly clear in the study of Bottler (2014). For this microstructure see the reconstruction of the chapters of Book 2 in Mansfeld and Runia (2009) Part II, passim, and Part I, index rerum s. *vv.* diaeresis, diaphonia.

⁴³ Lebedev (1984) and (1988), cf. above n. 2, arguing towards his conclusions rather than from the evidence; criticized by Runia at Mansfeld and Runia (1997) 333–338. Gourinat’s revision of Lebedev’s view (2011) 174–177 is rather complicated: T’s mistake ‘Aëtius’ for ‘Arius’ would be due to the fact that he did not know Arius (Didymus) and therefore misremembered the name of the latter from E’s references. See now also Gourinat above, ch. 1. One may observe that T in his *Historia ecclesiastica* and *Haereticarum fabularum compendium* regularly refers to the 4th cent. theologian (and heretic) Aëtius of Antioch, so the name itself would be familiar, which of course can be used to argue in favour of the mistaken as well as of the correct reference.

⁴⁴ Begging to differ from Frede’s account at (1999) 144–147, which needlessly complicates matters.

⁴⁵ Porph. fr. 198T Smith ap. Eun. *VS* 2.1, p. 2.14–18 ‘Porphyry and Sotion (fr. 1. Wehrli) recounted the history of philosophy and the lives of the philosophers, but Porphyry, as it turns out, stopped at Plato and his times, while Sotion appears to have proceeded further, although Porphyry was later’ (τὴν φιλόσοφον ἱστορίαν καὶ τοὺς τῶν φιλοσόφων ἀνδρῶν βίους Πορφύριος καὶ Σωτίων ἀνελέξαντο· ἀλλ’ ὁ μὲν Πορφύριος, οὕτω συμβάν, εἰς

while the former includes Hellenistic doxai. Porphyrys' book will have resembled Diogenes Laërtius Books 1 to 3, Presocratics to Plato. The variety and inclusiveness characteristic of P and Aëtius is also different from what is on offer in the fragments of Arius Didymus, who privileges Peripatetics and Stoics, and presents his material in a different way. To quote a recent assessment:⁴⁶ Arius Didymus 'does not collect philosophical opinions on particular topics but, rather, paints comprehensive pictures of philosophical systems.' Thus, another sub-genre again, different from the sort of doxography represented by P.

At CAG 5.16 T first mentions Plutarch and Porphyry, then Aëtius preceded by καὶ μέντοι καί, 'but also', 'and in particular', which highlights the climax and implies that Aëtius is his main source for what follows.⁴⁷ This is confirmed by the fact that in the excerpts concerning the soul corresponding to P chs. 4.2–5 that immediately follow at CAG 5.17–24 we find ingredients corresponding to S but absent from P. Above we have assigned this group of quasi-chapters to first to the S/T and then to the P/S/T source.

That T cites three names is moreover not coincidental, since, as *LSJ*'s dictionary tells us s.v. τρία, 'from the earliest times three was a sacred and lucky number'. The presentation of a triad of items representing a specific collection of things, of which the third may be in some way or other be distinguished from the two others and often represents a climax, is a recurrent rhetorical and narrative ploy.⁴⁸ What is also noteworthy is that T presents this triad of names no less than three

Πλάτωνα ἐτελεύτα καὶ τοὺς ἐκείνου χρόνους, Σωτίων δὲ καταβάς φαίνεται, καίτοι ὁ γε Πορφύριος ἦν νεώτερος). See also Segonds (1982) 164.

⁴⁶ Heil (2000) 371. We should take our cue from the fragments on physical philosophy (frs. 29 and 39 Diels) explicitly attributed to Arius Didymus in E, and from the doxographies of Stoic and Peripatetic ethics in S Book 2 (the *Epitomae ethicae*), which have been attributed with a high degree of plausibility because of the mention of 'Didymus' (without Arius) at S *Anth.* 4.39.28, quotation of a snippet of the Peripatetic doxography (other references to Didymus without Arius are at S 2.1.17 and E *PE* 11.23.2). I exclude the references to a Didymus in Clement of Alexandria. That it is sometimes difficult to decide whether in S Book 1 (the *Epitomae physicae*) certain anonymous passages are to be attributed to A or to Arius Didymus (see Gourinat (2011) 177–187) is another matter. Diels was occasionally in doubt himself, as is clear from his annotations in the apparatus of the *DG*. See further the paper of K. Algra, this volume ch. 2.

⁴⁷ See Diels *DG* 48, Mansfeld and Runia (2010) 177. According to *LSJ* s.v. μέν B.II.4.d. καὶ μέντοι καί 'is used to add a point to be noted' (my italics), so for emphasis. The dictionary cites Heracl. 22B24 DK ap. Clem. *Strom.* 5.1.9.3 (T 640 Mouraviev) as an example; the attribution of καὶ μέντοι καί to Clement rather than Heraclitus is irrelevant to its emphatic function (for the discussion see Mouraviev (2000) 512 *ad. loc.*, and note that this is the only example of this particle combination in Clement). For another example see Simp. *in Phys.* 151.24–28, cited next n. Pace Lebedev (2016) 592–593 this string of particles is not used to add 'just an additional point or name' or to signify 'the termination of a list of names' 'without any emphasis'.

⁴⁸ See e.g. 1 Cor 13:13 'and now abideth faith, hope, charity, these three; but the greatest of these is charity' (νυνὶ δὲ μένει πίστις, ἐλπίς, ἀγάπη, τὰ τρία ταῦτα· μείζων δὲ τούτων ἡ ἀγάπη), and *Anacreon*. 20 'sweet-singing is Anacreon, and sweet-singing Sappho; may someone mix with these and add a song of Pindar; this triad seem to me' etc. (ἡδυμελὴς Ἀνακρέων, / ἡδυμελὴς δὲ Σαπφώ· / Πινδαρικὸν δ' ἔτι μοι μέλος / συγκεράσας τις ἐγγχεί· / τὰ τρία ταῦτά μοι δοκεῖ κτλ.). The third passer-by in the parable of Luke 10:25–37 is the good Samaritan. Or compare Simplicius' enumeration of three works by Diogenes of Apollonia, 64A4 DK ap. *Phys.* 151.24–28 ἰστέον ὡς γέγραπται μὲν πλείονα τῷ Διογένει τούτῳ συγγράμματα ὡς αὐτὸς ἐν τῷ Περὶ φύσεως ἐμνήσθη καὶ πρὸς φυσιολόγους ἀντειρηκέναι λέγων οὕς καλεῖ καὶ αὐτὸς σοφιστάς, καὶ Μετεωρολογίαν γεγραφέναι, ἐν ᾗ καὶ λέγει περὶ τῆς ἀρχῆς εἰρηκέναι, καὶ μέντοι καὶ [note the καὶ μέντοι καὶ before the third title] Περὶ ἀνθρώπου φύσεως. A TLG search for τὰ τρία ταῦτα yields quite a few more examples. West (1988) 155–156 cites 'the verse consisting of three names, the last of which is accompanied by an adjective or other amplification' in Homer (e.g. *Il.* 3.147,

times. Now the famous 'Plutarch' and the equally famous or even infamous 'Porphyry' (the enemy of Christianity) are household names, while 'Aëtius' is not. By presenting Aëtius in the company of these others T raises the work of this quasi-anonymous author to the level of importance of the two luminaries⁴⁹ — which importance this work actually had for him, because he used it on a comparatively large scale.

Even so, Jan Bremmer argues that the four occurrences of the name Ἀέτιος in Pausanias for a minor hero do not count, and that its occurrence in Pausanias' contemporary Aelius Herodian (second half of 2nd cent. CE) actually derives from Pausanias so is invalid.⁵⁰ Like Bremmer I assume that Lentz's text can be trusted here.⁵¹ It is a list of adjectives and proper names on -ιος. Among these the words Ὑπάτιος, Εὐστράτιος, and Ἀθανάσιος, which accompany Ἀέτιος, appear for the first time as proper names in the literary record; they are only paralleled in later literature, though not often. The name Ἀέτιος also occurs in an epigram attributed to Philip of Thessalonici (1st cent. CE), where it does not belong to a mythical figure but to a 'good and eminent rhetorician'. According to Gow and Page 'the lines sound like Byzantine writing', but one cannot be sure.⁵² There are more parallels in later than in earlier literature for the name (best known are the heretic Aëtius of Antioch ca. 450 CE, the general Flavius Aetius † 454 CE, and the 6th cent. physician Aëtius of Amida), but as we see there are also earlier examples.

Another puzzling name is that of Alcinous, author of the *Didascalicus*, or *Introduction to Plato*. Apart from the manuscript tradition no ancient authority known to us ever referred to him as the author of this work. Jacob Freudenthal, in *Der Platoniker Albinos und der falsche Alkinoos*, published in the same year as the *DG*, famously and for a long time successfully proposed to change the name 'Alkinoos' for that of the better known Platonist 'Albinos'. This change provides a perfect parallel for the replacement of 'Aëtios' by the similar name 'Arios', but Freudenthal's suggestion is no longer accepted today, and Lebedev's suggestion should be (and has been) rejected as well, and for similar reasons.⁵³

That nobody mentions Aëtius is sufficiently explained by the popularity of P's epitome, which for all practical purposes replaced it. T may have found a copy of Aëtius that had been gathering dust for centuries in a provincial library, and so, remarkably, may S.⁵⁴ Perhaps the work would have

4.52), probably having its 'roots in Indo-European poetry'; much more on this 'augmented triad' as he calls it, adapting a term from music, in West (2004). Göbel (1935), e.g. p. 2, in similar cases speaks of 'Reihe mit Achtergewicht' ('sequence with emphasized last member'). Perhaps less to the point are the 'two or three' biblical 'witnesses' (needed for a conviction Deut 17:6; more neutral Matth 18:16 and 2 Cor 13:1).

⁴⁹ Cf. CAG 10.42, 'I have referred to Oenomaus and Plutarch and Diogenianus and Porphyry and the others because of you (sc. pagans), since by presenting your own views to you they are trustworthy'.

⁵⁰ Aelius Herodian *Pros.Cath.* p. 1.119.35–120.6 Lentz, Bremmer (1998) 156.

⁵¹ I have moreover checked the evaluation of this section of Herodian by Egenolff (1900).

⁵² *AP* 7.362.2 Ἀετίου χρηστοῦ, ῥήτορος εὐπρεπέος. The epigram is Philip no. lxxviii in Gow – Page (1968), whose translation I quote; for their judgment see Vol. 2.370. Montanari's dictionary (2015) s. v. Ἀέτιος attributes the name to the epigram, and dates the author without comment to the 1st cent. BCE.

⁵³ See Whittaker (1990) ix–xiii, with references. For Lebedev's suggestion see above, n. 43 and text thereto. Manilius is not a rare name, but the author of the *Astronomica*, too, is only identified in the manuscript tradition.

⁵⁴ For survival in the periphery ('zone periferiche', 'aree laterali' or 'isolate') rather than the center see the eighth rule of his famous decalogue at Pasquali (1952) xvii–xviii, and the reference *ibid.* p. 8 to the seminal work of the linguist Matteo Bartoli on 'relic areas' (as they are called in English). Endorsed by Timpanaro (1961) 44–46 (cf. Engl. ed. (2006) 87). For a group of medieval manuscripts see Reeve (2011), and for a

survived if, like those of ps.Plutarch and ps.Galen, it had been falsely ascribed to someone famous. We do not know the real names of the ‘authors’ (if this is not too big a word) of these pseudepigraphic epitomes, but would have to accept them if they had been transmitted. Where there is no viable alternative it is better philological manners to follow the tradition, this quite apart from the fact that the authorial name-label is irrelevant in as far as the reconstruction of the source shared by P, S and T is concerned. Replacing Aëtius with some unknown *X* does not change much.⁵⁵ The author of this common source I therefore will persist in calling by the name of Aëtius, widely cited from the time Diels called him up from the shades.⁵⁶

spectacular instance pertaining to the so-called *Traditio apostolica* that has become recently known see Bausi (2009). This rule not only holds for textual variants but also for entire works. Also compare Taft (1978) e.g. 254–256, 392–395 on the continuation in churches of the periphery of liturgical practices that are no longer observed in the mother church.

⁵⁵ Or with the ‘version plus complète’ of P no longer falsely attributed but by the Chaeronaean himself proposed by Gourinat (2011) 174–177; or circulating ‘under the name of Plutarch’, see this volume, ch. 1.

⁵⁶ *DG* 48 ‘ecce tandem velut ex inferis citatum Aëtium Placitorum collectorem’.

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Appendix

Two Recent Papers

Andrey Lebedev has returned to the issue in a substantial paper published recently: Lebedev (2016), see list of References. A draft of this paper was read at the Melbourne conference. To the extent that Lebedev attempts to strengthen his earlier views there is no need to argue against all over again, since his core view has remained unchanged, and this position, viz. that T is irrelevant for (the reconstruction of) A, has been dealt with in the present paper. Further hypotheses built on this foundation need not be discussed. But I may be allowed to refer to his novel suggestion that each of the more than one hundred and twenty chapters in the source excerpted by P and S began with an ‘apodictic authorial definition’, of which in P and S only eight (Lebedev (2016) 600–601), and perhaps two more found only in S (attributed by Lebedev (2016) 604), are now extant. In the first place, it should be pointed out that the surviving introductory definitions are nominal, and are merely meant to provide a preliminary notion of the matter at hand. A 1.9 for instance, the chapter dealing with various views on matter, begins with an anonymous and general definition of the special meaning of the word ὕλη in philosophical prose, necessary because in ordinary language it means ‘wood’. Secondly and more importantly, because P and S excerpted their common source independently, the possibility that out of more than one hundred definitions they would select exactly the same eight ones is almost nil, as Edward Jeremiah elegantly proves in the present volume (see ch. 9, p. 000 f.).

Prof Charlotte Schubert, in a paper published when the present volume had already gone to the press (Schubert (2017), see list of References) offers a novel argument in favour of the suggestion that P is by Plutarch of Chaeronea: the tract could be a collection of notes (*hypomnēmata*) he may have made as student. She bases this conclusion on three quotations shared by P and Plutarch, and on the purportedly similar purposes served by these quotations in Plutarch’s treatises.

Because of the different locations of the line *Il.* 14.246 in P and S Prof Schubert argues for an irreconcilable difference between these two sources for A (2017) 53–54. She fails to realize that S several times transfers lines or phrases from an Aëtian lemma on purpose to the cluster of poetic quotations as a rule found at the beginning of his composite chapters. As to lemmata of ch. A 1.3 included with other material in his own ch. 1.10, he (1) not only transferred the above-mentioned Homeric hexameter — part of P’s text for the first lemma of the chapter which Diels, not followed by Mau and Lachenaud, arbitrarily divided in two — from the prose lemma to S 1.10.2, but (2) also transformed the standard prose formula ἐκ πυρὸς γὰρ τὰ πάντα γίνεσθαι καὶ εἰς πῦρ πάντα τελευτᾶν λέγουσι (part of P’s text for A 1.3.9) in the (quasi-)poetic line ἐκ πυρὸς γὰρ τὰ πάντα καὶ εἰς πῦρ πάντα τελευτᾶ at S 1.10.7. (3) The cento Emp. 31B6 (3 lines) + 31B36 DK (1 line) at S 1.10.11a is placed before the Empedocles lemma in prose following at S 1.10.11a, which as to contents differs to a degree from the Empedocles lemma in prose in P at A 1.3.20. In P’s lemma the first three of these Empedoclean hexameters (i.e. 31B6 DK) are found inside the prose text.⁵⁷ This transfer of poetic or quasi-poetic ingredients from prose lemmata to a separate cluster of poetic quotations is a variety of S’s crucial technique of *coalescence*, discussed and explained in Mansfeld and Runia (1997) 217–224 twenty years ago. One reads Prof Schubert’s statement (*op.cit.* 54) ‘die Arbeitsweise des Stobaios bedürfte einer eigenen Untersuchung’ with some amazement.

P’s rather generous quotations in 4.12, a chapter dealing with *phantasia* etc. and cognitive reliability, taken from Euripides’ *Orestes* (five lines, *Or.* 255–257 + 258–259), share a single line (*Or.* 258) with several passages in the works of Plutarch (Schubert, 2017 49–50). But these lines of the *Orestes*, or references to them, are also found in several passages in Sextus Empiricus where the various kinds of *phantasiai* are discussed from a cognitive point of view, thus confirming the solid Stoic background of ch. 4.11: see *M.* 7.170, 7.244–245 (*SVF* 2.65), 8.56–57 (*SVF* 2.88), 8.63–64, and 8.67. This context is *toto coelo* different from those of Plutarch.

⁵⁷ See also below, ch. 8, 227–228.

The fact that P 1.30 Περὶ φύσεως and Plu. *Adv.Col.* 111F share the same Empedocles fragment (four lines, 31B8 DK), absent from S, does not yet make Plutarch the redactor of P 1.30. Plutarch *loc.cit.* argues against Colotes' interpretation of this text, and he may well cite it from him. The traditional problem at issue in P 1.30 ultimately derives from Aristotle's discussion of the meaning of φύσις at *Met.* Δ.4, where most of the same Empedocles text is quoted. S's ch. 1.41 Περὶ φύσεως καὶ τῶν συμβαινόντων ἐξ αὐτῆς αἰτίων now only contains abstracts from the *Corpus Hermeticum*, ps.Archytas *On Principles*, and Plato's *Cratylus*, and one does not know what may have been omitted by the Byzantine editors. S anyhow was under no obligation to copy out A's treatise in full, as is already clear from the fact he sometimes left out whole chapters and also individual lemmata preserved in P's epitome.

And of course the Aëtian *Placita*, to judge from P's epitome, is far from being a collection of private notes, *hypomnēmata*. It is a well-ordered treatise using a definite method of presentation. Both the order of larger and smaller themes and the way they are presented have a long history.⁵⁸

⁵⁸ Cf. above, n. 42 and text thereto; in general see Mansfeld and Runia (2009), also for references to earlier literature, and for the method of presentation and its earlier history now also Mansfeld (2016).

Aëtius et le problème des sources de Théodoret : à propos de GAC 4.12*.

Gerard Journée

Abstract : It is a remarkable fact that the doxa on Hippasus and Heraclitus at Theodoret GAC 4.12 was placed by Diels in Aëtius 1.5 (On the whole as one). The best place, however, would have been in fact 1.3 (On the principles, what they are), but ps.Plutarch and Stobaeus give us another text on the same philosophers that is obviously different. Given that Diels' solution is not satisfactory, the other possibilities are (1) that this lemma is a relic of a ghost chapter 'On the whole (τὸ πᾶν)' which has to be seen as competing with 1.3, as Elter argued long ago with respect to a lemma on Xenocrates in Stobaeus ; (2) that it comes from another source not mentioned by Theodoret ; or (3) that if Aëtius is the source of Theodoret, he cannot be the direct source of ps.Plutarch and Stobaeus. The paper confronts these issues, beginning with the fact that this brief text of Theodoret seems to be linked to a fragment of Theophrastus given by Simplicius.

Key terms: Theodoret, Aëtius, ps.Plutarch, Stobaeus, Hermann Diels, *On principles*, Presocratics, Hippasus, Heraclitus

1. Le problème

Théodoret de Cyr cite au sein d'une série de lemmes que l'on admet le plus souvent, à la suite de Diels, être tirés d'Aëtius une notice consacrée à Hippase et Héraclite dont le thème est le tout (τὸ πᾶν) et le principe (ἡ ἀρχή) :

* Ce texte est la version française révisée, et modifiée sur certains points, de la communication lue lors du colloque de Melbourne (du 2 au 4 décembre 2015) sur les Aëtiana. Notre ambition était dans un premier temps d'adjoindre à cet exposé, exclusivement consacré au problème que pose Théodoret GAC 4.12 eu égard à la reconstitution d'Aëtius, une première partie considérant la même notice, mais dans son rapport aux fragments de Théophraste. Mais paradoxalement peut-être, il s'est avéré difficile de traiter dans un même article de ces deux aspects concernant pourtant un seul et même texte, si court soit-il. Nous n'aborderons ici donc cet autre aspect qu'autant qu'il nous a paru nécessaire de le faire concernant le volet Aëtius. Que David Runia et Jaap Mansfeld soient ici remerciés pour leurs remarques et pour avoir mis à ma disposition leur discussion des sources du chapitre 1.3 dans leur commentaire encore inédit qui accompagnera leur prochaine édition. Que l'assistance du colloque de Melbourne soit également remerciée pour la discussion.

Theodoretus, *Graec. Aff. Cur.* 4.12

^{a)}Ἰππασος δὲ ὁ Μεταποντίνος καὶ Ἡράκλειτος ὁ Βλόσωνος ὁ Ἐφέσιος ^{b)}ἐν εἶναι τὸ πᾶν, ἀ<ει>κίνητον καὶ πεπερασμένον, ^{c)}ἀρχὴν δὲ τὸ πῦρ ἐσχικήναι.

² ἀκίνητον *mss.*, cf. Theod. 5.17 : *corr.* Zeller ex Diog. Laert. 8.84 (cf. *infra*)

Sans nous apprendre grand chose ni sur Hippase ni sur Héraclite, ce passage de Théodoret présente un certain intérêt si on le compare à deux autres textes qui laissent songer que l'ensemble dépend d'une source commune, probablement Théophraste dans ce cas :

Simplicius, *In Phys.*, 23, 33ss. = Theophrastus fr. 225 FHS&G

33 ^{a)}Ἰππασος δὲ ὁ Μεταποντίνος καὶ Ἡράκλειτος
24,1 ὁ Ἐφέσιος ^{b)}ἐν καὶ οὗτοι καὶ κινούμενον καὶ πεπερασμένον, ^{c)}ἀλλὰ
πῦρ ἐποίησαν τὴν ἀρχὴν καὶ ἐκ πυρὸς ποιοῦσι τὰ ὄντα πυκνῶσει καὶ μανῶσει
καὶ διαλύουσι πάλιν εἰς πῦρ, ὡς ταύτης μιᾶς οὔσης φύσεως τῆς ὑποκειμένης.
πυρὸς γὰρ ἀμοιβὴν εἶναι φησιν Ἡράκλειτος πάντα. ποιεῖ δὲ καὶ
5 τάξιν τινὰ ^{d)}καὶ χρόνον ὠρισμένον τῆς τοῦ κόσμου μεταβολῆς κατὰ τινὰ
εἰμαρμένην ἀνάγκην. καὶ δῆλον ὅτι καὶ οὗτοι τὸ ζῶογονον καὶ δημιουργικόν
καὶ πεπτικόν καὶ διὰ πάντων χωροῦν καὶ πάντων ἀλλοιωτικόν τῆς θερμότητος
θεασάμενοι ταύτην ἔσχον τὴν δόξαν· οὐ γὰρ ἔχομεν ὡς ἄπειρον τιθεμένων
αὐτῶν. ἔτι δὲ εἰ στοιχείον μὲν τὸ ἐλάχιστόν ἐστιν ἐξ οὗ γίνεται τὰ ἄλλα
10 καὶ εἰς ὃ ἀναλύεται, λεπτομερέστατον δὲ τῶν ἄλλων τὸ πῦρ, τοῦτο ἂν εἴη
μάλιστα στοιχείον. καὶ οὗτοι μὲν οἱ ἐν καὶ κινούμενον καὶ πεπερασμένον
λέγοντες τὸ στοιχείον.

Diogenes Laertius, 8.84 (Hippasus)

^{a)}Ἰππασος Μεταποντίνος καὶ αὐτὸς Πυθαγορικός. ἔφη δὲ ^{d)}χρόνον ὠρισμένον εἶναι τῆς τοῦ κόσμου μεταβολῆς καὶ ^{b)}πεπερασμένον εἶναι τὸ πᾶν καὶ ἀεικίνητον.

La comparaison parle d'elle-même : le début du texte de Simplicius — mise à part la question du sujet¹ — est virtuellement le même que le texte de Théodoret. Les noms d'Hippase et d'Héraclite

¹ L'usage de neutres chez Simplicius, avec un sujet féminin (l'ἀρχή), arrête : la grammaire ne s'y oppose pas, mais le trait est du moins étonnant lorsque l'on considère les parallèles. On peut noter que la fin du texte (l. 12) présente le terme στοιχείον, qui conviendrait. Mais on peut évidemment songer, puisque tant Théodoret que D.L. parlent du tout (τὸ πᾶν) que Simplicius a réduit le texte pour le faire correspondre à son thème du principe ou de l'élément, sans trop se soucier de la concordance (cf. *infra* p. 000). Si tel est bien le cas, il s'agirait d'une marque nette de réélaboration.

(a) apparaissent dans le même ordre, trois attributs quasiment identiques sont présents (un, mû/toujours mobile, limité = b), les syntaxes se correspondent jusque dans l'introduction du feu (c).

Pour Diogène Laërce (D.L. dans la suite), dont le texte ne concerne que le seul Hippias, nous retrouvons à la fois la mention du tout, comme dans Théodoret, et deux des mêmes attributs typiques : limité et toujours mobile (b)². À ce point commun peut être ajouté la présence de χρόνον ὠρισμένον τῆς τοῦ κόσμου μεταβολῆς (d), qui se retrouve mot pour mot dans le texte de Simplicius (24, 5), et semble donc assurer qu'une version proche de celle de Simplicius est à l'origine des deux autres textes³.

Diels compare ces textes, dans les *Doxographi Graeci* (= DG), en traitant de la question des sources théophrastéennes de Diogène Laërce (p. 168)⁴ ou, en mettant en parallèle Simplicius et

² Sans doute avons-nous reproduit ci-dessus, pour Théodoret, la correction de Zeller, ce qui paraît faire cercle, mais celle-ci reste très probable. Même si ἀκίνητον donnerait à la rigueur un sens, y compris dans un contexte héraclitéen, sa présence ici est assez inattendue et, outre que le texte de D.L. donne une piste, on trouve ailleurs chez Théodoret la même erreur sur le même mot, dans un cas où il est sûr que l'original, conservé par ailleurs, portait ἀεικίνητον : voir Theod. GAC 5.17 qui porte Θαλῆς τοίνυν κέκληκε τὴν ψυχὴν ἀκίνητον φύσιν. Tant le Ps.Plut. Plac. 4.12 que Stobée, Anth. 1.49. 1^a ont ἀεικίνητον ; le problème paraît récurrent dans la transmission des textes : il est probable que ἀεικίνητα soit aussi appliqué aux atomes de Leucippe par Hermias, *Irris*. 12 (67A17 DK). Les mss. ont, comme il arrive avec Théodoret, ἀκίνητα. Diels, DG: 654, 12, accepte la correction mentionnée (Hippolyte, *Elenchos*, 1.12 : Λευκιππος δὲ Ζήνωνος ἐταῖρος οὐ τὴν αὐτὴν δόξαν διετήρησεν, ἀλλὰ φησιν ἄπειρα εἶναι καὶ αἰετὶ κινούμενα καὶ γένεσιν καὶ μεταβολῇ συνεχῶς οὖσαν). À l'inverse, les mss. du *De Mundo*, 400b31, portent ἀεικινήτως, mais la citation du passage par Stobée porte ἀκινήτως, leçon préférée par Lorimer. On peut toutefois se demander si le choix de la *lectio difficilior* ne serait pas meilleur, et suspecter une normalisation de la part de Stobée, sans assurance. Sur ἀεικίνητον chez Platon, voir Mansfeld (2014) 3, n. 3.

³ Un autre parallèle est tentant avec Philon d'Alexandrie, *Leg.* 3.7, qui résume ainsi la doctrine d'Héraclite : 'κόρον καὶ χρημοσύνην' καὶ 'ἐν τὸ πᾶν' καὶ 'πάντα ἀμοιβή' [ἀμοιβὴν coni. Mangey] εἰσάγων. Une formule du type πῦρ ἀμοιβή πάντα est relativement fréquente dans la doxographie, et se trouve notamment dans le texte de Simplicius cité ci-dessus (*In Phys.* 24, 4 ; voir aussi Heraclit., *All.*, 43,7, D.L. 9.8, comparer la restitution de Diels (inspirée de Bernays) de 22B90, à partir de la citation de Plut. *de E*, 388e : πῦρ τε ἀνταμοιβή τὰ πάντα καὶ πῦρ ἀπάντων ὅκωσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός). Le fr. B65 (κόρον καὶ χρημοσύνην), aussi cité par Philon, est ailleurs mis en rapport avec la venue de l'un et le retour vers l'un : ὥς ἐν τὰ πάντα ἢ ὅτι ἐξ ἑνός τε καὶ εἰς ἓν, ὅπερ οἱ μὲν 'κόρον καὶ χρημοσύνην' ἐκάλεσαν, οἱ δ' ἐκπύρωσιν καὶ διακόσμησιν (Philon, *Spec.* 1.208 ; la première partie vise manifestement Héraclite, la seconde plutôt le stoïcisme ; Hippolyte, *Haer.* 9.10.6, franchit le pas consistant à ramener B65 à la seconde proposition). Le ἐν τὰ πάντα arrête en ce qu'il rappelle cette fois 22B50, mais les rapprochements restent frappant et permettent aussi, peut-être, de poser la question du degré de réélaboration de la notice de Simplicius attribuée à Théophraste.

⁴ Diels ne traite pas d'Héraclite dans sa comparaison en tableau des différentes sources doxographiques des p. 133-144 des *D.G.*. Héraclite ou Hippias ne sont pas représentés, notamment, dans les *Stromates* du Ps.Plutarque (Eusèbe *PE* 1.8) et le texte d'Hippolyte (*Elenchos*, I. 4) consacré à Héraclite n'est pas exploitable. DK, dont la fonction n'est certes pas d'opérer ce genre de comparaisons, produit le texte de Simplicius en 22A5, mais se contente de renvoyer à Aétius 1.5.5, il est vrai reproduit dans le chapitre sur Hippias. Mais l'édition à part d'Héraclite (*Herakleitos von Ephesos* (1901) 40, Témoignage 6) ne reproduit pas non plus le texte après la citation de Simplicius, et se contente de citer à la suite Aétius 1.3.11, soit la notice du Ps.Plutarque et de Stobée. Dans le chapitre consacré à Hippias dans DK, si le texte de Théodoret est bien reproduit après celui de Simplicius (= 18, 7 DK), la citation de ce dernier s'arrête à ὑποκειμένης (l. 3). Or, si la suite parle en effet spécialement d'Héraclite et ne semble consacrée qu'à lui, le découpage de la citation empêche d'effectuer un autre rapprochement textuel, toujours avec Hippias. À la suite du texte de D.L., DK (= 18, 1) renvoie à Théophraste et à 18, 7. La comparaison signalée se limite donc en fait à πεπερασμένον εἶναι τὸ πᾶν καὶ ἀεικίνητον, alors que, manifestement, elle aurait dû également porter sur χρόνον ὠρισμένον (εἶναι) τῆς τοῦ κόσμου

Théodoret, dans sa discussion des *Vetusta Placita* (p. 221). Mais il tient bel et bien compte de cette comparaison en éditant tout le début du texte de Simplicius (de 23, 33 à 24, 6) comme un fragment de Théophraste (*Op. Phys.* fr. 1). Les indications de divisions (comme ici un, mû, limité) sont d'ordinaire laissées à Simplicius dans les *DG* et considérées comme issues du travail classificatoire du commentateur, quand, pour Hippase et Héraclite, Diels imprime bel et bien en caractères espacés (typographie qui indique le fragment) le début du texte et la division⁵.

Les rapprochements pointent vers une source ultime identique et puisque cette source, dans l'*In Phys.* de Simplicius est sans doute Théophraste, il semble donc assuré que les trois attributs qui entament le texte, un, mû, limité, étaient aussi présents chez lui sous cette forme cumulative.

Ce constat semble venir renforcer l'hypothèse de J. Mansfeld selon laquelle les catégories de division du commentarisme à *Phys.* 1.2, issues d'une extension des propres divisions d'Aristote dans le passage, étaient déjà présentes chez Théophraste, ce qui permettrait de supposer que le plan de ses notices doxographiques était déjà à peu près le même que celui que l'on observe chez Simplicius⁶. Usener n'avait pas tenu compte de ce point pour classer les fragments théophrastéens. Le cas des notices sur Héraclite et Hippase vient confirmer sans ambiguïté l'usage par Théophraste de catégories systématiques, unité et pluralité, mouvement, limitation et illimitation. Diels l'avait probablement vu, mais sans chercher à en tenir compte⁷.

Deux problèmes se posent cependant :

1) La démarche de Théophraste doit être différenciée de celle de la *Physique* d'Aristote sur un point qui l'en distingue radicalement : Aristote ne vise dans sa division de *Phys.* 1.2 que le seul nombre des *principes matériels*, de un à l'infini. Théophraste, en revanche, intègre à sa division les principes moteurs, hétérogènes à ceux que la division de la *Physique* regarde exclusivement⁸.

μεταβολῆς, que l'on retrouve en *In Phys.* 24, 5. On peut se demander si le manque d'insistance (surtout dans les *DG*) ne témoigne pas d'un certain embarras.

⁵ On notera qu'ailleurs, les indications de divisions de Simplicius ne sont pas, comme ici, présentées au sein d'une notice consacrée à un auteur, mais ouvrent indépendamment des subdivisions dans lesquelles sont ensuite rangées les notices. Deux autres exceptions sont à noter, celles de Xénophane et de Leucippe.

⁶ Voir Mansfeld (1989) 138-148 ; sur Xénophane, 140, sur Hippase et Héraclite, 142.

⁷ Le fait est du moins qu'il manifestait certains doutes prudents, mais néanmoins évidents, sur l'ordre de son maître, voir *DG* 104 : *in reliquis disponendis Usenerum fere sequor non quo omnia eum recte ordinasse credam sed quia putidum duco in leviculis vel dubiis ab egregio exemplari recedere.*

⁸ Voir McDiarmid (1953) 89.

L'influence de *Métaph.* 1.2-3, généralement reconnue sur les notices de Théophraste⁹, s'exerce ici sur un thème absent de *Phys.* 1.2s., la cause motrice, qui ne peut être considéré comme simplement périphérique. Théophraste ne maintient pas purement et simplement la distinction aristotélicienne entre partisans de l'immobilité (Éléates) et partisans du mouvement (physiciens en général), mais la raffine précisément pour y inclure la distinction entre physiciens qui ont admis un principe moteur, et ceux qui, au contraire, ont posé un mouvement éternel dépourvu de moteur extérieur. Le terme de Théodoret (après correction) et de D.L., ἀκίνητον, est de ce point de vue tout à fait significatif de l'entreprise de Théophraste, en ce qu'il ne se contente pas de qualifier le mobilisme des physiciens en général, mais plutôt le mobilisme de ces physiciens qui n'ont pas admis de cause motrice et ont dû, par conséquent, admettre l'éternité du mouvement¹⁰. Le problème de l'ordre des fragments, comme le pensait Diels, peut être jugé secondaire et sujet de doutes, mais la question reste posée de savoir si le parallèle avec *Phys.* 1.2 peut être maintenu jusqu'au bout, d'autant qu'il est sûr que, dans un cas, celui de Platon, Théophraste adoptait bel et bien un classement chronologique¹¹. La différence entre le projet de Théophraste et celui d'Aristote est suffisamment importante pour imputer à Simplicius une réorganisation qui ne répond plus à la division originelle de Théophraste, et ne respecte l'esprit d'aucune des deux divisions, ni celle de Théophraste, ni celle d'Aristote.

⁹ On a souvent remarqué que les notices de Théophraste offraient un certain nombre de parallèles avec la *Métaphysique* d'Aristote. Zeller (1877) 150-155 en avait dressé la liste, et Diels a soigneusement noté ceux-ci à sa suite dans son apparat aux fragments de Théophraste, dans les *DG*. Voir aussi McDiarmid (1953) 85-86.

¹⁰ L'éternité du mouvement est également affirmée dans le cas d'Anaximandre (διὰ τῆς αἰδίου κινήσεως, *In Phys.* 22, 24), d'Anaximène (κίνησιν δὲ καὶ οὗτος αἰδίων ποιεῖ, δι' ἣν καὶ τὴν μεταβολὴν γίνεσθαι, *In Phys.* 22, 31s.), et après le rappel de la position de Parménide et de Xénophane (ἐν καὶ ἀκίνητον καὶ ἀγένητον καὶ πεπερασμένον ποιοῦντων τὸ πᾶν, 28, 7s.) à Leucippe (οὗτος ἄπειρα καὶ ἀεὶ κινούμενα ὑπέθετο στοιχεῖα τὰς ἀτόμους, 28, 8s. ; cf. Hippolyte, *Elenchos*, 1.12: Λεύκιππος δὲ Ζήνωνος ἐταῖρος οὐ τὴν αὐτὴν δόξαν διετήρησεν, ἀλλὰ φησιν ἄπειρα εἶναι καὶ ἀεὶ κινούμενα καὶ γένεσιν καὶ μεταβολὴν συνεχῶς οὖσαν).

¹¹ Tant Usener et Diels que Mansfeld et la collection de FHS&G (Voir Fortenbaugh & al. (1993) 402-422 (=224 à 230 FHS&G); Mejer (1998) 5s.) admettent que la remarque de Simplicius — que c'est « en ayant rendu compte au préalable des autres » que Théophraste parle de Platon —, permet de conclure que sa notice figurait en fin de liste dans cet ensemble (*Op. Phys.* fr. 9 = 230 FHS&G ; voir Diels, *DG*, 104 n. 2 ; Mansfeld (1989) 144 et 148). Le motif de l'ajout de Simplicius (τοὺς ἄλλους προϊστορήσας) est parfaitement clair. Le début de l'intervention donne en effet : ὁ μέντοι Θεόφραστος τοὺς ἄλλους προϊστορήσας, 'τούτοις, φησίν, ἐπιγενόμενος Πλάτων, κτλ'. Si Simplicius n'avait pas ajouté « ayant traité au préalable des autres », nous ne saurions tout simplement pas à qui renvoie le τούτοις ἐπιγενόμενος, sauf évidemment s'il devait renvoyer à ceux qui précèdent directement. Suggérer de ne pas déplacer la notice de Platon, comme l'a fait Mejer (1998) 7-8 — ou de considérer du moins que celle-ci, qui évoque donc deux principes, la matière et le dieu, pouvait également apparaître dans l'embranchement de la division consacré à une pluralité de principes en nombre fini —, reviendrait à se contenter de la division abstraite, en dépit de la lettre du texte de Simplicius, et ne paraît guère acceptable.

2) À un autre niveau, le texte de Théodoret qui peut être mis en lien avec celui de Simplicius et de D.L. fut également classé par Diels parmi les fragments d'Aétius. Tout concourait, dans ce cas, pour ranger le passage en Aétius 1.3, chapitre consacré au principe (περὶ τῶν ἀρχῶν τί εἰσιν, selon le titre du Ps.Plutarque) : les notices de Théophraste connues avant tout par Simplicius traitent incontestablement du principe, ce qui amène à penser qu'un texte qui en serait dérivé devrait naturellement tomber dans la même catégorie, et plusieurs des autres notices citées par Théodoret dans le même passage sont parallèles à celles connues par ailleurs, notamment chez le Ps.Plutarque. Un point crucial l'empêchait cependant : la notice concernant Hippase et Héraclite connue par le Ps.Plutarque (et plus partiellement par Stobée) ne correspond pas à celle de Théodoret. Diels, manifestement ennuyé par ce point, la rangeait pour cela dans un autre chapitre d'Aétius, en 1.5 (εἰ ἐν τὸ πᾶν, d'après le titre du Ps.Plutarque). Mais ce choix constituait manifestement un pis-aller, qui ne peut être maintenu à considérer le contenu réel du chapitre 1.5. Se pose dès lors le problème de savoir si la notice de Théodoret provient ou non d'Aétius : si tel est le cas, elle deviendrait dès lors inclassable dans l'état actuel des choses ; si en revanche elle devait revenir à une autre source, la question se poserait de savoir laquelle et d'en déterminer les conséquences quant à l'hypothèse aëtienne, fondée en bonne partie chez Diels sur un principe d'exclusion qui suppose connues l'ensemble des sources de Théodoret.

C'est à cette seconde question que sera consacré spécifiquement cet article, la première n'ayant été posée ici qu'à titre de cadre général, qui n'est cependant pas complètement sans incidence, nous le verrons, sur la question des sources de Théodoret.

2. Théodoret GAC 4.12 comme source d'Aétius

La notice de Théodoret consacrée à Hippase et Héraclite s'inscrit dans une suite de notices qu'il convient de citer un peu au long pour commencer¹². Celles-ci sont censées tout à la fois illustrer la *diaphonia* des philosophes grecs, et l'incapacité des raisonnements humains à parvenir seuls aux vérités des dogmes de la sainte Écriture relatifs à la création divine. Cet ensemble présente à la suite, dans des notices plus ou moins longues, dans l'ordre, les opinions de 1/ Xénophane, 2/ Parménide, 3/ Mélissos¹³, 4/ Démocrite, 5/ Métrodore de Chios, 6/ Épicure (dit venir à la cinquième génération

¹² Pour une autre liste doxographique chez Théodoret, GAC, 2.9-11, voir infra p. 000.

¹³ Dit ici de Milet. L'erreur est curieuse mais tient peut-être à un simple lapsus dû à l'assonance.

après Démocrite¹⁴), 7/ Ecphante (signalé comme pythagoricien), 8/ Platon, 9/ Aristote, 10/ Xénocrate, 11/ Zénon de Citium (signalé comme disciple de Cratès), 12/ Hippase et Héraclite, 13/ Diogène d'Apollonie.

Théodore, GAC 4.5-12

§5.

1) Ξενοφάνης μὲν οὖν ὁ Ὀρθομένους ὁ Κολοφώνιος, ὁ τῆς Ἑλεατικῆς αἰρέσεως ἡγησάμενος, ἐν εἶναι τὸ πᾶν ἔφησε, σφαιροειδὲς καὶ πεπερασμένον, οὐ γενητόν, ἀλλ' αἰδίου καὶ ἀμύπαν ἀκίνητον· πάλιν δ' αὖ τῶνδε τῶν λόγων ἐπιλαθόμενος, ἐκ τῆς γῆς φύναι ἅπαντα εἴρηκεν. αὐτοῦ γὰρ δὴ τότε τὸ ἔπος ἐστίν· ἐκ γῆς γὰρ τάδε πάντα, καὶ εἰς γῆν πάντα τελευτᾷ.

...

§7.

2) καὶ Παρμενίδης δὲ ὁ Πύρρητος ὁ Ἑλεάτης, Ξενοφάνους ἐταῖρος γενόμενος, κατὰ μὲν τὸν πρῶτον λόγον ζύμφωνα τῷ διδασκάλῳ συγγέγραφεν· αὐτοῦ γὰρ δὴ τότε τὸ ἔπος εἶναι φασιν· οὐλον μουνογενὲς τε καὶ ἀτρεμὲς ἢ δ' ἀγέννητον. αἴτιον δὲ τῶν ὄλων οὐ τὴν γῆν μόνον, καθάπερ ἐκεῖνος, ἀλλὰ καὶ τὸ πῦρ εἴρηκεν οὗτος.

§8.

3) Μέλισσος δὲ ὁ Ἰθαγένους ὁ Μιλήσιος τούτου μὲν ἐταῖρος ἐγένετο, τὴν δὲ παραδοθεῖσαν διδασκαλίαν ἀκήρατον οὐκ ἐτήρησεν· ἄπειρον γὰρ οὗτος ἔφη τὸν κόσμον, ἐκείνων φάντων πεπερασμένον.

§9.

4) Δημόκριτος δὲ ὁ Ἀβδηρίτης ὁ Δαμασίππου τὴν τοῦ κενοῦ καὶ τῶν ναστῶν πρῶτος ἐπεισήγαγε δόξαν·
5) ταῦτα δὲ Μητρόδωρος ὁ Χίος ἀδιαίρετα καὶ κενὸν προσηγόρευσεν,
6) ὥσπερ αὖ πάλιν Ἐπίκουρος ὁ Νεοκλέους ὁ Ἀθηναῖος, πέμπτη γενεᾷ μετὰ Δημόκριτον γεγονώς, τὰ ὑπ' ἐκείνων ναστὰ καὶ ἀδιαίρετα δὴ κληθέντα ἄτομα προσηγόρευσεν.

§10.

ἀδιαίρετον δὲ καὶ ἄτομον καὶ ναστὸν οἱ μὲν διὰ τὸ ἀπαθὲς ὠνομάσθαι φασίν, οἱ δὲ διὰ τὸ ἄγαν σμικρόν, ἅτε δὴ τομὴν καὶ διαίρεσιν δέξασθαι οὐ δυνάμενον. καλοῦσι δὲ οὕτω τὰ σμικρότατα ἐκεῖνα καὶ λεπτότατα σώματα, ἃ διὰ τῶν φωταγωγῶν εἰσβάλλων ὁ ἥλιος δείκνυσιν ἐν ἑαυτῷ ἄνω καὶ κάτω παλλόμενα.

§11.

7) τούτοις καὶ Ἐκφαντος ὁ Συρακούσιος ὁ Πυθαγόρειος ἡκολούθησε.
8) Πλάτων δὲ ὁ Ἀρίστωνος ἀρχὰς εἶναι τῶν ὄλων τὸν θεὸν καὶ τὴν ὕλην καὶ τὰς ἰδέας φησίν·
9) Ἀριστοτέλης δὲ ὁ Σταγειρίτης ὁ Νικομάχου εἶδος καὶ ὕλην καὶ στέρησιν· στοιχεῖα δὲ οὐ τέσσαρα, ἀλλὰ πέντε· ἕτερον γὰρ εἶναι τὸ αἰθέριον εἴρηκεν, ἄτρεπτόν τε καὶ ἀμετάβλητον.

§12.

10) Ξενοκράτης δὲ ὁ Χαλχιδόνιος ἀνάαν τὴν ὕλην, ἐξ ἧς ἅπαντα γέγονε, προσηγόρευσεν.
11) Ζήνων δὲ ὁ Κιτιεὺς ὁ Μνασέου, ὁ Κράτητος φοιτητής, ὁ τῆς Στωικῆς ἄρξας αἰρέσεως, τὸν θεὸν καὶ τὴν ὕλην ἀρχὰς ἔφησεν εἶναι.
12) Ἰππασος δὲ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Βλόσωνος ὁ Ἐφέσιος ἐν εἶναι τὸ πᾶν, ἀ<ει>κίνητον καὶ πεπερασμένον, ἀρχὴν δὲ τὸ πῦρ ἐσχηκέναι.
13) ὁ δὲ Ἀπολλωνιάτης Διογένης ἐκ τοῦ ἀέρος ἔφη ξυστῆναι τὸ πᾶν.

¹⁴ L'indication, si elle est exacte, ne peut être déduite des « diadochies » fournies par Eusèbe (PE 14.17.10) ou par Clément d'Alexandrie (Str. 1.64). La différence avec la notice du Ps.Plutarque est considérable, mais rend compte de l'usage du terme « atome », absent de la notice de Démocrite connue du moins par Théodore. On ne peut exclure ici l'usage d'une autre source, mais l'ensemble reste cohérent avec ce que nous croyons connaître d'Aétius.

La liste de Théodoret est courte — y manquent en particulier les Milésiens —, mais l'on y voit s'y profiler, tout au moins au début, des groupes tout à fait nets : a) celui des Éléates (1-3), b) celui des atomistes desquels Ecphante est rapproché (4-7), c) Platon et ses principaux disciples (8-10), d) le fondateur du Stoïcisme. Ces textes, tout au moins à partir de Démocrite, entretiennent par ailleurs des rapports parfois étroits avec des notices connues par le biais du Ps.Plutarque et de Stobée¹⁵, et Diels estimait que Théodoret avait simplement utilisé le chapitre 1.3 (*Sur les principes*) d'Aétius — dont il n'est pas besoin de rappeler qu'il est le seul à mentionner l'existence —, tout en le réduisant ou en le réécrivant parfois drastiquement. Théodoret est un écrivain. Contrairement à Eusèbe, dont on sait qu'il constitua pour une bonne part la « bibliothèque » ou la source dans laquelle a puisé Théodoret dans bien des endroits de son ouvrage, il paraphrase beaucoup ou se réapproprie ses lectures, et il n'y a guère à s'attendre chez lui à une fidélité scrupuleuse à la lettre originale. Mais les parallèles, quand ils existent, sont suffisamment nets, malgré des difficultés de détail sur lesquels nous n'insisterons pas ici. La question se pose cependant différemment quand Théodoret cite des opinions pour lesquelles n'existe aucun parallèle avec Stobée ou le Ps.Plutarque. Si la notice de Xénophane est partiellement recroisée chez Stobée (pour la citation du moins de B27 DK¹⁶), il n'en va pas de même pour Parménide, Mélissos ou Héraclite et Hippase.

Diels a admis sans peine pour Parménide et Mélissos, absents de Stobée et du Ps.Plutarque, que le texte de Théodoret devait dériver d'Aétius 1.3, et admettait la même chose pour Diogène d'Apollonie, présent dans Stobée, mais avec un texte différent. Mais lui restait sur les bras la notice concernant Héraclite et Hippase, qui ne se laissait pas si aisément classer : celle-ci ne correspond pas à la notice que l'on trouve dans le Ps.Plutarque, elle-même recroisée par Stobée, bien que celui-

¹⁵ On notera surtout le fait que, bien que l'ordre de Stobée soit parfois perturbé, on observe chez lui une série Leucippe, Démocrite, Épicure, Ecphante, Platon, Aristote (Stob. 1.10.12s.; un texte tiré du corpus hermétique est inséré entre les notices d'Épicure et d'Ecphante) qui se trouve très parallèle au milieu de la liste de Théodoret, probablement pas par hasard : Démocrite, Métrodore de Chios, Épicure, Ecphante, Platon, Aristote. Il est probable également que Xénocrate et Zénon de Citium, qui suivent chez Théodoret, apparaissaient également dans cet ordre chez Aétius (pour Xénocrate, Stobée le place curieusement après Anaximandre, et avant Xénophane et Anaximène, mais ce choix est pour le moins énigmatique : pour Xénocrate, il est possible que Stobée ait fait un rapprochement entre la théorie prêtée à Anaximandre (λέγει γοῦν διότι ἀπέραντόν ἐστιν, ἵνα μηδὲν ἐλλείπη <ή> γένεσις ἢ ὑφισταμένη), et celle prêtée à Xénocrate d'une matière appelée τὸ ἀέναν, l'intarissable ; sur ce point, voir Journée (2014) 48). Il est plus étonnant de trouver Hippase et Héraclite et Diogène d'Apollonie en fin de liste chez Théodoret. On pourrait de fait, sur ce constat, se demander si Théodoret n'opère pas un changement de corpus, qu'il s'agisse d'un autre chapitre d'Aétius, ou d'une autre source. Il s'agirait là d'un argument.

¹⁶ Sur le problème de ce fragment, je renvoie au texte de mon intervention « Xenophanes B27, Testimony and Fragment » faite à Berlin dans le cadre d'un Workshop organisé par O. Lewis, lisible à titre de *draft* à l'adresse : https://www.academia.edu/4047783/Xenophanes_B27_testimony_and_fragment

ci la réduise, et la coupe en deux, croyant y repérer bien à tort une citation poétique. Dans le cadre de l'hypothèse aëtienne, l'accord entre le Ps.Plutarque et Stobée obligeait à réserver un traitement particulier au texte de Théodoret, tout au moins en l'excluant du cadre d'Aëtius 1.3.

La comparaison des textes est sur ce point sans appel. Les notices de Théodoret, d'une part, de Stobée et du Ps.Plutarque d'autre part, sont sans l'ombre d'un doute parfaitement indépendantes :

Théodoret, GAC, 4.12	Ps.Plut. 1.3.(8)	Stob. 1.10.7 et 14
"Ιππασος δὲ ὁ Μεταποντίνος καὶ Ἡράκλειτος ὁ Βλόσωνος ὁ Ἐφέ-σιος ἐν εἶναι τὸ πᾶν, ἀ<ει>κίνητον καὶ πεπερασμένον, ἀρχὴν δὲ τὸ πῦρ ἐσχηκέναι.	Ἡράκλειτος καὶ Ἰππασος ὁ Μεταποντίνος ἀρχὴν τῶν ὄλων τὸ πῦρ. ἐκ πυρὸς γὰρ τὰ πάντα καὶ εἰς πῦρ πάντα τελευτᾷν λέγουσι. τούτου δὲ κατασβεσθέντος κοσμοποιεῖσθαι τὰ πάντα. πρῶτον μὲν γὰρ τὸ παχυμερέστατον αὐτοῦ εἰς αὐτὸ συστελλόμενον γῆν γίνεσθαι, ἔπειτα ἀναχαλωμένην τὴν γῆν ὑπὸ τοῦ πυρὸς φύσει ὕδωρ ἀποτελεῖσθαι, ἀναθυμιάμενον δ' ἀέρα γίνεσθαι· πάλιν δὲ τὸν κόσμον καὶ πάντα τὰ σώματα ὑπὸ πυρὸς ἀναλοῦσθαι ἐν τῇ ἐκπυρώσει. ἀρχὴ οὖν τὸ πῦρ, ὅτι ἐκ τούτου τὰ πάντα τέλος δέ, ὅτι καὶ εἰς τοῦτο ἀναλύεται τὰ πάντα.	§7. Ἡρακλείτου. ἐκ πυρὸς γὰρ τὰ πάντα καὶ εἰς πῦρ πάντα τελευτᾷ. [...] §14. Ἡράκλειτος καὶ Ἰππασος ἀρχὴν τῶν ἀπάντων τὸ πῦρ. πρῶτον μὲν γὰρ τὸ παχυμερέστερον αὐτοῦ εἰς αὐτὸ συστελλόμενον <γῆ> γίγνε-ται, ἔπειτα ἀναχαλωμένην τὴν γῆν ὑπὸ τοῦ πυρὸς χύσει ὕδωρ ἀποτε-λεῖσθαι, ἀναθυμιάμενον δὲ ἀέρα γίγνεσθαι. πάλιν δὲ τὸν κόσμον καὶ τὰ σώματα πάντα ὑπὸ τοῦ πυρὸς ἀναλοῦσθαι ἐν τῇ ἐκπυρώσει.

Diels estimait cependant que la notice devait bel et bien provenir d'Aëtius, hypothèse que son bel optimisme consistait à penser que les sources de Théodoret sont généralement traçables l'obligeait à privilégier. Se posait cependant la question du « où », et Diels prit le parti, non sans embarras, à la vérité, de ranger la notice en Aëtius 1.5, dans le chapitre intitulé εἰ ἐν τὸ πᾶν, du fait que le sujet principal de celle-ci est précisément le tout (τὸ πᾶν).

Ce classement demeure cependant pour le moins douteux, et vient en quelque sorte camoufler un problème évident pour la propre hypothèse de Diels :

- 1) soit ce texte appartient bien au corpus aëtien que connaît Théodoret mais ne se trouvait pas dans le chapitre sur les principes. La question serait dans ce cas de savoir où il pouvait se trouver : en 1.5, comme le pensait Diels, ou dans un chapitre perdu, portant plus spécifiquement sur le tout, comme l'avait postulé Elter à propos d'un texte de Xénocrate provenant de Stobée, sur lequel nous reviendrons.
- 2) soit ce texte est cité par Théodoret sur la base d'une autre source et, dans ce cas, la question serait : laquelle ? si du moins la chose doit ou peut être déterminée.

- 3) soit Théodoret cite bel et bien un chapitre d'Aétius correspondant à 1.3, *Sur les principes*, et dans ce cas, si Aétius est bien la source de Théodoret, il n'est pas la source immédiate de Stobée et du Ps.Plutarque.

Diels, naturellement, devait à tout prix contourner la troisième solution : mais la sienne, comme nous tâcherons de le montrer, reste pour le moins artificielle, ce qui nécessite d'examiner les autres solutions possibles, en nous cantonnant du moins à celles qui viennent d'être énumérées.

3. Parallèle théophrastéen

Les parallèles théophrastéens évoqués dans notre introduction tendent à assurer que les catégories de division « un, mû, limité » du texte de Simplicius étaient déjà présentes de quelque façon chez Théophraste et ne furent pas introduites par le commentateur, du moins à cet endroit, pour les besoins de son exégèse de *Phys.* 1.2, qui utilise déjà de telles catégories aux fins d'un classement des types de théories relatives aux principes. Deux différences importantes doivent toutefois être rappelées et soulignées : Simplicius ne prend pas la peine d'introduire un sujet (qui est implicitement, dans l'économie de son propos, le principe, ἀρχή), mais maintient des attributs au neutre là où, chez Théodoret ou Diogène Laërce, le sujet est très clairement le tout (τὸ πᾶν). Dans la mesure où la structure des phrases, chez Théodoret et Simplicius semblent très parallèles, on peut se demander si l'effacement du sujet n'incombe pas à Simplicius plutôt que l'ajout à un doxographe plus tardif ayant assimilé Théophraste. S'ajoute à cet argument le fait qu'il paraît plus naturel de parler d'un tout unique et limité que d'un principe unique et limité, l'attribut de limitation supposant au moins, dans le cas d'une unité, que le principe soit envisagé comme le tout homogène¹⁷. D'autre part, Simplicius écrit κινούμενον là où Diogène et Théodoret ont ἀεικίνητον : Théophraste, en toute vraisemblance, n'opposait pas simplement le mobilisme des physiciens à l'immobilisme des Éléates, mais distinguait également les physiciens entre ceux qui admettaient un principe de mouvement, comme Empédocle ou Anaxagore, et ceux qui, n'en postulant pas, devaient nécessairement admettre le mouvement éternel (les Milésiens ou les Atomistes par exemple).

Un premier constat peut apparemment être tiré de ces remarques : bien que nous ne sachions pas exactement ce qu'a pu dire Théophraste de Xénophane, la notice présente dans Simplicius à son

¹⁷ Il est vrai cependant qu'Aristote donne, en *Phys.* 1.2, le mauvais exemple sur ce point.

sujet pouvant difficilement provenir en ligne directe du disciple d'Aristote (ce qui pose au demeurant la question de la source réelle de Simplicius), la notice relative à Parménide citée littéralement par Alexandre d'Aphrodise prend elle aussi comme sujet central le tout. Cette notice appartenait probablement au même ensemble doxographique que les textes utilisés par Simplicius, comme tend à le soutenir le grand parallélisme entre le texte cité par Alexandre, et la notice concernant Platon transmise par Simplicius, elle-même citée littéralement de Théophraste¹⁸ – ce qui prouve à tout le moins une unité de composition –, si bien que l'on peut noter pour commencer qu'un même ensemble pouvait alternativement traiter de la question du ou des principes, ou du tout en sa relation (ou absence de relation) avec le principe physique. Naturellement, la chose n'étonne guère dans le cas de Parménide, son sujet métaphysique, pour le dire ainsi, ayant été très tôt identifié au tout, chez Platon ou Aristote¹⁹, mais elle remet néanmoins en ordre le traitement passablement étrange de *Phys.* 1.2, où Aristote faisait mine de croire que Parménide ou Mélissos parlaient directement du principe, pour le dire unique et immobile et, pour l'un limité, pour l'autre illimité²⁰. Mais si elle était valable également, chez Théophraste, dans le cas d'Hippase et d'Héraclite, le constat en serait d'autant mieux renforcé, et ne serait pas sans conséquences.

¹⁸ La comparaison parle d'elle-même :

Alex. *In Metaph.* 31, 7s. (ad 984b3)
fr. 227c FHS&G

Περὶ Παρμενίδου καὶ τῆς δόξης αὐτοῦ καὶ Θεόφραστος ἐν τῷ πρώτῳ Περὶ τῶν φυσικῶν οὕτως λέγει « 1) τοῦτ' ἐπιγενόμενος Παρμενίδης Πύρητος ὁ Ἐλεάτης » (λέγει δὲ καὶ Ξενοφάνη) « ἐπ' ἀμφοτέρων ἦλθε τὰς ὁδοὺς. καὶ γὰρ ὡς αἰδιὸν ἐστὶ τὸ πᾶν ἀποφαίνεται καὶ γένεσιν ἀποδιδόναι πειράται τῶν ὄντων, οὐχ ὁμοίως περὶ ἀμφοτέρων δοξάζων, ἀλλὰ κατ' ἀλήθειαν μὲν ἐν τῷ πᾶν καὶ ἀγέννητον καὶ σφαιροειδὲς ὑπολαμβάνων, 2) κατὰ δόξαν δὲ τῶν πολλῶν εἰς τὸ γένεσιν ἀποδοῦναι τῶν φαινομένων 3) δύο ποιῶν τὰς ἀρχάς, πῦρ καὶ γῆν, τὸ μὲν 4) ὡς ὕλην τὸ δὲ 5) ὡς αἴτιον καὶ ποιοῦν. »

Simpl. *In Phys.*, 26, 7s.
fr. 230 FHS&G

ὁ μὲντοι Θεόφραστος τοὺς ἄλλους προῖστορήσας « 1) τοῦτοις, φησὶν, ἐπιγενόμενος Πλάτων, τῇ μὲν δόξῃ καὶ τῇ δυνάμει πρότερος τοῖς δὲ χρόνοις ὕστερος καὶ τὴν πλείστην πραγματείαν περὶ τῆς πρώτης φιλοσοφίας ποιησάμενος, 2) ἐπέδωκεν ἑαυτὸν καὶ τοῖς φαινομένοις ἀψάμενος τῆς περὶ φύσεως ἱστορίας· 3) ἐν ᾗ δύο τὰς ἀρχὰς βούλεται ποιεῖν τὸ μὲν ὑποκείμενον 4) ὡς ὕλην ὃ προσαγορεύει πανδεχὲς, τὸ δὲ 5) ὡς αἴτιον καὶ κινεῖν ὃ περιάπτει τῇ τοῦ θεοῦ καὶ τῇ τοῦ ἀγαθοῦ δυνάμει. »

Les deux notices sont bâties, *mutatis mutandis*, selon le même plan. Certains rapprochements peuvent être fortuits, comme celui sur la dualité (3). Mais il est au moins frappant que cette dualité est développée dans des termes conceptuels similaires : ὡς ὕλην–ὡς αἴτιον καὶ κινεῖν/ποιοῦν (4-5); voir aussi Hippolyte, *Elenchos*, I, 11, à propos de Parménide : οὐδ' αὐτὸς ἐφεύγων τὴν τῶν πολλῶν δόξαν ... τὴν μὲν γῆν ὡς ὕλην, τὸ δὲ πῦρ ὡς αἴτιον καὶ ποιοῦν. La proximité des formules classées ici sous le n° 2 relève apparemment d'une intention similaire : Platon, de son côté, a surtout traité de philosophie première, mais s'est aussi adonné à la physique ; Parménide a lui aussi traité du thème, indépendamment de sa Vérité, dans la *Doxa*. Or, il est évidemment vraisemblable que, tout comme Aristote (*De Caelo* 298b18s ; *Phys.* 1.2, 184b25s ; *Metaph.* 1.5, 986b14s), Théophraste ne considèrerait pas la Vérité de Parménide comme relevant à proprement parler de la physique. Voir aussi *supra* n. 11.

¹⁹ Voir e.g. Plat. *Prm.* 128ab, *Sph.* 242d, 244b-245a *passim*, *Tht.* 180e, 183e ; Arist. *Metaph.* 986b10s., *Phys.* 185a20s, 185b5s., 207a8s.,

²⁰ Voir, à ce propos, l'attitude Thémistius, *In Phys.* p. 3,5s. ou de Philopon, *In Phys.* p. 22, 23s.

4. L'hypothèse de Diels, chapitre 1.5 : εἰ ἐν τὸ πᾶν

Ce parallèle général pose en effet problème pour la question aëtienne, puisqu'il tend à montrer, tant pour Parménide que pour Héraclite et Hippase que des notices ayant au moins en parti un contenu et une construction similaire, s'agissant du tout, pouvaient bel et bien figurer dans un chapitre thématique dont le thème est le principe. En outre, la notice de Théodoret (comme presque toutes les autres qu'il cite) donne le nom du père d'Héraclite, trait qui semble bien avoir été le propre, dans la doxographie proprement dite, des notices les plus significatives pour la présentation d'un philosophe, à savoir la présentation de sa doctrine générale ou, si l'on préfère, de ses principes, comme tel était le cas presque systématiquement en Aétius 1.3, l'absence de mention du nom du père y étant en réalité plutôt l'exception²¹. Ces éléments conduisent en fait immanquablement à cadrer la notice de Théodoret dans un chapitre de ce genre, qui soit appartenait bien au corpus aëtien, soit lui était extérieur. C'est précisément ce problème que la solution de Diels élude sans autre procès.

Il est vrai que Diels lui-même doutait de la pertinence de son classement de la notice de Théodoret dans le chapitre 1.5, εἰ ἐν τὸ πᾶν, sans pour autant douter de son appartenance au corpus aëtien²². Il ne fait guère de doute que le sujet principal de la notice est le tout, et que la question de l'unité y est bel et bien posée. Néanmoins, les lemmes qui appartiennent certainement à ce chapitre, connus par des citations conjointes de Stobée (1.22) et du Ps.Plutarque, ne portent pas proprement sur l'unité du tout, mais plutôt sur la question de la pluralité des mondes eu égard au tout²³. La

²¹ On trouve une mention du père, dans l'Aétius 1.3 de Diels pour Anaximandre (Aétius 1.3.3 = Stob. 1.10.12.[2]), Anaximène (Aétius 1.3.4 = Stob. 1.10.12.[5]), Anaxagore (Aétius 1.3.5 = Stob. 1.10.12.[6]), Archélaos (Aétius 1.3.6 = Ps.Plut. 1.3.5), Pythagore (Aétius 1.3.7 = Ps.Plut. 1.3.7 et Stob. 1.10.12.[11]), Xénophane (Aétius 1.3.12 = Theod. 4.5), Parménide (Aétius 1.3.13 = Theod. 4.7), Mélissos (Aétius 1.3.14 = Theod. 4.8), Démocrite (Aétius 1.3.16 = Theod. 4.9), Métrodore de Chios (Aétius 1.3.17 = Stob. 1.10.14), Épicure (Aétius 1.3.18 = Ps.Plut. 1.3.9 et Theod. 4.9), Empédocle (Aétius 1.3.20 = Ps.Plut. 1.3.10), Platon (Aétius 1.3.21 = Ps.Plut. 1.3.11 (avec le nom du père de Socrate), Stob. 1.10.16a.[2], Theod. 4.11), Aristote (Aétius 1.3.22 = Ps.Plut. 1.3.12, Stob. 1.10.16a.[3], Theod. 4.11), et Zénon de Citium (Aétius 1.3.25 = Ps.Plut. 1.3.13, Stob. 1.10.14.[4], Theod. 4.12). Il s'agit en réalité de la règle et l'absence de mention du père est en fait l'exception, accidentelle ou non ici (il manque pour Thalès, Philolaos, Héraclite et Hippase (dans la version du Ps.Plutarque et de Stobée), Leucippe, Ecphante, Xénocrate, Straton, Diogène d'Apollonie, Diodore Cronos).

²² Diels, *DG* 45 : *Ad I 5 dubitanter rettuli quae IV 12 Hippasi et Heracliti de universo traditur sententia. Sed inveniri possit etiam alia idonea sedes. Quin e Placitis ea excerpta sit, dubitatio est nulla.*

²³ Pour ne citer que les passages significatifs de 1.5 d'après le texte du Ps.Plutarque, on a notamment : (1) οἱ μὲν ἀπὸ τῆς Στοᾶς ἕνα κόσμον ἀπεφάναντο, ὃν δὴ καὶ τὸ πᾶν ἔφασαν εἶναι καὶ τὸ σωματικόν. (2) Ἐμπεδοκλῆς δὲ κόσμον μὲν ἕνα, οὐ μέντοι τὸ πᾶν εἶναι τὸν κόσμον ἀλλ' ὀλίγον τι τοῦ παντὸς μέρος, τὸ δὲ λοιπὸν ἀργὴν ὕλην. (3) Πλάτων δὲ τεκμαίρεται τὸ δοκοῦν, ὅτι εἷς κόσμος καὶ ἐν τὸ πᾶν, ἐκ τριῶν [...]. (4) Μητροδώρος δὲ φησιν ἄτοπον εἶναι ἐν μεγάλῳ πεδίῳ ἕνα στάχυν γεννηθῆναι καὶ ἕνα κόσμον ἐν τῷ ἀπείρῳ [...].

question de l'unité ou de la pluralité des mondes étant absente de la notice de Théodoret, qui reste en réalité centrée sur la notion de principe, il reste très douteux que celle-ci puisse trouver sa place dans le chapitre 1.5 d'Aétius, qui plus est si l'on admet le principe d'ordonnancement thématique postulé par Mansfeld et Runia, qui suppose une forte cohérence de contenu au sein d'un même chapitre.

Le choix de Diels, malgré les différents indices comme le thème lui-même de la notice, qui dans sa version théophrastéenne figurait très certainement dans un ensemble traitant des principes, ou la mention du nom du père d'Héraclite, était un pis-aller tenant à l'embarras causé par un texte qu'il ne pouvait pas classer en 1.3, bien qu'il aurait dû y avoir sa place, vu son contenu. En le mettant à part, Diels réglait à bon compte le sort d'un texte pourtant bien problématique pour son hypothèse. Car si 1.5 n'est pas une position valable, où classer ce lemme et faut-il le maintenir dans le corpus aëtien ?

5. L'hypothèse du chapitre fantôme

L'hypothèse d'un chapitre manquant fut proposée il y a bien longtemps par Anton Elter sur la base d'un lemme de Stobée (1.10.12) concernant Xénocrate :

Ξενοκράτης συνεστάναι τὸ πᾶν ἐκ τοῦ ἑνὸς καὶ τοῦ ἀέναντος, ἀέναντον τὴν ὕλην αἰνιττόμενος διὰ τοῦ πλήθους.

Elter arguait que la notice ne fait pas mention en propre du principe, mais de la manière dont le tout est composé, et faisait valoir que Photius, comme les principaux manuscrits de Stobée au demeurant, citait le chapitre dans lequel elle est insérée sous la forme : Περὶ ἀρχῶν καὶ στοιχείων καὶ τοῦ παντός, l'édition de Wachsmuth omettant le καὶ avant τοῦ παντός avec le florilège Laurentien, autrement dit la tradition indirecte²⁴. Le chapitre 10 du livre 1 de l'*Anthologie*, après les passages poétiques qui l'entament comme il est d'usage dans la plupart des chapitres de Stobée, se poursuit par des citations généralement attribuées à Aétius (outre quelques extraits extérieurs, par exemple, d'Hermès ou de Théano), considérées par Diels comme ayant été tirées de 1.3 (sur les principes) et de 1.2 (sur la différence entre principe et éléments)²⁵. Elter, notant que le thème du tout est

²⁴ Elter (1880) 19, n. 1.

²⁵ Le chapitre se termine en outre par une citation tirée du *Timée* de Platon, puis par une citation attribuée formellement à Chrysippe, mais provenant sans doute plutôt d'une paraphrase doxographique due à Arius Didyme.

formellement distingué dans le titre des *mss.*, tel qu'il était aussi connu de Photius, supposait que Stobée avait pu en fait tirer sa notice concernant Xénocrate d'un chapitre concernant le tout, ignoré dès lors par le Ps.Plutarque.

L'hypothèse pourrait également sembler tentante dans le cas de la notice de Théodoret concernant Hippase et Héraclite : si celle-ci ne peut appartenir au chapitre sur les principes du fait qu'elle ne recroise pas Plutarque et Stobée, son sujet premier reste lui aussi le tout. À cela vient s'ajouter par ailleurs le fait que d'autres lemmes repris par Théodoret concernent également le tout dans son rapport au principe. Pour le plus clair, on citera notamment la notice relative à Xénophane (4.5) :

Ξενοφάνης μὲν οὖν ὁ Ὀρθομένους ὁ Κολοφώνιος, ὁ τῆς Ἑλεατικῆς αἰρέσεως ἡγησάμενος, ἐν εἶναι τὸ πᾶν ἔφησε, σφαιροειδὲς καὶ πεπερασμένον, οὐ γεννητὸν, ἀλλ' αἰδῖον καὶ ἀκίνητον· πάλιν δ' αὖ τῶνδε τῶν λόγων ἐπιλαθόμενος, ἐκ τῆς γῆς φύναι ἅπαντα εἴρηκεν. αὐτοῦ γὰρ δὴ τότε τὸ ἔπος ἐστίν·

ἐκ γῆς γὰρ τότε πάντα, καὶ εἰς γῆν πάντα τελευτᾷ.

Il est probable que les notices concernant Parménide et Mélissos, qui suivent, étaient dans le même cas, bien que l'on y observe des différences de vocabulaire, dont on peut cependant croire qu'elles sont des variations stylistiques de Théodoret (4.7-8) :

7. καὶ Παρμενίδης δὲ ὁ Πύρρητος ὁ Ἑλεάτης, Ξενοφάνους ἐταῖρος γενόμενος, κατὰ μὲν τὸν πρῶτον λόγον ξύμφωνα τῷ διδασκάλῳ ξυγγέγραφεν· αὐτοῦ γὰρ δὴ τότε τὸ ἔπος εἶναι φασιν·

οὐλὸν μουνογενὲς τε καὶ ἀτρεμὲς ἢ δ' ἀγέννητον.

αἴτιον δὲ τῶν ὄλων οὐ τὴν γῆν μόνον, καθάπερ ἐκεῖνος, ἀλλὰ καὶ τὸ πῦρ εἴρηκεν οὗτος.

8. Μέλισσος δὲ ὁ Ἰθαγένους ὁ Μιλήσιος τούτου μὲν ἐταῖρος ἐγένετο, τὴν δὲ παραδοθεῖσαν διδασκαλίαν ἀκήρατον οὐκ ἐτήρησεν· ἅπειρον γὰρ οὗτος ἔφη τὸν κόσμον, ἐκείνων φάντων πεπερασμένον.

Théodoret, qui songe à la Genèse mosaïque, envisage la question de la naissance du monde, et l'on peut croire que la mention de τὸν κόσμον, dans le cas de Mélissos, lui incombe, même si la confusion relative entre tout et monde, ou la tendance à ramener l'un à l'autre, apparaît ailleurs dans Aétius²⁶. On retrouve dans ces notices une thématique proche de celle observée dans celle concernant Héraclite et Hippase : le tout de Xénophane est dit un, limité, inengendré et complètement immobile, et la même chose est implicitement admise pour Parménide (la différence se situant dans le choix du principe physique), Mélissos n'étant distingué des deux autres que par l'illimitation.

²⁶ Voir e.g. Aétius 2.4.11 : Ξενοφάνης, Παρμενίδης, Μέλισσος ἀγέννητον καὶ αἰδῖον καὶ ἀφθαρτον τὸν κόσμον (= Stob. 1.20.1f)

Ces catégories de division coïncident avec celles utilisées pour Héraclite et Hippase. On trouve enfin également la mention du tout, par le biais d'une formule qui ne manque pas de rappeler celle utilisée chez Stobée pour Xénocrate, dans la notice relative à Diogène d'Apollonie, qui suit celle d'Héraclite et Hippase chez Théodoret (4.12) :

ὁ δὲ Ἀπολλωνιάτης Διογένης ἐκ τοῦ ἀέρος ἔφη ξυστῆναι τὸ πᾶν.

Diels estimait que cette notice n'était qu'une variation de celle que l'on trouve chez Stobée (1.10.14) : Διογένης δὲ ὁ Ἀπολλωνιάτης ἀέρα ἄπειρον. On peut à la vérité noter que la mention de l'infinité apparaît chez Stobée, mais non chez Théodoret, alors qu'elle y serait justement plutôt attendue en comparaison des notices qui viennent d'être citées, ce qui fait problème.

L'hypothèse d'un chapitre sur le tout ne se heurte pas absolument à l'absence d'une telle entrée chez le Ps.Plutarque. Comme l'avait noté Elter, le titre de Stobée 1.10 permet de croire à l'existence d'un tel chapitre séparé, et le fait qu'il soit ignoré par Plutarque pourrait sans nul doute provenir du fait qu'il était dans ce cas en concurrence avec le chapitre sur les principes, le thème y étant également abordé, la question du tout débouchant dans tous les cas, pour Xénophane, Parménide, Héraclite et Hippase, sur la question du principe physique, la terre, pour Xénophane, la terre et le feu pour Parménide, le feu pour Héraclite et Hippase. Dans ce cas, il faudrait admettre que Stobée et Théodoret auraient compilé deux chapitres cousins, là où le Ps.Plutarque se serait plutôt contenté de supprimer l'un d'eux.

6. Le problème des sources de Théodoret

Diels, comme on sait, admettait que pour ses extraits doxographiques, Théodoret avait pu faire essentiellement usage des trois sources qu'il cite à trois reprises comme ses références principales : Porphyre, Plutarque (identifié au Ps.Plutarque conservé), et Aétius. Son argument général, s'agissant de la simple attribution, repose sur une exclusion : Porphyre avait écrit des biographies et n'avait donc pas de plan thématique ; Plutarque est connu et Théodoret a des notices qu'il n'a pas, certaines étant par ailleurs recroisées par Stobée ; reste donc Aétius.

Certains passages doxographiques posent néanmoins problèmes à cet égard, en particulier la liste doxographique de 2.9-11²⁷.

§9.

1) Θαλῆς μὲν γάρ, τῶν ἐπτὰ καλουμένων σοφῶν ὁ πρεσβύτατος, ἀρχὴν πάντων τὸ ὕδωρ ὑπέλαβεν, Ὁμήρῳ γε οἶμαι εἰρηκότι πιστεύσας·

Ὡκεανὸν τε θεῶν γένεσιν καὶ μητέρα Τηθύν.

2) Ἀναξίμανδρος δέ, τοῦτον διαδεξάμενος, ἀρχὴν ἔφη τὸ ἄπειρον·

3) Ἀναξίμενης δέ, ὁ τούτου διάδοχος, καὶ Διογένης ὁ Ἀπολλωνιάτης τὸν ἀέρα συμφώνως ἀρχὴν προσηγορευσάτην·

§10.

4) Ἴππασος δέ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος τῷ πυρὶ τὴν ἀρχὴν τῶν πάντων ἀπενειμάτην·

5) ὁ δὲ Ἀκραγαντῖνος Ἐμπεδοκλῆς τὰ στοιχεῖα ἔφη τὰ τέτταρα·

6) Ξενοφάνης δέ ὁ Κολοφώνιος τὸ πᾶν αἰδίον, ἐκ δὲ τῆς γῆς τὰ πάντα·

7) καὶ Παρμενίδης δέ ὁ τούτου ἐταῖρος ὁ Ἐλεάτης ὡσαύτως τόνδε τὸν λόγον ἐκράτυνε, ψεῦδος δὲ ἀπέφηνε τῶν αἰσθήσεων τὸ κριτήριον, ἥμισυ λέγων ἐφικνεῖσθαι τοῦτο τῆς ἀληθείας·

§11.

8) Δημόκριτος δέ ὁ Ἀβδηρίτης ἄπειρον τὸ πᾶν εἶρηκε καὶ ἀγέννητον·

9) Ἐπικούρος δέ ὁ Νεοκλέους ὁ Ἀθηναῖος ἐκ τῶν ἀτόμων ἐξ ἀρχῆς ξυστῆναι τὸ πᾶν, εἶναι μέντοι ἀναρχον καὶ αἰδίον·

10) καὶ Μητρόδωρος δέ ὁ Χίος καὶ Ζήνων ὁ Ἐλεάτης καὶ Διογένης ὁ Σμυρναῖος διαφόρους ἀρχὰς τῶν ὄλων ὑπέθεντο.

La source de Théodoret ne peut pas être identifiée directement ici : la chose est d'autant plus frappante que les sources qu'il utilise sont pour le reste du passage assez faciles à tracer. On y repère nettement une reprise de textes cités par Eusèbe de Césarée dans le livre 1 et le livre 14 de sa *Préparation Évangélique* (= *PE*) Eusèbe étant certainement une source de Théodoret – qui le mentionne explicitement, quoi que sans insistance²⁸ –, il est en revanche étonnant que les extraits doxographiques cités ici ne semblent pas provenir directement des *Stromates* du Ps.Plutarque cités en *PE* 1.8, alors même que Théodoret compile en partie des passages cités à grande proximité et imite même Eusèbe sur un point bien précis : Eusèbe distinguait les philosophes grecs selon qu'ils lui semblaient plus ou moins fréquentables, en particulier selon qu'ils étaient d'après lui purement matérialistes ou avaient au contraire effleuré l'idée de la divinité, comme ce serait le cas d'Anaxagore, Pythagore, Platon ou Aristote. La chose explique d'ailleurs pourquoi, dans le livre 14 de la *PE*, lorsqu'Eusèbe cite cette fois des extraits du chapitre 1.3 des *Placita* de Plutarque, il se contente de citer les notices des philosophes présumés purement matérialistes, et omet celles concernant

²⁷ Pour le traitement de Diels, voir *DG* 170.

²⁸ *GAC* 2.97

Anaxagore, Pythagore, Platon, Aristote ou Zénon de Citium. Le mouvement, dans le livre 1 et le livre 14 est en réalité exactement le même.

De la même manière, Théodoret, dans son second livre, oppose tout comme Eusèbe aux philosophes « matérialistes » qu'il vient de citer, les réflexions prêtées à Socrate dans le *Phédon* de Platon (96c). Les pages qui suivent sont quasiment entièrement composées d'extraits tirés des abondantes citations d'Eusèbe : Théodoret utilise successivement *PE* 1.8.18, 14.4.5-6, 14.4.8-10, 14.18.28, 14.12 etc., et finit par opposer à ces philosophes, tout comme Eusèbe, Anaxagore ou Pythagore. C'est clairement sur la base des livres 1 et 14 d'Eusèbe que Théodoret a lui-même construit cette partie de son chapitre mais, paradoxalement, il ne paraît pas pour autant avoir compilé les *Stromates*, qui se trouvaient pourtant dans le chapitre 1.8 de la *PE*.

On peut toutefois observer un certain parallélisme entre les citations doxographiques de Théodoret et les *Stromates* du Ps.Plutarque cités par Eusèbe, à commencer par le choix des philosophes, seul Aristippe, ici mis entre parenthèses, qui n'est d'ailleurs pas un physicien, étant ignoré : Thalès, Anaximandre, Anaximène, Xénophane, Parménide, Zénon d'Elée, Démocrite, Épicure, (Aristippe de Cyrène), Empédocle, Métrodore de Chios, Diogène d'Apollonie. Mais outre que Théodoret ajoute une notice sur Héraclite et Hippase ou cite curieusement en passant Diogène de Smyrne (qu'il pouvait aussi connaître par les listes de succession d'Eusèbe²⁹), subsistent également quelques différences palpables : Théodoret regroupe Anaximène et Diogène d'Apollonie, et cite surtout un vers d'Homère *Il.* 14.201/302³⁰, absent des *Stromates*. Ce vers ne coïncide pas plus

²⁹ Diogène de Smyrne reste pour nous avant tout un nom dans la diadochie Éléato-atomiste, qui permet sans doute avant tout d'ajouter un maillon dans la chaîne de succession (entre Métrodore de Chios et Anaxarque) menant de Démocrite à Pyrrhon ou à Épicure (voir Clem. Al., *Strom.* 1.64.4, Eus. *PE*, 14.17.10, D. L., 9.58 ; voir aussi Probus, *Verg.* p. 335, 8s. Hagen (13, 8s. Keil), avec une série de confusions de noms, dont, pour ce Diogène, « Dionysium Smyrnaeum »). Épiphanes (*Pan.* 3.2.9.17) se contente de dire qu'il avait les mêmes opinions que Protagoras, lui-même étant crédité d'athéisme (sans doute par renforcement de son agnosticisme) dans la liste doxographique. Peut-être s'agit-il du Diogène mentionné par Stobée, 1.50.24, qui aurait défendu la doctrine, conjointement avec Leucippe et Démocrite, que les sensibles sont νόμῳ et non pas φύσει (voir Laks (2008) 239 = S3). Usener se demandait, mais sans rien vouloir affirmer, si le passage sur la justice en Stobée 3.9.46 ne pouvait pas lui être attribué. Voilà à peu près toute notre connaissance sur Diogène de Smyrne. Théodoret avait-il sous les yeux un renseignement précis ? On doit noter en tout cas que la présence de ce Diogène dans cette liste composée de philosophes de la lignée éléato-atomiste, dont Métrodore, réputé son maître, ne jure pas. Sur le sujet, et le fait que Diogène d'Apollonie prenne sa place dans les notices de la lignée italique chez Diogène Laërce, voir Journée (2014).

³⁰ Ce vers est très souvent cité, soit pour illustrer le flux (Plat. *Thét.* 152e, voir 180d, *Cra.* 402b, où il est alors plutôt rapproché d'Héraclite ; voir les prolongements sur la doctrine du sensible dans le témoignage d'Aristoclès in Eus. *PE* 14.20.1), soit globalement dans un contexte cosmologique ou dans celui de la théorie des principes. Le rapprochement avec Thalès est loin d'être systématique : Stobée, qui fusionne apparemment une notice d'Aétius (cf. Ps.Plut., *Plac.*, 1.3.10 et Stob. 1.10.11a-b = Aétius 1.3.20) et un passage de la *Vie d'Homère* du Ps.Plutarque (*Vit. Hom.* 97-99 ; voir Journée (2012) 43s.), rapproche le vers, ou plus exactement le passage (*Il.* 14, 200-202), d'Empédocle. Sextus

avec celui cité par Aétius en 1,3 dans la notice de Thalès, mais correspond en revanche à celui cité par Aristote en *Métaphysique* A³¹, ce qui couplé à la tendance au regroupement plus systématique des monistes (Anaximène et Diogène, Héraclite et Hippase) pourrait pointer du doigt une source péripatéticienne.

Une influence des *Stromates* sur Théodoret est très clairement possible, des parallèles d'attribution pouvant être observés dans certains cas, partiellement pour Démocrite³², peut-être, plus, pour le fond cette fois, pour Parménide, mais ces notices ne sauraient en tout cas être dérivées dans l'ensemble des *Stromates* ni d'ailleurs d'Aétius, ni même des deux ensemble. Théodoret pourrait donc bien utiliser ici, que ce soit en tout ou en partie, une autre source qui nous serait inconnue : dans la mesure où de telles listes plus ou moins construites sur un même plan ont dû circuler en nombre dans l'antiquité, Théodoret aurait donc pu soit reproduire l'une d'elles, qu'il estimait convenir particulièrement à son propos, soit compiler plusieurs sources diverses, mais dont l'une d'elles au moins ne nous serait pas parvenue par un autre biais³³.

S'agissant des extraits problématiques du livre IV, en particulier de la notice concernant Hippase et Héraclite, le fait que Théodoret ait pu puiser à certaines occasions à des sources intraquables ouvrirait certainement la possibilité que tel est le cas également pour ces notices, mais poserait néanmoins un problème en retour. Si Théodoret avait à sa disposition un ou plusieurs *X*, rien n'empêcherait que les citations attribuées à Aétius le doivent être à cet *X*, et celles attribuées à cet *X*, à Aétius. On pourrait certes encore arguer dans ce cas que Théodoret aura préféré citer le nom de la source qu'il utilisait de prédilection. Mais le simple fait de reconnaître, pour les notices doxographiques, d'autres sources que celles nommément désignées par Théodoret, ouvrirait

Empiricus témoigne de son côté d'une association avec Xénophane, en rapprochant d'abord le vers de *Il.* 7.99 (ἄλλ' ὑμεῖς μὲν πάντες ὕδωρ καὶ γαῖα γένοισθε) puis en citant Xénophane B33 DK (πάντες γὰρ γαίης τε καὶ ὕδατος ἐκγεγόμεθα). Il a ailleurs une portée cosmologique plus générale, sans rapprochement précis avec un philosophe (*e.g.* Achilles, *Intr. Arat.*, p. 29, 24ss., Damascius, *Pr.* 3, p. 162, 19ss.), mais l'association avec l'eau est naturellement également bien représentée, par exemple dans les scholies à Pindare (*Schol. in Ol.* 1, 1e), chez Justin Martyr (*Cohort.* 2 ; Thalès est mentionné un peu plus loin, *Cohort.* 3, apparemment d'après Ps.Plut. *Plac.* 1.3.1) ou encore Jamblique au témoignage de Lydus, *Mens.* 4.159. Mis à part Aristote et ses commentateurs, l'association avec Thalès apparaît chez Calcidius, *In Plat. Tim.* 2.280 et Probus, *Verg.*, p. 344, 12s. Hagen (21, 19s. Keil), mais semble rester au fond assez rare.

³¹ *Métaphysique* 1.2, 983b30-31 : on notera que, chez Aristote, il s'agit en fait d'une paraphrase, non d'une citation littérale.

³² On a par exemple, pour Démocrite chez Théodoret 2.11 : Δημόκριτος δὲ ὁ Ἀβδηρίτης ἄπειρον τὸ πᾶν εἶρηκε καὶ ἀγένητον. Dans les *Stromates* (*PE* 1.8.7) : Δημόκριτος ὁ Ἀβδηρίτης ὑπεστήσατο τὸ πᾶν ἄπειρον διὰ τὸ μηδαμῶς ὑπὸ τινος αὐτὸ δεδημιουργῆσθαι· ἔτι δὲ καὶ ἀμετάβλητον αὐτὸ λέγει. Mais d'autres indices démontrent qu'une dérivation faite tout entière sur les *Stromates* est impossible : il n'empêche que postuler une autre source absolument extérieure n'est pas nécessaire, voir *infra*.

³³ Voir Mansfeld et Runia (1997) 287 ; Schulte (1904) 70-72.

d'avantage le champ des possibles : à deux reprises, dans le livre II puis, au minimum, dans une partie des notices citées dans le livre IV, dont celle d'Héraclite et Hippase, et peut-être aussi celles concernant les Éléates, comme ont pu le soupçonner Mansfeld et Runia, Théodoret pourrait utiliser des sources qui nous sont inconnues, sans que l'on puisse être absolument certain, dans ce cas, que l'une de ces sources inconnues soit en fait l'Aétius qu'il mentionne, tandis que la source qu'on lui admet commune avec celle du Ps.Plutarque et de Stobée serait en réalité un X.

Néanmoins, une autre possibilité ne peut être exclue : que la liste de Théodoret en 2.9-11 soit tout entière l'œuvre du penseur chrétien, qui aurait bien pu faire lui-même œuvre de « doxographe » sur la base de ses propres connaissances, ce qui correspondrait par ailleurs à son goût pour la réécriture inventive. On peut démontrer en effet que tous les éléments présents dans cette liste, ou peu s'en faut, s'ils ne peuvent être reconstruits sur la stricte base des *Stromates* du Ps.Plutarque citées en *PE* 1.8 et d'Aétius 1.3, lui étaient néanmoins accessibles à partir d'Eusèbe qui, avons-nous noté, constitue le plus souvent la « bibliothèque » dans laquelle Théodoret puise ses connaissances. Le fait même que la liste de Théodoret recroise les philosophes présents dans la citation des *Stromates* sans que le contenu des notices ne le soit à proprement parler peut laisser songer que, dans ses notes préparatoires, Théodoret avait simplement listé le nom des philosophes considérés en *PE* 1.8, sans nécessairement insister sur le contenu des notices. Dans ce cas, il aurait pu recomposer de son propre chef le contenu de ces notices sur la base des autres éléments qu'il trouvait dans Eusèbe : nous serions dans ce cas, non pas devant un phénomène de répétition plus ou moins fidèle d'une autre source, mais devant la création propre d'une liste doxographique à partir d'éléments connus épars, mais toujours puisés dans la source la plus importante de Théodoret, Eusèbe de Césarée.

On peut notamment faire valoir que sur la citation d'Homère *Il.* 14.201/302 qui semble pointer une source péripatéticienne, Théodoret s'approprie le rapprochement (οἶμαι), qu'il pouvait opérer à partir des citations de Platon présentes dans Eusèbe (*PE* 14.4.1). La liste des parallèles mérite d'être dressée, en nous concentrant ici sur les éléments remarquables³⁴ :

Théodoret	Eusèbe
1) Θαλῆς μὲν γάρ, τῶν ἐπτὰ καλουμένων σοφῶν ὁ πρεσβύτατος, ἀρχὴν πάντων τὸ ὕδωρ ὑπέλαβεν,	> 10.4.17 (μεθ' ἣν ἡ ἀπὸ Θαλοῦ τοῦ τῶν ἐπτὰ σοφῶν ἐνὸς Ἰωνικῆ προσαγορευθεῖσα) ; 14.14.1 (Θαλῆς ὁ Μιλήσιος, εἰς τῶν ἐπτὰ σοφῶν = Ps.Plut. 1.3)

³⁴ Nous ignorons dans ce qui suit les éléments trop communs, par exemple que l'eau est le principe de Thalès et nous nous concentrons sur les informations plus « atypiques » de la liste.

Ὁμήρῳ γε οἶμαι εἰρηκότι πιστεύσας·

Ὡκεανὸν τε θεῶν γένεσιν καὶ μητέρα Τηθύν.

2) Ἀναξίμανδρος δέ, τοῦτον διαδεξάμενος, ἀρχὴν ἔφη τὸ ἄπειρον·

3) Ἀναξίμενης δέ, ὁ τούτου διάδοχος,

καὶ Διογένης ὁ Ἀπολλωνιάτης τὸν ἀέρα συμφώνως ἀρχὴν προσηγορευσάτην·

4) Ἴππασος δέ ὁ Μεταποντίνος καὶ Ἡράκλειτος ὁ Ἐφέσιος τῷ πυρὶ τὴν ἀρχὴν τῶν πάντων ἀπενειμάτην·

5) ὁ δὲ Ἀκραγαντίνος Ἐμπεδοκλῆς τὰ στοιχεῖα ἔφη τὰ τέτταρα·

6) Ξενοφάνης δὲ ὁ Κολοφώνιος τὸ πᾶν αἰδίων,

ἐκ δὲ τῆς γῆς τὰ πάντα

7) καὶ Παρμενίδης δὲ ὁ τούτου ἐταῖρος ὁ Ἐλεάτης

ὡσαύτως τόνδε τὸν λόγον ἐκράτυνε,

ψεῦδος δὲ ἀπέφηνε τῶν αἰσθήσεων τὸ κριτήριον, ἥκιστα λέγων ἐφικνεῖσθαι τοῦτο τῆς ἀληθείας·

8) Δημόκριτος δὲ ὁ Ἀβδηρίτης ἄπειρον τὸ πᾶν εἶρηκε καὶ ἀγέννητον·

9) Ἐπίκουρος δὲ ὁ Νεοκλέους ὁ Ἀθηναῖος

ἐκ τῶν ἀτόμων ἐξ ἀρχῆς ξυστῆναι τὸ πᾶν, εἶναι μέντοι ἀναρχον καὶ αἰδίων·

10) καὶ Μητρόδωρος δὲ ὁ Χίος

καὶ Ζήνων ὁ Ἐλεάτης

καὶ Διογένης ὁ Σμυρναῖος

διαφόρους ἀρχὰς τῶν ὅλων ὑπέθεντο

> 14.4.1 (cf. 14.20.1) = Plat. *Tht.* 152d s.

> 1.8.2 (Μεθ' ὃν Ἀναξίμανδρον, Θάλητος ἐταῖρον γενόμενον) ; 10.14.11 (Θάλεω δὲ γίνεται ἀκουστής Ἀναξίμανδρος)

> 10.14.12 (Ἀναξίμανδρου δὲ γνώριμος ἐγένετο Ἀναξίμενης Εὐρυστράτου Μιλήσιος)

> 1.8.12 (Διογένης ὁ Ἀπολλωνιάτης ἀέρα ὑφίσταται στοιχεῖον)

> 14.14.4 (Ἡράκλειτος καὶ Ἴππασος ὁ Μεταποντίνος ἀρχὴν τῶν πάντων τὸ πῦρ = Ps.Plut. 1.3, cf. *PE* 7.12.1, 14.3.8)

> 1.8.10 (Ἐμπεδοκλῆς ὁ Ἀκραγαντίνος στοιχεῖα τέσσαρα, cf. 7.12.1 : Ἐμπεδοκλῆς τὰ τέσσαρα στοιχεῖα) ; 14.14.6 (Ἐμπεδοκλῆς Μέτῳνος, πόλις τῆς Σικελίας Ἀκραγαντίνος, τέτταρα μὲν στοιχεῖα)

> 1.8.4 (Ξενοφάνης δὲ ὁ Κολοφώνιος [...] οὔτε γένεσιν οὔτε φθορὰν ἀπολείπει, ἀλλ' εἶναι λέγει τὸ πᾶν αἰεὶ ὅμοιον, cf. 1.8.5 : Παρμενίδης δὲ ὁ Ἐλεάτης, ἐταῖρος Ξενοφάνους, [...]. αἰδίων μὲν γὰρ τὸ πᾶν καὶ ἀκίνητον ἀποφαίνεται)

> 1.8.4 (γίνεσθαι δὲ ἅπαντα ἐκ γῆς, et voir, naturellement Theod. *GAC* 4.5 cité *supra* p. 7)

> 1.8.5 (Παρμενίδης δὲ ὁ Ἐλεάτης, ἐταῖρος Ξενοφάνους) ; cf. 10.14.15, 14.17, 10

> 1.8.5 (ἅμα μὲν καὶ τῶν τούτου δοξῶν ἀντεποιεῖσάτο...) ; cf. 14.3.9

> 1.8.5 (γένεσιν δὲ τῶν καθ' ὑπόληψιν ψευδῆ δοκούντων εἶναι καὶ τὰς αἰσθήσεις ἐκβάλλει ἐκ τῆς ἀληθείας) ; cf. 14.3.6, 14.16.13, 14.17, 1

> 1.8.7 (Δημόκριτος ὁ Ἀβδηρίτης ὑπεστήσατο τὸ πᾶν ἄπειρον διὰ τὸ μηδαμῶς ὑπὸ τινος αὐτὸ δεδημιουργῆσθαι· ἔτι δὲ καὶ ἀμετάβλητον αὐτὸ λέγει)

> 1.8.8 (Ἐπίκουρος Νεοκλέους Ἀθηναῖος)

> 1.8.8 (ἀλλὰ καὶ οὐθέν, φησὶν, γίγνεται ἐκ τοῦ μὴ ὄντος, ὅτι τὸ πᾶν αἰεὶ τοιοῦτον ἦν καὶ ἔσται τοιοῦτον)

> 1.8.11 (cf. 14.17.10, 14.19.8 etc.)

> 1.8.6 (cf. 10. 14.15, 11.2.2, 14.17.1, 14.17.10)

> 14.17.10

Ces parallèles ouvrent de manière tout à fait franche la possibilité que les notices sur le principe présentes dans livre 2 proviennent non pas d'une source externe inconnue, mais du propre travail de compilation que Théodore opère sur sa source fondamentale, Eusèbe, ce qui réglerait au demeurant le problème de savoir pourquoi il n'a pas plutôt cité ou résumé, purement et simplement, les *Stromates* du Ps.Plutarque, qui ne seraient plus dès lors que l'une des sources de son travail propre, source certainement fondamentale, comme tend à le soutenir notre comparaison, mais non

pas unique, l'essentiel restant cependant qu'Eusèbe, dans l'ensemble, pourrait être la seule source de Théodoret en l'occurrence.

Admettre que Théodoret utilise d'autres sources que celles qu'il mentionne expressément pose le problème de savoir si Aétius n'est jamais qu'un nom parmi d'autres possibles. Si en revanche les notices issues de *GAC* 2.9-11 étaient le propre fruit de son travail de compilation, le constat permettrait de réduire la difficulté qui découlerait, pour l'identification d'Aétius, d'une prolifération de sources, mais nous renconduirait en revanche à la difficulté de départ : soit Théodoret aurait puisé, pour la notice d'Héraclite et d'Hippase du livre 4, à un chapitre autrement inconnu d'Aétius, soit il aurait utilisé, très ponctuellement, et alors même qu'il avait dans Aétius une notice concurrente sur les mêmes philosophes, une source externe autrement inconnue.

7. Dernière hypothèse : un corpus unique, mais des états différents

Des différentes hypothèses qui viennent d'être présentées, la plus improbable reste à nos yeux, sans remettre en cause ses autres mérites, celle de Diels, qui a clairement minimisé un problème dont il s'était certainement rendu compte. Mais l'exclure ouvre en retour plusieurs portes sans qu'il soit aisé de se décider ensuite sur lesquelles il convient de fermer.

L'hypothèse d'une source externe, à laquelle encouragerait la présence éventuelle chez Théodoret de listes doxographiques qui ne peuvent être identifiées au sein de son corpus, peut pousser sans doute à exclure les textes atypiques et « inclassables » du corpus aétien. Elle se heurte cependant à un point que soulève l'hypothèse du chapitre fantôme : il existe une thématique globale concernant le tout non seulement chez Théodoret, mais également à un niveau plus modeste chez Stobée (à propos de Xénocrate), et ce parallélisme tend à soutenir l'hypothèse de la présence d'un traitement du tout (τὸ πᾶν) dans la source supposée commune. Le texte plus ou moins parallèle de Théodoret (Ξενοκράτης δὲ ὁ Χαλχηδόνιος ἀέναον τὴν ὕλην, ἐξ ἧς ἅπαντα γέγονε, προσηγόρευσεν, 2.12) paraît bien être dérivé d'un texte que représente probablement mieux celui de Stobée : Ξενοκράτης συνεστάναι τὸ πᾶν ἐκ τοῦ ἐνὸς καὶ τοῦ ἀενάου, ἀέναον τὴν ὕλην αἰνιττόμενος διὰ τοῦ πλῆθους.

Si le texte de Théodoret sur Xénocrate, sans la mention du tout, a bien la même origine que celui de Stobée, reste alors deux solutions : soit ils appartenaient à un même chapitre fantôme, mais il faudrait admettre que Théodoret avait correctement remplacé Xénocrate après Platon, pour lequel il tirait son extrait plus probablement d'Aétius 1.3, cette fois, soit ils appartenaient en réalité au

chapitre *Sur les principes* ou peut-être, s'il convient de retirer le καὶ du titre du chapitre de Stobée « sur les principes... du tout ». Et dans ce cas, naturellement, la contrainte d'exclusion des notices sur le tout citées par Théodoret du chapitre 1.3 d'Aétius tendrait à s'affaiblir fortement, et entraînerait une conséquence forte, tout au moins en apparence : du même coup, en effet, on ne pourrait exclure que la notice de Théodoret sur Hippase et Héraclite ait bel et bien figuré dans le chapitre *Sur les principes*, ce qui obligerait à conclure que si Aétius fut peut-être la source de Théodoret, il n'était pas la source du Ps.Plutarque et de Stobée.

On ne peut rigoureusement exclure cette option qu'à une seule condition : accepter d'emblée l'hypothèse d'une source absolument unique pour Stobée, Plutarque et Théodoret, hypothèse qui peut paraître certes suffisamment validée au vu des nombreux parallèles entre les trois, mais qui doit aussi dès lors apporter une explication *ad hoc* à tout cas problématique, au prix, croyons-nous, d'un certain arbitraire, comme c'est déjà le cas, au plus haut point, chez Diels. En maintenant de manière rigide cette hypothèse, on en est nécessairement conduit à multiplier les exceptions et, finalement, à saper les bases mêmes sur lesquelles s'est établi l'édifice. L'unité du *corpus* est abondamment prouvée et notre ambition n'est certainement pas de la remettre en cause : mais ceci prouve-t-il pour autant l'unité de l'*ouvrage* utilisé ensuite par chaque doxographe et démontre-t-il l'impossibilité que chacun aura pu bénéficier d'un état proche, mais néanmoins différent, d'un même *corpus* doxographique dont la tendance à évoluer, et à accueillir des strates successives de transformation semble avérée ? Qui dit que ces différences, loin d'être des anomalies, ne sont pas les dernières traces d'évolution d'un *corpus* autrefois en vie, dont les membres qui subsistent aujourd'hui ne sont pas les reliques d'un seul et même corps, à présent démembré, mais les parties de différents individus appartenant à la même espèce, pour ainsi dire, mais à des stades d'évolution différents ? Aétius, dans ce cas, ne serait lui-même que l'état d'un *corpus*, à disposition de Théodoret, proche sans nul doute de l'état ou des états connus de Stobée et du Ps.Plutarque, mais non pas rigoureusement identique.

Les solutions restent trois, nous semble-t-il, et nous aimerions penser qu'elles restent toutes problématiques, quoi qu'à des degrés divers :

- (1) Théodoret a fait usage d'une autre source, malgré le cas de Xénocrate ;
- (2) Théodoret, tout comme Stobée, avait accès à un chapitre aujourd'hui perdu dans le plan du Ps.Plutarque, mais dans ce cas faisant quasiment doublon avec le chapitre *Sur les principes*.

- (3) Théodoret, Stobée et Plutarque ont certes eu accès à un même *corpus*, mais à des stades d'évolution et d'élaboration différents.³⁵

La troisième solution, pour incertaine qu'elle doive rester, nous semblerait avoir un certain avantage, à défaut peut-être de pouvoir être entièrement convaincante, faute d'autres exemples pertinents. Elle tiendrait compte du moins d'un des points que nous avons abordés en commençant : la question du tout (τὸ πᾶν) apparaissait sans doute dans le traitement thématique de la question générale du principe chez Théophraste, y compris pour un philosophe comme Héraclite, et non pas seulement pour les Éléates. La tendance à considérer le tout dans le traitement de la question du principe a par ailleurs perduré ensuite dans la doxographie, comme c'est manifestement le cas dans les *Stromates* du Ps.Plutarque. Que Théodoret ait reproduit ce trait pour ainsi dire natif par hasard dans le livre 4, en mélangeant des extraits d'Aétius qui n'aurait guère parlé du tout (ce que le cas de Xénocrate rend déjà plus que douteux) avec ceux d'un autre auteur qui en parlait, à propos des Éléates ou d'Héraclite et Hippase, est possible, mais il ne s'agirait certainement pas là de l'explication la plus simple.

8. Conclusion générale

Le texte de Théodoret concernant Héraclite et Hippase n'est somme tout, semble-t-il, qu'un détail. Diels l'a traité comme tel, convaincu qu'il devait provenir d'Aétius, mais ne sachant pas pour autant où le classer en toute certitude. Cette notice, ou encore celles que le livre 4 consacre aux Éléates, doit-elle être exclue du corpus aétien ? Ces textes, par des intermédiaires qu'il reste difficile de définir, sont en lien avec la doxographie théophrastéenne. L'argument consistant à faire valoir, dans le cas des Éléates, que les notices ne concernent pas en propre le principe physique, et ne pouvait donc être considéré par Aétius, reste d'une grande faiblesse : tant Aristote que Théophraste ont traité de l'éléatisme dans un cadre physique, et les notices de Théodoret, tant pour Parménide que pour Xénophane, après l'évocation de l'unité et de l'immobilité du tout, considèrent la terre, pour l'un, le feu et la terre, pour l'autre comme les principes de la constitution des choses, et abordent donc la question physique.

³⁵ Pour la suggestion la plus récente de J. Mansfeld voir plus loin, ch. 8.

L'argument de Diels fonctionnait sur une exclusion : ni le Ps.Plutarque que nous connaissons, ni Porphyre ne peuvent être à l'origine des citations de Théodoret. Il s'ensuit que la seule source possible est l'Aétius mentionné. Une fois que l'on admet que certaines citations, les mieux recroisées du moins, appartiennent à Aétius, mais que celles qui sont problématiques doivent être rejetées, l'argument de base s'effrite quelque peu. Sans doute, il reste évident que tant Théodoret que le Ps.Plutarque ou Stobée ont utilisé un fond commun. Mais la question n'est pas d'abord de savoir si cette source se nommait Aétius, Pierre, Paul ou Jacques : l'identification ne regarde en réalité en première instance que le seul Théodoret, et reste secondaire dès lors que l'exception vient poser le problème plus fondamental de l'unité de la source.

Mais l'unité absolue de cette source doit rester un postulat dès lors que l'on admet que, pour sauver l'hypothèse, il est nécessaire d'admettre que, par exception, quand les textes ne se recroisent pas, il convient d'admettre que Théodoret utilisait une autre source, inconnue de nous : car, en réalité, cette autre source pourrait déjà être Aétius. Soit Théodoret utilise plusieurs sources, ce que ne suffisent pas à prouver les parallèles avec le Ps.Plutarque et Stobée, soit sa source, qui est sans doute Aétius, n'est pas rigoureusement celle du Ps.Plutarque et de Stobée³⁶. Il ne peut exister ici aucun moyen de trancher en toute certitude, puisque l'exclusion ne se fonde que sur le postulat d'une unité qui reste cependant la chose à prouver. Les possibilités sont au fond ici assez claires : maintenir l'hypothèse aétienne en admettant que Théodoret utilisait en réalité de nombreuses sources différentes dont certaines ne sont jamais mentionnées par lui, ou admettre que son Aétius n'était au fond qu'une des étapes de la réduction complexe des manuels doxographiques qui, partant de Théophraste, finit par aboutir à la vulgate du Ps.Plutarque, la seule qui ait fini par se transmettre jusqu'à nous sous forme complète, mise à part la compilation plus tardive du Ps. Galien, qui est elle-

³⁶ Lebedev (2016) 621, n. 70, contre cette hypothèse, invoque le raisoir d'Ockham ou le principe d'économie. Il s'agit cependant d'une nécessité hypothétique, non pas d'une coquetterie superflue : si la notice de Théodoret concernant Hippase et Héraclite vient d'Aétius, et si le seul candidat probable pour le classement du passage est Aétius 1.3, il s'ensuit que Théodoret ne peut avoir le même texte que le Ps.Plutarque et que Stobée. Autrement dit, soit on multiplie les sources de Théodoret, soit on admet deux sources différentes pour Théodoret d'une part, et le groupe Stobée-Ps.Plutarque d'autre part. En bref, on ne peut se passer ici de multiplier les sources, à un niveau ou à un autre. Au surplus, l'hypothèse émise par Lebedev en 1988 ne peut plus tenir sous sa forme originelle, comme l'auteur doit volontiers l'admettre : les amendements successifs qui lui ont été apporté pour la faire tenir nous paraissent plus coûteux en l'occurrence que l'idée somme toute très simple et facile à étayer que le corpus doxographique est resté longtemps assez meuble, comme le démontrent amplement les usages connus de l'ouvrage simplifié du Ps.Plutarque.

même le meilleur exemple de la manière dont les manuels furent l'objet d'appropriations successives et d'appauvrissements malheureux.

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Archai Lists in Doxographical Sources

Ps.Plutarch, Stobaeus, Theodoret, and another Ps.Plutarch

Jaap Mansfeld

Abstract. Theodoret's contribution to the reconstruction of Aët. *Plac.* ch. 1.3 'On the principles' has been overestimated by Hermann Diels and denied by others. Comparison of the lists of principles in ps.Plutarch, Stobaeus and Theodoret (who has two such lists), the three authors considered as sources for Aëtius, as well as in the *Stromateis* of another ps.Plutarch, shows both these views to be partly mistaken. Theodoret CAG 4.5 on Xenophanes (perhaps, and in part), 4.9 on Democritus, 4.9 on Metrodorus, 4.11 on Plato, 4.11 on Aristotle, 4.11 on Ecphantus, 4.12 on Zeno of Citium, and 4.12 on Xenocrates (perhaps) should be associated with Aët. 1.3. But the greater part of CAG 4.5–6 on Xenophanes, as well as 4.7 on Parmenides, 4.7 on Melissus, 4.9 on Epicurus, 4.12 on Hippasus and Heraclitus, and 4.12 on Diogenes of Apollonia, all included by Diels in Aët. 1.3, are probably derived from a different source shared with the *Stromateis*.

Key words: Successions, Aristotle, Eleatics, Atomists, overlap, reconstruction, τὸ πᾶν, τὸ ἔν, shared lemmata

1. The issue

There are two lists of philosophers, in more or less chronological order, accompanied by their *archai*, or principles of physical philosophy, in the church father and apologist Theodoret's *Therapy of Greek Diseases* (*Graecarum affectionum curatio*), namely one in Book 2.9–11 and another one in Book 4.5–12, which display some degree of affinity with those of the two main sources for chapter 1.3, 'On what the principles are' (Περὶ τῶν ἀρχῶν, τί εἰσιν), of the *Placita* of Aëtius. Both these lists have been studied and discussed, one is tempted to say 'of course', in Diels' *Doxographi Graeci* of 1879 (hereinafter *DG*). Little or no attention has been paid to them as such by others, with the noteworthy exception of Gérard Journée in the present volume.¹

Diels based his epoch-making reconstruction of the fundamental doxographical treatise he attributed to this Aëtius not only on a tract falsely attributed to the famous Plutarch of Chaeronea, entitled *On the Physical Doctrines Held by the Philosophers* (*Placita philosophorum*)² and the anonymous abstracts in the first Book (almost entirely)³ of the colossal *Anthology* of the fifth-century author Stobaeus, the so-called *Physical Selections* (*Eclogae physicae*), but also on the abstracts in Theodoret, namely in CAG Books 1, 2, 4, 5 and

¹ Journée, G., 'Aëtius et le problème des sources de Théodoret: à propos de GAC 4.12', above, 000.

² Of which the greater part was in its turn epitomized in the *Historia Philosopha* (ed. at *DG* 595–648) falsely attributed to Galen, which derives from a text that was sometimes better. A new edition by Dr Mareike Jas of Munich is in preparation, see above, ch. 00. Ps.Galen's long ch. 3 dealing with the Successions does not derive from ps.Plutarch; see Diels *DG* 244–246, Von Kienle (1961) 15–17.

³ Lemmata corresponding to ps.Plut. 5.30 are as far away as Stob. 4.36.29–31 and 4.50a30.

6. Theodoret three times refers to Aëtius *expressis verbis*, without making clear what precisely he borrowed from this treatise.⁴

No one has ever doubted Diels' conclusion that a common source has to be assumed whenever ps.Plutarch and Stobaeus agree, but his view that Theodoret also used this source has come under attack.⁵ I argue elsewhere that a common source should also be assumed whenever Stobaeus and Theodoret agree and parallels in ps.Plutarch are absent, an observation that has never been proposed before.⁶ One can moreover prove that the source shared by Stobaeus and Theodoret is the same as the source shared by ps.Plutarch and Stobaeus. Lemmata found among the doxographical abstracts in Theodoret CAG Books 1, 4, 5, and 6, that are shared with Stobaeus but not paralleled in ps.Plutarch, should therefore also be attributed to Aëtius as their source.⁷ But should the extra ingredients, i.e. the lemmata in Theodoret that are embedded in these 'Aëtian' micro-contexts, but are not paralleled in either ps.Plutarch or Stobaeus, therefore be attributed to Aëtius as well? Diels was convinced (for on his part it is a conviction rather than the result of an argument) that this holds without exception, and he can be proved to be almost always right. But the material in Theodoret parallel to Aët. ch. 1.3 is difficult and to some extent different.⁸

For the most part Diels' reconstruction of the lost treatise is based on his trio of sources in a quite straightforward manner, but that of A ch. 1.3 is rather less so.⁹ In the usual Dielsian way this depends on P ch. 1.3, 875D–878C, and S 1.1.10, 1.1.12, 1.1.14, and 1.1.16a, printed in parallel columns, but for T on CAG 4.5–12 alone (both the parallel and the unparallelled paragraphs are printed in the apparatus under the right-hand column), and not on CAG 2.9–11 as well. What is also remarkable is that in the *Prolegomena* of the *DG*, 'a mighty maze but not without a plan', he discussed these two lists in two different places rather far from each other:

⁴ T 2.95; 4.31; and 5.16, where he refers to Aëtius as his source for what follows.

⁵ Doubts have been expressed and difficulties mentioned by Lebedev (1984), (1988), and (2016), Frede (1999), Gourinat (2011) esp. 177–187, and Scholten (2015) 114–122; the latter argues that not all problems have been or even can be solved, but still comes down in favour of the Aëtius hypothesis. Very strong doubts been formulated by Bottler (2014) 511–522 and *passim* (e.g. *ibid.* 53 'gerade Theodoret bleibt trotz der *Aëtiana* 1997 ein Problemfall').

⁶ Mansfeld (2016b) = this volume ch. 00, and below text to n. 108.

⁷ Mansfeld (2016b) 158–160 = this volume 000.

⁸ Hereinafter P will stand for ps.Plutarch the author of the *Placita*, S for Stobaeus, T for Theodoret (*GAG*), and A for Aëtius.

⁹ In the 'Theophrastorum apud excerptorum conspectus', *DG* 133–144, his famous overview in five parallel columns of abstracts from several sources that, as he argues, derive from Theophrastus (Hippolytus *Refutation of All Heresies* Book 1, ps.Plutarch *Stromateis*, Diogenes Laërtius *passim*, Aëtius *Placita* *passim*, and Theophrastus' so-called *De physicorum opinionibus* — cf. below, n. 23), Diels in column four prints fragments of his hypothetically reconstructed A (though not always in full), rather than undiluted fragments of the three sources for this reconstruction, thus deciding the question of the reconstruction of A ch. 1.3 and its Theophrastean roots in advance. I have argued elsewhere that to avoid begging the question of Theophrastus qua source a sixth column should have been added, with the Aristotelian parallels. Von Kienle (1961) 19–21 is not of any use here, since he grounds his analysis on A ch. 1.3 as reconstructed by Diels, instead of studying the contributions of each individual source of A. Mansfeld and Runia (1997) 274–275 in their lists of relevant passages in T do not include T 2.9–11 (thus following Diels, see *ibid.* 284 with n. 36), and (2009) 73–89 again omit T 2.9–11 when examining the reconstruction of A 1.3 in the context of a discussion of Successions and sects. Frede (1999) has little to say on this chapter.

that of CAG 2.9–11, at some length, as far down as pp. 170–171, and first but more or less in passing that of CAG 4.5–12 at p. 45 (with some further information at pp. 168 and 221). The contents of the passage in Book 4 were accepted by him as Aëtian and utilized for his reconstruction of A ch. 1.3, but those of Book 2 were left by the wayside. ‘The list of philosophers is augmented with the names [and doxai, JM] of Parmenides and Melissus’, Diels enthusiastically wrote of what he saw as the riches (‘ubertas’) of CAG 4.5–12, pointing out that ethnicons (as for Strato), or a date (as of Epicurus), or doxai (he probably thinks especially of Xenophanes) are stated more accurately in T.¹⁰

One almost always has to go back to the master, since not only his wonderful discoveries, but also his omissions and his decisions — as in the present case in favour of the list at CAG 4.5–12 — have decisively influenced subsequent scholarship.

In what follows I shall compare the two lists of T with each other and with that of the *Stromateis* (*Miscellanies*) preserved by Eusebius, falsely attributed to the great Plutarch as well,¹¹ and also with those of S and P. This investigation is largely based on my section of the commentary already to be found in the unpublished draft of ch. 1.3 of the forthcoming edition of A by D. T. Runia and the present writer.¹²

2. Archai in CAG Book 2.9–11

Let us start with the list in T CAG Book 2, and provisionally compare some of its contents with selected paragraphs of the list in Book 4, and of P and S, the latter as the twin sources for A 1.3. The title of CAG Book 2 is ‘On the principle’ (Περὶ ἀρχῆς), which entails that the presence of an *archai* list should not come as a surprise.¹³ T says that ‘the paths of falsity [sc. of the heathen philosophers] are multifarious’, and briefly lists a selection of philosophers (some of which are cited without doxai): Thales, Anaximander, Anaximenes plus Diogenes, Hippasus plus Heraclitus, Empedocles, Xenophanes, Parmenides, Democritus, Epicurus, Metrodorus of Chios, Zeno of Elea, and Diogenes of Smyrna.

¹⁰ DG 45.

¹¹ Eus. PE 1.7.16–8.12, also DG 577–583, Plu. fr. 179 Sandbach. The argument for authenticity (and attribution of Eus. PE 15.62.7–13 to the same author) of Mras (1955) are not convincing, see Sandbach (1969) 324–327 on fr. *179, though he goes a bit far in calling the compilation ‘puerile’. For translations of the lists of S and the *Stromateis* see the Appendix.

¹² Namely for the comparison of the two lists in T with those of P and S, for the engagement with the argument of Elter, for the comparison with the *Stromateis* of the other ps.Plutarch, for the issue of ‘the All’, and for the argument that T combined only a few excerpts from A with material found in another source close to the *Stromateis*.

¹³ Cf. the announcement in the table of contents at T 1.5, ‘Book 2 provides an inventory of the doxai concerned with the principle of the totality of things (τὰς περὶ τῆς τῶν ὅλων ἀρχῆς ... δόξας) of the most famous wise men of the Hellenes and the philosophers after them’. Scholten (2015) translates ‘Anfang des Weltalls’, less well. For the expression cf. e.g. Achilles, a cousin writing of A, at *De univ.* 3, heading p. 9.10 Di Maria Περὶ τῆς τῶν ὅλων ἀρχῆς of a chapter listing the doxai from Zeno of Citium (god and matter, SVF 1.85) to anonymi via Epicurus (atoms, fr. 267 Usener) and Aristotle (form matter privation), etc. For a Christian author ἀρχὴ τῶν ὅλων also designates God, e.g. Eus. PE 7.14.3, Theod. Haer. MPG 83 p. 441.28 sqq. T profits from this double entendre, which enables him to compare philosophy with Scripture. The phrase has a political sense in Polyb. 1.3.7.3 etc.

In his discussion in the *Prolegomena* of the *DG* (p. 170) Diels noticed and considered the composite nature of this list, which appends a *Diadochai* or Successions list composed in Hellenistic times¹⁴ and ending in what seems to be a disorderly way, to a revised Aristotelian overview. First he singled out the tenets of Heraclitus-plus-Hippasus and of Xenophanes as related ('cognata') to what is found in P and S for A in the *DG*. But underneath paragraph 1.3.12 (Xenophanes) in the right-hand or S-column of ch. 1.3, just as underneath an open space in the right-hand or S-column of A 1.5 (Heraclitus-plus-Hippasus), he did not print the 'uncommon' ('praeter vulgaria') doxai from the list in *CAG* Book 2, but preferred their more detailed analogues from the list in Book 4. We thus observe that Diels was aware of a close relationship between T's two lists, a matter of indubitable interest as we shall see. The Parmenides lemma in the first list at T 2.10, on the other hand, though commencing in the same way as that in the later list at T 4.7, 'continues in a quite different fashion' ('in plane alia excurrit'), namely with an observation on the falseness of the criterium of the senses, or sensations (τῶν αἰσθήσεων τὸ κριτήριον — Hellenistic terminology at the earliest), so is less similar.

Diels next spotted specific echoes at T 2.9–10 of Aristotle's preliminary overview of the principles, or elements, as material causes in *Metaphysics* A. The Homeric line (*Il.* 14.201 = 14.302) cited for Thales at T 2.9 is not that of A 1.3.2 (where we have *Il.* 14.246), but of Arist. *Met.* A.3 983b30–31. Diels does not know via what intermediary source this could have come about.¹⁵ This unexplained Aristotelian connection also includes the combination of Anaximenes with Diogenes, and then of Hippasus with Heraclitus in that order (and not in the reverse order of A),¹⁶ immediately followed by Empedocles. This, we may readily agree, indeed looks like a calque of Aristotle's introductory shortlist at *Met.* A.3 984a2–8, 'Thales (sc. water), ... Anaximenes air plus Diogenes, Hippasus of Metapontum fire plus Heraclitus, and Empedocles the four ...': monists for the elements water, air and fire, the pluralist Empedocles to complete the full set of four with earth.

'But the rest', Diels goes on, 'on Anaximander, Xenophanes, Parmenides, Democritus, Epicurus, Metrodorus of Chios, Zeno of Elea, and Diogenes of Smyrna is not consistent with Aristotle. It seems to have been derived from a poor Successions compendium, and to have been beefed up with T's own learning or balderdash'. Yet he is prepared to accept (a bit to our surprise) that when writing out the Xenophanes paragraph T remembered A. But the reference to the 'various principles' of Metrodorus, Zeno, and Diogenes (of Smyrna) at the end, he believes, is mere obfuscation, for in antiquity no one knew what the thought of Diogenes of Smyrna was, so it is entirely unlikely T did know. Diels concludes correctly that T will have utilized a standard Successions list on which Diogenes of Smyrna precedes Anaxarchus, as at Clement of Alexandria *Stromata* 1.64, where we find the Eleatics Xenophanes Parmenides Zeno Leucippus Democritus Protagoras Metrodorus Diogenes of

¹⁴ For the literature on *Diadochai* ('Successions') see Von Kienle (1961), Wehrli (1978), Dorandi (1999), Mejer (2000) 45–47. On Successions and Sects in the *Placita* see Alt (1973) 137–148, Mansfeld and Runia (2009) 73–96.

¹⁵ We may add that *Il.* 14.201 is quoted much more often (e.g. already at Pl. *Crat.* 402b and *Thet.* 152e, then Philod. *Piet. PHerc.* 247, col. VIa (sin. pars), 5–12 Schober) than *Il.* 14.246, which moreover first appears in later sources (e.g. at Heracl. *All.* 22.6, Plu. *Fac.* 938D, Athenag. *Leg.* 18.3, [Just.] *Coh.* 5). See e.g. Zeegers-van der Vorst (1972) 147–148, and West's *Iliad* edition (2000) *ad locc.* Diels should not have given a separate lemma to the Homeric line at A 1.3.2, see Mansfeld and Runia (2009) 77.

¹⁶ A 1.3.11 has 'Heraclitus and Hippasus'.

Smyrna Anaxarchus (ending, we may add, with Epicurus), or Diogenes Laërtius 9.58, with Democritus Nessas Metrodorus Diogenes of Smyrna Anaxarchus. He could have added the Successions list of the Eleatics from Xenophanes to Pyrrho at Eusebius *Praeparatio Evangelica* 14.17.10.¹⁷

All this is nevertheless a bit fast, and calls for some comment. Though Diels points out that the inclusion of Anaximander cannot be reduced to the example of Aristotle, he surprisingly fails to add that it will be due to the initiative of Theophrastus,¹⁸ his famous predilection for Theophrastus as *fons et origo* of the doxographical tradition notwithstanding. And the order Hippasus — Heraclitus is not only Aristotelian but also that of Theophrastus.¹⁹

Furthermore, this (mostly) Aristotelian series of name-labels and doxai is followed and continued also by the pair Xenophanes/Parmenides. To be sure, their doxai are largely different from those described by Aristotle, but the strategic role of the Eleatics' stance in relation to that of their physicist predecessors from Thales to Empedocles is analogous to their role in Aristotle's overview in *Met.* Book A. According to Aristotle's account Xenophanes, the first to promote the One, 'made nothing clear' (οὐθέν διεσαφήνισεν), that is to say failed to make clear whether he spoke of form, or matter (which would imply physics), but just looked at the whole heavens and said the One is God (which would point in the direction of first philosophy). And his Parmenides had to compromise by assuming two physical elements, hot and cold or fire and earth, next to the immobile One.²⁰ According to T's list Xenophanes and Parmenides (we are told the latter agrees with his master) claim that it is 'the All', or 'universe', that is everlasting. This means that Parmenides' Being has meanwhile been reinterpreted in a cosmological sense, and so has Xenophanes' divinity, here as elsewhere via an identification with Parmenides' Being.²¹ A version of Parmenides' Aristotelian compromise is now moreover attributed to Xenophanes as well, since he is said to have claimed earth as the element 'from which', next to his 'everlasting All'. Though this is not spelt out in T, he must have had a similar physicist view (cf. T 4.7–8, where earth and fire are mentioned) in mind for Parmenides, for as we have seen he is said to agree with his master. The two Eleatics, in other words, are not only at variance with their predecessors, but also implicitly convicted of positing theories that are self-contradictory.²² This is in line with Theophrastus' account in the fragments of the principles of the philosophers, which is a shade more outspoken than Aristotle's. Parmenides' so-called 'two ways' are described in the

¹⁷ Diogenes will be the one mentioned at A 4.8 (S only) together with Leucippus and Democritus for the view that sensations are by convention, see Diels *DG* 676 s.v. Diogenes Smyrnaeus. For Gérard Journée's different hypothesis for the source of CAG 2.9–11 see above, 000.

¹⁸ Thphr. *Phys.Op.* fr. 2 Diels (= fr. 226A FHS&G) ap. Simp. in *Phys.* 24.13–14.

¹⁹ Thphr. *Phys.Op.* fr. 1 Diels (= fr. 225 FHS&G) ap. Simp. in *Phys.* 23.33–24.1 (thus also Simp. in *Cael.* 602.20, 615.22 and 620.5, but not Simp. in *Phys.* 149.8). This Aristotelian/Theophrastean order is also found at T 5.18 (on the fiery soul: 'Parmenides and Hippasus and Heraclitus'), where the parallel passage in S 1.49.1b omits Parmenides (cf. A 4.3.4 Diels).

²⁰ *Met.* A.3.984b2–4, A.5 986b10–987a2.

²¹ This also holds for Melissus' One, see e.g. the representative doxa A 2.4.11 'Xenophanes and Parmenides and Melissus (say that) the cosmos is ungenerated and everlasting and indestructible' (Ξενοφάνης Παρμενίδης Μέλισσος ἀγένητον καὶ αἰδῖον καὶ ἄφθαρτον τὸν κόσμον). Note that the *Placita* only cite this reinterpretation of the Eleatic doctrine and omit the metaphysics, thus neutralizing the criticism by ignoring it outright.

²² See below, Section 4.

verbatim fragment of the *Physics* cited by Alexander of Aphrodisias,²³ while Xenophanes' single principle or 'one and All' (ἓν καὶ πᾶν), namely the God, is said in Simplicius' paraphrase to belong with another discipline than physics,²⁴ a statement that echoes Aristotle's dictum in the *Physics* about Parmenides and Melissus.²⁵ We shall see presently that this picture of Eleatic philosophy as being at odds with itself is also found in the second *archai* list in CAG Book 4, where it is set out in much more detail. It is also paralleled in the *Stromateis* of the other ps.Plutarch,²⁶ and is a feature of the parallel accounts of Hippolytus, *Refutation of All Heresies* 1.14 (Xenophanes) and 1.11 (Parmenides). For this cluster of passages Diels therefore claimed descent from Theophrastus.²⁷ Parmenides' purported rejection of the senses/sensations is paralleled at ps.Plu. *Strom.* 5,²⁸ and even (retrospectively) attributed to his master Xenophanes at *Strom.* 4.²⁹ Even so, the self-contradictory nature of Eleatic theory emphasized in these later sources is by no means as forcefully expressed by Aristotle and Theophrastus as it is by T at CAG 4.5–7, as we shall see in Section 4 below. Parmenides' theory of human knowledge, for instance, is put by Aristotle on a par with those of

²³ *Phys.Op.* fr. 6 Diels (= 227C FHS&G) ap. Alex. in *Met.* 31.7–14. For the fragments on the principles of Theophrastus in Simplicius' *Commentary on Aristotle's Physics* I will speak of *Physics* where Usener, Diels and their followers speak of *On the Tenets of the Physicists* (*De physicorum opinionibus*, abbreviated *Phys.Op.*—the abbreviation itself is ambiguous and may also stand for *De physicis opinionibus*). There are only two indubitable references to a treatise entitled *Physical Tenets* (*Physikai Doxai*, and not *Tenets of the Physicists*), namely *Phys.Op.* fr. 5a Diels = 231 FHS&G (τὰς τοῦ Θεοφράστου βίβλους ..., καθ' ἃς τὴν ἐπιτομὴν ἐποίησατο τῶν φυσικῶν δοξῶν) and fr. 11a Diels = 241A FHS&G (Θεόφραστος μέντοι ἐν τῷ Περὶ τῶν φυσικῶν δοξῶν), and some other fragments, too, may be attributed to this work. But the fragments in Simplicius' *Commentary on Aristotle's Physics* as well as several others habitually attributed to the so-called *De physicorum opinionibus* derive from the *Physics*. See Mansfeld (1989) 148–150 = (1990) 253–255, with references. Fortenbaugh & alii (1992) print these texts under the cautious heading 'Doxography on Nature'.

²⁴ *Phys.Op.* fr. 5 Diels (= 224 FHS&G) ap. Simp. in *Phys.* 22.27–30. See also Simp. in *Phys.* 7.1–3 'Xenophanes of Colophon and his pupil Parmenides and the Pythagoreans taught a quite perfect though enigmatic personal philosophy pertaining to physics and what is beyond nature'.

²⁵ Arist. *Phys.* 1.2 184b25–185a1.

²⁶ See below, Section 6.

²⁷ In the 'excerpta de Xenophane' and 'de Parmenide' in the conspectus of excerptors of Theophrastus, *DG* 140–142. For Xenophanes see. Hipp. *Ref.* 1.14.2 = 21A33 DK ('he says nothing comes to be or passes away or moves/changes and that the All is one, not subject to change', conflicting with the cosmic cycle of 1.14.5; for Parmenides Hipp. *Ref.* 1.11 = 28A23 DK ('he posits that the All is one and eternal and spherical, but failing to escape from the opinion of the many he says that are the elements of the All are fire and earth')).

²⁸ *DG* 142. This epistemological doxa is also paralleled at Philod. *Rhet.* IV *PHerc.* 224 fr. 3 Vassallo (Parmenides 28A48 DK, Melissus 30A14), in combination with the doctrine that 'the All is one' (ἐν τὸ πᾶ[ν λέγον]τας εἶναι); see the text at Vassallo (2015) 84 and his comments *ibid.* 101–106. For the phrase 'the All is one' see below, Section 5. Xenophanes, Parmenides, and Melissus are among the eleven name-labels at A 4.9.1 ap. S 1.50.17 that are listed for the view that 'the senses/sensations are false' (Diels *DG* 142, citing this paragraph, only mentions Pythagoras and Parmenides).

²⁹ Not cited among the 'excerpta de Xenophane' at *DG* 140.

Anaxagoras and Empedocles (and even with Homer's).³⁰ Parmenides' view of sex differentiation in the womb is contrasted with that of Empedocles without a hint of any difference in epistemic status.³¹ And if the quotation from Theophrastus' *Physics* at S 1.25.1b for A 2.20.3, second part, really refers to a doctrine of Xenophanes, as is convincingly argued by David Runia,³² the Eresian can hardly have wanted us to believe that Xenophanes' physics made a mockery of his whole purported system.

The doxa attributed to Democritus, who is made to follow the two Eleatics instead of preceding them as in Aristotle,³³ much resembles the metaphysical half of the doxa of Xenophanes (and Parmenides). But no cosmology is attributed, however, so there is no internal contradiction. In fact, the atomic theory is conspicuously absent, while the telegraphically formulated doxa that the All is 'infinite and ungenerated' is in the first place known as that of Parmenides' follower Melissus,³⁴ whose name does not occur on the present list, though it is found on the other list, at T 4.8.³⁵ Nevertheless this attribution has to be accepted, although it is of course not a summary of the main points of Democritus' doctrine, that is, of the assumption of the atoms and the void (as at T 4.9: 'solids' and void). It may be seen as a selective emphasis on an important aspect of his doctrine. This is paralleled in the *Stromateis* of the other ps.Plutarch, where at §7 we read: 'Democritus of Abdera posited that the All is *infinite* because it was absolutely not manufactured by anyone [or: 'anything']. ... And what sort of All this is he sets out verbatim, (saying) that the causes of things that are taking place now have *no beginning*'.³⁶ *Ad sententiam* this is equivalent to Democritus' doctrine of the All that is infinite and ungenerated at T 2.11. Aristotle reports that 'Democritus shows how impossible it is that everything can have been generated, because time was not generated'.³⁷

In ps.Plu. *Strom.* 10 we moreover meet with a similar account of Metrodorus of Chios, a later Atomist in the manner of Democritus: 'Metrodorus of Chios says that the All is

³⁰ Arist. *Met.* Γ.5 1009b12–31, successively citing Empedocles 31B106 and B108, Parmenides 28B16, Anaxagoras 56A28, and a parallel to Democritus 68A101 (ap. Arist. *de An.* 1 2.404a27–31) and 68A135 DK (ap. Thphr. *Sens.* 58). A faint echo of this passage is found at A 4.5.12.

³¹ Arist. *PA* 2.2 648a25–31, echoed A 5.7.1–2. See further Mansfeld (2015).

³² *Phys.Op.* fr. 16 Diels = 232 FHS&G, Runia (1992).

³³ *Met.* A.4 985b5–22.

³⁴ Cf. the versions of the famous thesis of Melissus 30B1–B2 DK at Arist. *SE* 5 167b13–14 (30A10 DK) '... the argument of Melissus that the All is infinite (ἄπειρον τὸ ἅπαν), since he assumes that the All is ungenerated (τὸ ... ἅπαν ἀγέννητον)', and *SE* 28 181a27–29 '... the argument of Melissus: if what has come to be has a beginning, what has not come to be, he posits, has no beginning, so that, if the universe is ungenerated (ἀγέννητος ὁ οὐρανός), it also is infinite (ἄπειρος)'. Also Cic. *Luc.* 118 (30A9DK) 'Melissus (said the *principium rerum e quo omnia consistunt*, 'the principle of things of which all things consist', is) what is infinite and immutable and has always been and will always be' (*Melissus hoc quod esset infinitum et immutabile et fuisse semper et fore*).

³⁵ Where his infinite Being has been turned into an 'infinite cosmos', cf. above, n. 21.

³⁶ Δημόκριτος ὁ Ἀβδηρίτης (68A35 DK) ὑπεστήσατο τὸ πᾶν ἄπειρον διὰ τὸ μηδαμῶς ὑπὸ τινος αὐτὸ δεδημιουργῆσθαι. ... οἷον πᾶν ἔστιν, ῥητῶς ἐκτίθεται μηδεμίαν ἀρχὴν ἔχειν τὰς αἰτίας τῶν νῦν γιγνομένων κτλ.

³⁷ Arist. *Phys.* 8.1 251b15–17, Democritus 68A71 DK, fr. 64a Taylor. Arist. *ibid.* 251b10–19 points out that Plato is the only philosopher to generate time, echoed A 1.22.8 (both P and S). Cf. Lucr. 5.423 (and elsewhere) *ex infinito ... tempore*.

everlasting, because, if it were generated, it would proceed from what is not. It is infinite, because it is everlasting, for it has no beginning from where it began, nor any limit or termination'.³⁸ But Theophrastus attributes 'virtually the same principles to Metrodorus as to Democritus', namely the 'full and the 'void',³⁹ which is as different from what we find in the passage of this ps. Plutarch as the account of Democritus at T 4.9 is from that at T 2.11. The great Eduard Zeller, who noticed the resemblance with the tenet of Melissus, argued that Metrodorus followed Melissus, while Peter Bicknell believed, understandably, that the *Stromateis* passage is mistaken and that the name-label Metrodorus plus ethnicon should be replaced by the name-label Melissus plus ethnicon.⁴⁰ John Palmer, who also recognizes the 'striking similarity' to Melissus' view, nevertheless argues that the account at ps.Pl. *Strom.* 7 is fully compatible with the main doctrine of Democritus, so in his view *Strom.* 10 would come to be compatible with the doctrine of Metrodorus, too.⁴¹ But these scholars do not take into consideration the even more indubitably 'Melissean' doxa attributed to Democritus at T 2.11.⁴² I believe, as I have already intimated above, that we are dealing here with a non-standard picture of Atomist theory, prompted by the fact that Melissus posited that Being (in later reports modified to the All, or the cosmos)⁴³ is infinite and everlasting, a view the Atomists maintained with regard to the totality of matter, and the void.⁴⁴ The closeness to Melissus of Democritus at T 2.11,⁴⁵ paralleled as we have seen for Democritus as well Metrodorus of Chios in ps.Pl. *Stromateis*, is important for understanding the particular nature of the *archai* lists in T, as compared with those in P and S qua sources for A ch. 1.3. For this Eleatization is not found in S 1.10.14 — where Metrodorus comes first and is separated from Democritus by Diogenes, Zeno and Leucippus —, printed and rearranged by Diels as A 1.3.16–17 (first Democritus, then Metrodorus), and where the contents of the doxai of both these Atomists consist only of the standard 'solids', or 'indivisibles', and the 'void'.

³⁸ Μητρόδωρος ὁ Χίος (70A4 DK) αἰδίων εἶναι φησι τὸ πᾶν, ὅτι εἰ ἦν γενητόν, ἐκ τοῦ μὴ ὄντος ἂν ἦν· ἀπειρον δέ, ὅτι αἰδίων, οὐ γὰρ ἔχειν ἀρχὴν ὅθεν ἤρξατο οὐδὲ πέρας οὐδὲ τελευτὴν κτλ. (what follows sounds also very Melissean).

³⁹ *Phys.Op.* fr. 8 Diels (= 229 FHS&G) ap. Simp. in *Phys.* 28.27–29 (70A3 DK).

⁴⁰ Zeller (1919–1920) 1186 n. 1, Bicknell (1982) 197.

⁴¹ Palmer (2001) 7–9.

⁴² It is referred to by Taylor (1999) 82 after Democr. test. 54, while Leszl (2009) 63–64 even prints it as Democr. '5.8. T'.

⁴³ See above, n. 21.

⁴⁴ See Palmer (2001) 9, who cites Leucippus ap. D. L. 9.31 (67A1 DK) 'he says the All is infinite' (τὸ μὲν πᾶν ἀπειρόν φησιν). Add, from Arist. fr. 208 Rose³ (verbatim): 'Democritus (68A37 DK) believes that the nature of the things that are everlasting consists of infinitely many little substances (τὴν τῶν αἰδίων φύσιν εἶναι μικρὰς οὐσίας πλῆθος ἀπειρους); under these he places something else, a place that is infinite in extension (τόπον ... ἀπειρον τῷ μεγέθει)'. Cf. Cic. *Fin.* 1.6.17 (68A56) 'atoms ... in the infinite void; ...the motion of the atoms must not be understood to have had a beginning, but as having taken place from eternity' (*atomos ... in infinito inani ...; ... motum atomorum nullo a principio, sed ex aeterno tempore intellegi convenire*).

⁴⁵ This may be related to Aristotle's suggestion at CG 1.8.325a2–32 (Leuc. 67A7 DK) that Leucippus stood the (Eleatic, indeed specifically Melissean) argument that motion is impossible because the void does not exist on its head. For the resemblance between the Melissan and the Atomist views of the infinite All see Avotins (1983) 424–427.

Continuing with the *archai* list at T 2.9–11, we further note that Epicurus is made to contradict himself in exactly the same way as the Eleatics, for ‘the All’, though constituted from atoms ‘in the beginning’ (!), is nevertheless ‘without beginning’, and everlasting⁴⁶. I have not found a parallel for this surprising interpretation. We are presumably dealing with someone’s *ad hoc* adaptation of Epicurus’ doctrine to that of the Xenophanes and Parmenides and Democritus before him on the list. I see no need to attribute this move to T.

From Empedocles’ four elements and Xenophanes’ origin ‘of all things from earth’ the *archai* list, as we note, takes a more conspicuously cosmological turn. And τὸ πᾶν is introduced here for the first time.

Xenophanes and Parmenides, as suggested above, have a pivotal role. On the one hand they continue and conclude the roll call of selected authorities in the manner of *Metaphysics* A, while on the other they form the commencement of a true-blue Eleatic Succession from Xenophanes to Epicurus, of which the final part is foreign to Aristotle and Theophrastus. From the point of view of the Succession Epicurus is made to follow uncommonly soon after Democritus, but the coupling of these two name-labels is far from unusual, and at any rate significant.⁴⁷ The appearance of Epicurus immediately after Democritus in ps.Plut. *Strom.* 7–8 induced Diels to comment that this coupling was habitual.⁴⁸ The three final name-labels, Metrodorus of Chios, Zeno of Elea, and Diogenes of Smyrna, are cavalierly collected at the end, without accompanying doxai and without regard for their official position in the Succession.

T’s aim to show that the paths of falsity are multifarious has clearly been achieved to his own satisfaction.

Finally, it should be observed that this list is explicitly organized by means of Successions only to a limited extent. It begins with the Milesian trio (standardly including Anaximander from Theophrastus), entirely absent from the second list at T 4.5–12 but generously paralleled at ps.Plut. *Strom.* 1–3 and in both P and S for A 1.3. At T 2.9 Anaximander and Anaximenes are explicitly said to be ‘successors’ (διαδεξάμενος, διάδοχος) of their predecessors. At T 2.10 Parmenides is said to be an ‘associate’ (ἐταῖρος) of Xenophanes, and to share his doctrine (ὡσαύτως). But others are associated via communality of doxa alone (T 2.9 Diogenes ξυμφώνως with Anaximenes, T 2.10 Heraclitus in conjunction with Hippasus), just as already in the passage from *Metaphysics* A.3 cited above, and in an Aristotelian sequence of name-labels as well (thus also Empedocles at T 2.10); or loosely, via what is in fact an abridged though still rather generous version of the Eleatic succession. T nevertheless comes close to being explicit about this Succession by giving Parmenides and Zeno their ethnicon, and citing Parmenides as the associate of Xenophanes. That he knew about and was interested in Successions *per se* follows from a somewhat odd tirade at CAG 5.65–66, for which Raeder cites no particular source. Here ‘Succession’ is used both in the original sense of pupil succeeding master, and of the continuation of a school of thought:

⁴⁶ For Epicurus’ view that the All was always just as it is now and always will be, and (ἀλλὰ μὴν καί, i.e. next point to be noted) infinite per se τὸ πᾶν ἄπειρόν ἐστι), and (καί μὴν καί, i.e. next point to be noted) infinite both as to the number of atoms and the size of the void see *Ep.Hdt.* at D.L. 10.40–41.

⁴⁷ E.g. Cic. *ND* 1.73, Gal. *in Epid.* 17A.521.7–9 K., Diog.Oen. fr. 54 col. 3 Smith, S.E. *P.* 3.31, *M.* 9.363.

⁴⁸ *DG* 158 ‘Democrito Democriteum Epicurum adiungere consentaneum erat’.

If I do not tell the truth, then tell me, gentlemen, whom did Xenophanes have as successor of his sect; whom Parmenides of Elea; whom Protagoras and Melissus; whom Pythagoras or Anaxagoras; whom Speusippus or Xenocrates; or whom Anaximander or Anaximenes; whom Arcesilaus or Philolaus; whom the leaders of the Stoic sect; who affirm the teaching of the Stagirite; who take part in government according to Plato's *Laws*; who eagerly followed the *Republic* described by him?

We may also cite Theod. *Eranistes* p.109.13 Ettlinger, where he speaks of the 'people who have become the successors of the divine apostles' (διάδοχοι τῶν θείων ἀποστόλων οἱ ἄνδρες γεγέννηται), and his *Haereticum fabularum compendium*, MPG 83, p. 389,11–12, where he calls Irenaeus 'the successor of the Apostles' (Εἰρηναῖος ὁ τῶν ἀποστόλων διάδοχος). The Christians have done better than the philosophers ...

As to arrangement according to number (one, more, infinitely many) the list at T 2.9–11 is both disorderly and rather unclear. In the wake of Aristotle's introductory roll call in *Metaphysics* A.3 it begins with six physicist monists from Thales to Heraclitus, followed by the pluralist Empedocles. But then we have Xenophanes, here a monist as to physics, while the position regarding the number of principles or elements of Parmenides, Democritus, Epicurus, Metrodorus of Chios, Zeno of Elea and Diogenes of Smyrna is not revealed. As we shall see the list at CAG 4.5–12 is more outspoken in this respect, but likewise a bit unclear.

On the other hand there is much agreement about the everlastingness and ungeneratedness of 'the All', or 'universe', among Xenophanes (τὸ πᾶν αἰδῖον), his faithful follower Parmenides (by implication), Democritus (τὸ πᾶν ... ἀγέννητον),⁴⁹ and Epicurus (τὸ πᾶν ... ἀνάρχον καὶ αἰδῖον). This All (πᾶν) is lacking in the doxai from Thales to Empedocles in the first section of the list at CAG 2.9–10. We shall meet τὸ πᾶν again when studying the archai list of CAG Book 4, where it is several times coupled with 'the One' (τὸ ἓν), not found on the present list either.

As Diels already saw, descent from, ultimately, Aristotle's roll call is certain for the first section at least up to Empedocles. But as we have seen he surprisingly omits to mention that this will have occurred via Theophrastus, for Anaximander is absent from *Metaphysics* Book A but conspicuously present in the fragments of Theophrastus' *Physics* abstracted by Simplicius.⁵⁰ Theophrastus moreover is also responsible for appending Metrodorus (never cited by Aristotle) to the early Atomists and so, ultimately, for his presence on a Successions list.⁵¹ The ascription of earth as the element to Xenophanes, on the other hand, cannot certainly be attributed to Theophrastus, since Galen could not find this ascription in the Xenophanes section of the work in which he epitomized the *doxai* of the physicists. Perhaps Aristotle included him among *hoi polloi*, or in the vicinity of the poet Hesiod.⁵²

Qua sequence therefore the section of this list from Thales to Empedocles is not parallel to A ch. 1.3 in its present arrangement, and this also holds for the part from Xenophanes to Diogenes of Smyrna. But the key doxai of Thales (water), Anaximander (the infinite),

⁴⁹ See above, n. 34 and text thereto.

⁵⁰ Thphr. *Phys.Op.* fr. 2 Diels (= fr. 226A FHS&G) ap. Simp. in *Phys.* 24.13–14.

⁵¹ Thphr. *Phys.Op.* fr. 8 Diels (= fr. 229 FHS&G) ap. Simp. in *Phys.* 28.27–28.

⁵² Gal. in *NH* 15.25.6–13 K. (Thphr. *Phys.Op.* fr. 6 Diels = 227C FHS&G). Arist. *Met.* A.8 989a5–12 says that no early monist posited earth as the principle, and that this is an idea of 'the many' and of Hesiod, though at *Phys.* 2.1 984a20–23 he lists earth among the elements adopted by the early monists (slip of the pen?). Cf. further Mansfeld (1987) 289–294.

Anaximenes plus Diogenes (air), Hippasus plus Heraclitus (fire), and Empedocles (all four elements) are entirely in agreement with the lemmata with the same name-labels of A 1.3.1, 1.3.3, 1.3.4, 1.3.11 and 1.3.12 that are more elaborate in other respects. Nevertheless, given his intentions with the apparatus below his reconstructed text, namely to print passages where the author used A directly, Diels' abstention from citing these five lemmata underneath the right-hand column in the *DG* is justified in view of the fact that parallel bare-bones versions of these same doxai, that is to say name-labels plus principles, are found in a multiplicity of related sources, from Cicero *Lucullus* 117–118 to Olympiodorus the Alchemist *De arte sacra* 18–25. The different tradition on which the list in T mostly depends is a further reason for restraint. And this difference is also evident from the noteworthy absence in T's list of Pythagoras, for both P and S provide evidence for the long Pythagoras lemma at A 1.3.8.⁵³ In his abstract of A 1.3 at *Praeparatio evangelica* 14.4.1–6 Eusebius reproduced only six of P's thirteen doxai. That the very long Pythagoras lemma is among those Eusebius omitted is irrelevant with regard to the lists in T, for it is clear that these were not abstracted from P as reproduced in the above-mentioned Eusebian passage, where Plato, Aristotle, and Zeno of Citium, who are cited by T, are equally absent.⁵⁴

T was well aware of Pythagoras. He knew about his importance as the founder of the Italic sect (cited from Clement), and he cites his (fictional) Succession starting with his spouse (from Eusebius), while the name-label of course repeatedly figures in the Aëtian abstracts in *CAG* Books 4, 5, and 6.⁵⁵ This makes his absence from both of T's *archai* lists all the more telling, and constitutes a major difference with the abundant evidence of the other sources for A 1.3 concerned with the Neopythagorean Pythagoras. We note that Pythagoras and his suite also sparkle through their absence in the *Stromateis* of the other ps.Plutarch (we need not assume that a Pythagoras lemma was here omitted by Eusebius on purpose).⁵⁶ In

⁵³ Cf. Mansfeld and Runia (2009) 74.

⁵⁴ What is more, Eusebius not only preserves the name-label Pythagoras in his abstracts from other chapters of P, but also not infrequently cites him elsewhere from other sources, namely in a brief list of philosophers plus *archai* at *PE* 7.12.1, in a longer similar list at *PE* 10.4.12–18, in an even more detailed one at *PE* 10.14.12–15 (inclusive of his fictional Succession), in the chronographic note introducing his abstracts from P 1.7 at *PE* 14.15.11, and in another such note at *PE* 14.17.10. In his tirade about the lack of individual successors of the pagan philosophers at *CAG* 6.65–66 (see above, p. 9), T mentions Pythagoras next to Anaxagoras, presumably remembering Eus. *PE* 6.8.5, or 14.14.3, or similar passages.

⁵⁵ Pythagoras is mentioned as the archegete of the 'Italic sect', and his didactic practice described, at T 1.55–56, from Clem.Alex. *Strom.* 1.14.62 and 5.11.67 according to Raeder *ad loc.* The Succession of Pythagoras is cited T 2.22–23 (Theanô, Têlaugês etc.), combined with Anaxagoras and his followers, from Eus. *PE* 10.14.12–15 also according to Raeder *ad loc.* The 'Italic and Ionic and Eleatic company' (ξύμμορ(α)) are mentioned T 5.61. Pythagoras' name-label occurs in the Aëtian abstracts at T 4.13, 4.15, 4.23, 5.17, 5.19, 5.23, 5.28, and 6.13. The ascription to Pythagoras of the monad as principle (T 2.22 ἀρχὴν τῶν πάντων ἔφησε τὴν μονάδα) does not derive from A 1.3.8 or 1.7.18, where Pythagoras is a dualist; his monism is paralleled, to cite parallels somewhat at random, at S.E. *M.* 10.261, Hipp. *Ref.* 6.23, and pace Marcovich at ps.Just. *Coh.* 19.4. Eudorus fr. 3 Mazzearelli (verbatim) ap. Simp. in *Phys.* 181.10–30 combines the two, ascribing both positions to 'the Pythagoreans' in a single system, that is, monism according to the 'highest account' and dualism to the 'next' or 'second', the second One being different from the primary One from which all things derive.

⁵⁶ Pythagoras is also absent in the overviews of the *archai* of Sextus Empiricus at *M.* 9.4–11, *M.* 9.359–364 and *M.* 10.310–318. *M.* 9.4–11 quotes antecedents in the poets and is in places close to Aristotle, to

Metaphysics A.5 Aristotle discussed the Pythagoreans but not Pythagoras himself, and in the fragments of the *Physics* concerned with the principles and elements of the philosophers Theophrastus does not mention Pythagoras either, and he even does not seem to have dwelt on the Pythagoreans. In this respect, then, T's *archai* lists and the *Stromateis* of the other ps.Plutarch are much closer to the Early Peripatos than the evidence for A ch. 1.3 in P and S. This agrees with the other evidence discussed so far that points at a relatively close relation of T's lists with the Early Peripatos.

T's Parmenides and Zeno of Elea as well as Diogenes of Smyrna are not found in either P or S for A 1.3, while Xenophanes is paralleled in S only — but only partially so, because in S we merely find the physical ingredient of the doctrine that is ascribed to him in T.⁵⁷ The dual doxai of Xenophanes (involving implicit internal contradiction) and Parmenides in T 2.10 are beyond the more limited general theme of A 1.3. This is something Diels failed to insist on, perhaps not even intentionally, and presumably also because he dearly wanted to link ch. 1.3 to Theophrastus by means of the inclusion of passages from T's second list among the evidence for this chapter, and T's presentation of Xenophanes and Parmenides in the second list (and thus by implication in the first) is very close to the fragments of the Eresian.⁵⁸ The 'Melissean' Democritus doxa of T 2.11 is not paralleled in A 1.3 either. And we do not at all know what doxai — if any — were attributed to Metrodorus (of Chios), Zeno of Elea, or Diogenes of Smyrna in T's source, though in view of the presence of Zeno's ethnicon and the parallel in ps.Plut. *Strom.* 6 we may believe that Zeno's views were in essential agreement with the problematic doctrine of the other Eleatics.

Accordingly, we must reach the conclusion that, partial parallels notwithstanding, the entire *archai* list of T CAG 2.9–11 turns out to be rather irrelevant for the reconstruction of A ch. 1.3, for the differences far outweigh the unsurprising similarities. But this list is not at all irrelevant for the study of the *Placita* chapter in its wider doxographical setting, or for the more limited purposes of comparison with the list at CAG 4.5–12 and that of ps.Plut. *Stromateis*.

3. *Archai* and more in CAG Book 4.5–12

We may now continue with the list in CAG Book 4.5–12. Although I argue that T excerpted A, I shall first briefly compare his account at CAG 4.13–23 with that of passages in P Books 1 and 4, because P is what we still have and A is what we have to reconstruct. The comparison with P shows that the source excerpted by T presented the information in the same order as P, but also contained more information than P, most of which is paralleled in the appropriate locations of S.⁵⁹

whom it refers *disertis verbis* at M. 9.7 (*Met.* A.3 984b18–31). M. 10.310–318 also quotes antecedents in the poets, and is studied and compared from this point of view at DG 91–92, in Diels' account of the literature on Homer; see further below, 000 [26] ff.

⁵⁷ An ingredient moreover that is paralleled in ps.Plut. *Strom.* 5 and the cousin source Hipp. *Ref.* 1.14.2. For Xenophanes at T 4.5–6, which shares with T, S.E. M. 10.313 and *Scholia in Hom. Il.* 7.99 the verbatim quotation of 21B27 DK not found at T 2.10 or in ps.Plut. *Stromateis*, cf. further below, 000 [26] ff.

⁵⁸ See above, nn. 23–24 and text thereto.

⁵⁹ See Mansfeld (2016b) = ch. 00 in the present volume, of which I summarize pp. 153–156 = here 000.

The title of Book 4 is ‘On matter and cosmos’ (Περὶ ὕλης καὶ κόσμου).⁶⁰ It contains material corresponding to P chs. 1.9 on ‘matter’ (T 4.13–14, introduced by ‘and as for the matter’, καὶ τὴν ὕλην)⁶¹ and 1.18 on ‘void’ (immediately following at T 4.14, and introduced by ‘and as for the void’, τὸ δὲ κενόν). T, passing over the set consisting of eight corresponding chapters in P, thus directly went from ‘matter’ to ‘void’. He immediately continues with excerpts corresponding to sections of four successive blocks of chapters in P’s cosmological Book 2, followed by a terse epitome of several others, thus effectively providing a sort of summary of the cosmological Book of the *Placita*.⁶² These four blocks deal with, respectively and in succession: (1) at T 4.15–16 the cosmos and some of its properties, namely whether it is one or many, what is its shape, whether it is ensouled or not,⁶³ whether it has been produced in reality or only in thought, and whether it is perishable or not,⁶⁴ introduced by ‘as for the cosmos’, καὶ ... τὸν κόσμον (~ P 2.1–4). (2) At T 4.17–20 the substance of the stars and one of their properties, namely their shape, introduced by ‘as for the stars’, καὶ ... τοὺς ἀστέρας (~ P 2.13–14). (3) At T 4.21–22 the substance of the sun and some of its properties, namely its size⁶⁵ and shape, introduced at T 4.21 by ‘as for also the sun and the moon’, καὶ μέντοι καὶ τὸν ἥλιον καὶ τὴν σελήνην (~ P 2.20–22). (4) At T 4.23 the substance of the moon and one of its properties, namely its size (~ P 2.25–27), introduced by καὶ περὶ σελήνης again. The material corresponding to the chapters in between in P has been passed over. At T 4.24 this account tapers off to become a list of themes: (5) ‘on shapes’ (σχημάτων περί, cf. P 2.27), (6) ‘and (on) eclipses’, apparently of both sun and moon (καὶ ἐκλείψεων, cf. P 2.24 and 2.29), and on (7) ‘distances’, apparently of the heavenly bodies from each other and from the earth (καὶ διαστημάτων), inclusive of a brief digest of the theme of P 2.31.⁶⁶

This account of matter, the void, the cosmos, and the heavenly bodies is preceded by the other *archai* list, at T 4.5–12. A substantial series of abstracts from A Books 1 and 2, as we have just seen, then follows at T 4.13–24, but this does not necessarily mean that the account at T 4.5–12 is a similar analogue of A 1.3 ‘On the principles, what they are’. Because of the title of CAG Book 4 and the physicist and cosmological excerpts that follow we should be prepared for more than principles alone; that is to say, also more than in the list of T 2.9–11. This expectation is further encouraged in the proem of CAG Book 4, when we read that the pagan philosophers do not have true views about the ‘visible creation’ (ὁρατῆς περὶ κτίσεως) and fail to agree among themselves, so that it is appropriate to display their tenets (δόξας) and compare these (of course unfavourably) with the doctrines (δόγματα) of Scripture. The purpose, obviously, is to undermine the contributions of the philosophers by first playing

⁶⁰ In the table of contents at CAG 1.7 T adds that the Book ‘proves that our cosmogony (τὴν ἡμετέραν κοσμογένειαν, i.e. that of Scripture) is far more appropriate than that of Plato and the others’. In the proem at CAG 4.4 he speaks of the ‘visible creation’.

⁶¹ Very briefly summarized and anticipated at T 1.63.

⁶² See the list at Mansfeld and Runia (1997) 274–275, which includes the anticipations in CAG Book 1 not quoted by Diels underneath the right-hand column, or the overview at Ninci (1977) 20–31, which does not.

⁶³ Briefly summarized and anticipated at T 1.63, where we read ‘the All’ instead of ‘the cosmos’.

⁶⁴ Briefly summarized and anticipated at T 1.63, where we read ‘the things that are seen’ instead of ‘the cosmos’.

⁶⁵ T 4.22 on the size of the sun, the analogue of P 2.21, is anticipated and discussed at some length at T 1.96–97.

⁶⁶ T 4.24 on cosmic distances, the analogue of P 2.31, is briefly anticipated and abstracted at T 1.96.

them off against each other, just as he did in CAG Book 2 (and would subsequently do in CAG Books 5 and 6).

4. The two lists in T compared further

As we have seen, comparison of the ostensibly disorderly list at T 4.5–12 with its predecessor in Book 2 shows (1) that it lacks the three Milesians found on the earlier list (we noted that Thales *cum suis* are also found at the head of the parallel list of ps.Plu. *Stromateis*). And Diogenes of Apollonia has deserted Anaximenes and been shifted to the very end. It further shows (2) that, like the earlier list at T 2.9–11, the present one has no room for Pythagoras, and (3) to a considerable extent likewise consists of a version of the Eleatic Succession from Xenophanes to Epicurus. This Eleatic Succession is much more detailed than in the earlier list and is in fact its *pièce de résistance*, with which, so to speak, it starts *in medias res*.

We may now add that (4) Ecphantus ‘of Syracuse, the Pythagorean’, not found on the earlier list (and, indeed, rarely cited elsewhere) is appended to the Atomists Democritus, Metrodorus and Epicurus, so apparently made an honorary member this part of the Eleatic Succession. (5) Plato, Aristotle, and Xenocrates, not found on the earlier list either, seem to represent a substantial section of the Ionic Succession: thus the two principal lines of Succession have in fact been fitted together, with a clear regard for the relative chronology involved. (6) Zeno of Citium, another philosopher not found on the earlier list, whose sect officially belongs with the Ionic Succession, is here introduced with some care as the founder of the Stoic sect and a follower of the Cynic Crates (the latter possibly on his own initiative by T), which explicitly makes him a link in the Ionic chain, too.⁶⁷ Towards its end the list seems to become more disorderly: (7) Hippasus—and—Heraclitus, also found on the earlier list in T 2.10, name-labels here mentioned in the same order as before, are out of order chronologically and seem to have been appended as a sort of afterthought. (8) This appears to hold a fortiori for the Presocratic philosopher Diogenes of Apollonia, who now brings up the rear.⁶⁸ He used to be routinely coupled with Anaximenes, as in Aristotle and on T’s earlier list, as we have seen, and is called a pupil of Anaximenes by Antisthenes of Rhodes,⁶⁹ so could be included in the Ionic Succession. If for some reason T wanted to preserve a reference to Diogenes, he only could append him somewhere near the end after he had omitted the Milesians and immediately started with the Eleatic Succession.

It seems to be the case, furthermore, that our two lists not only correspond to some extent with each other as to contents, but also have been made to correspond with each other even further by T in other respects. It is a rhetorical *trouvaille* rather than a coincidence, or so I believe, to have both lists end with a Diogenes, though a different one each time, carefully identified by his ethnicon: of Smyrna (without doxa) the first time, of Apollonia (plus doxa) the second. In a similar rhetorical way Zeno of Citium (plus doxa) at the end here corresponds with Zeno of Elea (without doxa) at the end there. More importantly, T commences with Xenophanes and his Succession on purpose, whereas on the

⁶⁷ Crates belongs with the Ionic Succession (D. L. 1.15): Socrates — Antisthenes — Diogenes the Dog — Crates — Zeno of Citium.

⁶⁸ That Thphr. *Phys.Op.* fr. 2 Diels = 226A FHS&G ap. Simp. in *Phys.* 25.2–3 calls him the youngest of the Presocratic physicists is not relevant.

⁶⁹ See below, text to n. 144.

earlier list they only follow after the Milesians. Xenophanes and Parmenides are now made to profess self-contradictory doctrines explicitly instead of implicitly, and in much richer detail than before. In this way the fact that the Greek philosophers are entirely misguided, because they do not only disagree from each other but in some individual cases are even inconsistent, is rubbed in right from the start of the substantial account of physics and cosmology in CAG Book 4. This strategic manipulation of the Successions sequences, this time not only by leaving out the Italic Succession beginning with Pythagoras, but also by omitting the three Milesians, of necessity leaves T no other option, as we have seen, than locations after the Eleatic Succession for whatever views beyond this group he wants to include. For the representatives of the Ionic Succession from Plato to Zeno of Citium, as we saw, this position agrees well enough with the relative chronology of the individuals concerned, but for Hippasus plus Heraclitus and Diogenes of Apollonia it of course does not.

Comparing the two lists in Books 2 and 4 further, we find that they have five lemmata, or parts of composite lemmata, in common. I discuss these one by one, beginning with the Xenophanes lemmata.

(1) I have pointed out above that already at T 2.10 Xenophanes' doctrine is self-contradictory, even if attention is not specifically drawn to this aspect.⁷⁰ In the present passage this contradiction is made abundantly obvious. What is also clear is that the passage in Book 2, which shares almost its entire wording with that in Book 4, can be seen as a succinct abstract from the latter, or as a much shorter equivalent alternative. In the same way 2.10 '*the All is everlasting*' (τὸ πᾶν ἀϊδίον) is a much shorter version of 4.5 '(he) said *the All* is one, spherical and limited, not generated but *everlasting* and entirely immobile' (ἐν εἶναι τὸ πᾶν ἔφησε σφαιροειδὲς καὶ πεπερασμένον, οὐ γενητόν, ἀλλ' ἀϊδίον καὶ πάμπαν ἀκίνητον). Just as 2.10 '*and from the earth all things*' (ἐκ δὲ τῆς γῆς τὰ πάντα) is a much shorter version of 4.5 '*he said that all things grow from the earth, for the following line (21B27 DK) is by him: "from earth all things around us, and into earth all things end"*' (ἐκ τῆς γῆς φύναι ἅπαντα εἴρηκεν. αὐτοῦ γὰρ δὴ τόδε τὸ ἔπος ἐστίν· (21B27 DK) '*ἐκ γῆς γὰρ τάδε πάντα, καὶ εἰς γῆν πάντα τελευτᾷ*'). At the very least these two passages must go back to a common source, twice excerpted by T, but it is even simpler to assume that the passage in Book 2 is a very short anticipation of the passage in Book 4.⁷¹ Diels must have noticed this communality, because he explicitly preferred the longer to the shorter version for his reconstruction of the Aëtian chapter 1.3.⁷² He printed T 4.5–6 beneath the right-hand S-column in the *DG*, as a parallel to the Xenophanes lemma at S 1.10.12 that he welcomed as A 1.3.12, presumably because the two texts not only share the basic physicalist information (earth qua element), but also since both cite Xenophanes fr. 21B27 DK. But as pointed out above, this basic information is also found elsewhere, and the quoted line plus the basic information is not only found in S, but for instance also in Sextus Empiricus' rather different account of the principles at *M.* 10.313.⁷³ The description of Xenophanes' doctrine provided by T in the present passage is not only much richer than what is in S, but also emphasizes at explicit length its self-contradictory

⁷⁰ Text to n. 22.

⁷¹ See below, text to n. 76 and n. 87, and n. 141 and text thereto. For similar anticipations see above, nn. 63–66.

⁷² *DG* 170.

⁷³ See above, n. 57 and text thereto, and further below, n. 129.

character,⁷⁴ and then insists on it by means of an *sorites* argument that is unparalleled elsewhere.⁷⁵ There is no trace of this self-contradiction, or of this *sorites* argument, in the Stobaeian Xenophanes lemma.

(2) We should next turn to the two Parmenides lemmata. Also here the passages in the two lists are congruous, the earlier one briefly anticipating the later one and adding an extra ingredient.⁷⁶ Parmenides is both times said to agree with his master. At T 4.5–8 agreement is total as to the ontology, since *ad sententiam* the Parmenidean line ‘entire, unique of its kind and immobile and ungenerated’ (28B8.4 DK, οὔλον μουννογενές τε καὶ ἀτρεμές ἡδ’ ἀγέννητον) is entirely consistent with the phrase ‘one, spherical and limited, not generated but everlasting and entirely immobile’ (ἐν ..., οὐ γενητόν, ... καὶ πάμπαν ἀκίνητον) characterizing the view of Xenophanes. Just as before at T 2.10, both philosophers are again guilty of self-contradiction by adding a physical doctrine, the difference between them now being one of degree, since Xenophanes posits one element while Parmenides plumps for two. Nevertheless disagreement as to physics between these two Eleatics is merely a matter of detail. The physicalist explication is absent at T 2.10, where in compensation we found an extra ingredient of an epistemological nature.⁷⁷ We note that also at ps.Plū. *Strom.* 5 this epistemic point is attributed to Parmenides: ‘he drives the senses/sensations away from the truth’ (καὶ τὰς αἰσθήσεις ἐκβάλλει ἐκ τῆς ἀληθείας), and is formulated in *ad sententiam* the same words as at T 2.10, where we read ‘(he) declared the criterium of the senses/sensations to be false, stating that this least of all comes near the truth’ (ψεῦδος δὲ ἀπέφηνε τῶν αἰσθήσεων τὸ κριτήριον, ἥκιστα λέγων ἐφικνέσθαι τοῦτο τῆς ἀληθείας). The Parmenidean line 28B8.4 DK, which as we noted is quoted at T 4.7, is also quoted at ps.Plū. *Strom.* 5, the only difference being μόνον instead of οὔλον. Enhancing the agreement between the two Eleatics this view is retrospectively also attributed to Xenophanes at *Strom.* 4, ‘he declares that the senses/sensations are unreliable’ (ἀποφαίνεται δὲ καὶ τὰς αἰσθήσεις ψευδεῖς). The two lemmata will therefore derive from a source excerpted by T, which cannot be far from that of the *Stromateis*.

(3) At T 4.9 the third Eleatic in the standard Succession, Melissus, is next. He is not found after Xenophanes and Parmenides at T 2.11. At T 4.9 the three Eleatics are followed by Democritus, while at T 2.11, as I have argued above, the doxa of the Democritus who comes after Xenophanes and Parmenides has been made to resemble that usually attributed to

⁷⁴ ‘These doctrines are absolutely incompatible’ (ἀξόμφωνοι δὲ ἀντικρυς οἶδε οἱ λόγοι). For the expression cf. T 5.37 τόνδε τὸν λόγον φησὶ ... ἀξόμφωτον ἑαυτῷ.

⁷⁵ It begins at (1) with an argument reminiscent of Melissus, e.g. 30B4 DK, and ends at (6) by standing this on its head: ‘(1) For if the cosmos is eternal, it is also without a beginning; and (2) if it is without a beginning, it is also without a cause; (3) but if it is without a cause, it of course does not have the earth as a mother. On the other hand, if (4) it has the earth as a mother, it follows that it has a cause; (5) if it is not without a cause, it follows that it is not without a beginning; (6) and if it is not without a beginning, it follows that it is not eternal’. The final clause at (6), agreeing with the Christian creationist view, seems to be what T wants. For a parallel as to form (movement down and up) see e.g. Carneades’ argument on gods at S.E. *M.* 9.182–184. On the *sorites* in general see Hyde (2014), with literature. It is mainly a Hellenistic (Stoic and Skeptic) argument form, though half a *sorites* is ascribed to Zeno of Elea by Arist. *Phys.* 7.5 250a19–25 (29A29 DK).

⁷⁶ See above, n. 71, and below, text to n. 87, and n. 141 and text thereto.

⁷⁷ See above, text after n. 14.

Melissus.⁷⁸ I assume communality of source for these passages too, the ‘ungenerated’ (ἀγένητον) of ‘Democritus’ universe at T 2.11 being paralleled by ‘ungenerated’ (ἀγένητον) at T 4.7 (Parmenides) and ‘not generated’ (ἀγένητον) at T 4.5 (Xenophanes). ‘The infinite All’ (ἄπειρον τὸ πᾶν) of ‘Democritus’ at T 2.11 is also equivalent to ‘the infinite cosmos’ (ἄπειρον ... τὸν κόσμον) of Melissus at T 4.8. But at T 4.5 Xenophanes is made to say that ‘the All’ is limited (πεπερασμένον). That Parmenides agreed as to this point is not said in the earlier Parmenides lemma but stated at T 4.8, where both of Melissus’ predecessors are said to have made the cosmos limited, whereas he made it infinite. Apart from this habitual point of disagreement between Melissus and Parmenides (Xenophanes having been turned into Parmenides’ predecessor also in this respect in the course of further interpretative reception), the implicit suggestion is that Melissus preserved most of the Eleatic doctrine unchanged.

At T 4.9 Democritus is the first of the Atomists that follow, and now he is presented in the usual way. As we have noticed, the briefly formulated standard doctrine, concerned with the ‘void’ and the ‘solids’ (τὴν τοῦ κενοῦ καὶ τῶν ναστῶν ... δόξαν), cited in the present lemma, is not found previously at T 2.11.

For Metrodorus of Chios who comes next and who is not more than a name-label plus ethnicon without doxa at CAG 2.11, the present passage (T 4.9) provides a brief version of his standard doxa: ‘Metrodorus ... addressed these (principles) as ‘indivisibles’ and ‘void’ (ταῦτα ... Μητρόδωρος ... ἀδιάρετα καὶ κενὸν προσηγόρευσεν). For the remarkable affinity between the account of Democritus at ps.Plu. *Strom.* 7 as well as that of Metrodorus at *Strom.* 11 with that of Democritus at T 2.11 see above.⁷⁹

(4) Apart from name-label, patronymic and ethnicon and the use of the technical term ‘atoms’ (specifically Epicurean according to T 4.9–10) the two versions of Epicurus’ doctrine are different. The present passage does not contain the interesting implicit point about self-contradiction of T 2.11.⁸⁰ In compensation it offers explanations for the various technical terms that have been stipulated so far, which to some extent resembles that in the Epicurus lemma at A 1.3.18, but could have been picked up anywhere. It concludes, as Diels noticed, with a fascinating echo of Aristotle’s point about Democritus’ ‘motes in the sun-beams through the windows’, formulated in a somewhat different way.⁸¹ Diels⁸² suggests that T added this information himself, but I believe the passage is further evidence of the proximity of T’s *archai* lists to an Early Peripatetic tradition.

(5) Turning lastly to Hippasus and Heraclitus, we notice that the two passages are for the most part identical, or virtually identical: the same name-labels, and in the same ‘Aristotelian’/‘Theophrastean’ order,⁸³ plus ethnicons, with at T 4.12 a rare patronymic for Heraclitus (i.e. Βλόσωνος) not found on the earlier list or in the evidence of P and S for A 1.3.11. This patronymic is only paralleled in the *vita* of Diogenes Laërtius, where also alternative patronymics are given.⁸⁴ This makes its occurrence in T all the more interesting. As their doxa at T 4.12 we have ‘fire’ as ‘the principle’ (sc. of ‘the All’), which is equivalent to fire as ‘the

⁷⁸ Above, text to n. 34.

⁷⁹ N. 9 and text thereto.

⁸⁰ Cf. above, text after n. 6.

⁸¹ Arist. *de An.* 1.2 403b31–404a4; cf. *de An.* 1.2 404a16–18 (Pythagoreans), [Arist.] *Probl.* 15.13 913a8–11 (explanation of a problem).

⁸² *DG* 45 n. 2.

⁸³ See above, text to n. 21.

⁸⁴ Diog. Laert. 9.1 (cited *Suda* s.v. H 472).

principle of all things' at T 2.10. But there is more doxa content at T 4.12, namely the important information that the All is 'one, ever-moving [we should accept Zeller's correction] and limited'. Diels pointed out that these three epithets are exactly paralleled in a fragment of Theophrastus dealing with the principles of the philosophers Hippiasus and Heraclitus,⁸⁵ and in Diogenes Laërtius' chapter on Hippiasus (for which accordingly he postulated Theophrastean influence).⁸⁶ These differences and similarities suggest that T 2.9 is an excerpt from T 4.12 or goes back to the same source, or rather, that it is an abridged anticipation of 4.12.⁸⁷ Diels, 'with some hesitation' (*dubitanter*, DG 45), added the lemma of T 4.12 to A 1.5, the chapter with the heading 'Whether the All is unique' (εἰ ἓν τὸ πᾶν). In terms of method this is instinctively right in so far as the *Placita* tend to disentangle related themes and to distribute them over separate chapters, but entails neglecting the part about fire as the principle, which qua theme belongs with the chapter on the principles, A 1.3. The assumption that the Theodoretean lemma is a combination of two different Aëtian lemmata fails, because the two themes, namely that of the singularity of the All and that of fire the principle, are already combined in the Theophrastus fragment and the sentence of Diogenes Laërtius. Even so, it may happen that an ingredient, which according to the pedantic *Placita* rules should go to another chapter, hangs on in an earlier one.⁸⁸ This would suggest incorporating the Theodoretean paragraph in A ch. 1.3,⁸⁹ but this fails against the agreement between P and S for A 1.3.11, who do not have the 'One-and-All'. And the first clause of A 1.3.11 already corresponds with Theophrastus (and Aristotle) on the principle of Hippiasus and Heraclitus, so in the absence of explicit evidence we can hardly postulate a different echo that would turn up subsequently. Diels believed that another apposite place could eventually be found for T's paragraph, but did not say where. That it was excerpted from the *Placita* he did not doubt,⁹⁰ though as we shall see this is far from credible.

The traditional coupling of Diogenes of Apollonia with Anaximenes, found at T 2.9, is not present at T 4.12, since, as we have seen, Diogenes has now been moved to the end of the set. Name-label and ethnicon are identical, but at 4.12 'the All' (τὸ πᾶν) has been included

⁸⁵ Diels DG 168 et 221; see also the excellent account of Gérard Journée, above 000. Thphr. *Phys.Op.* fr. 1 (= fr. 225 FHSG, ap. Simp. in *Phys.* 23.33–24.2) 'Hippiasus of Metapontum and Heraclitus of Ephesus — they too said it is one and moving and limited, but they made fire the principle and derive the things that are from fire' ('Ιππασος δὲ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος ἓν καὶ οὗτοι καὶ κινούμενον καὶ πεπερασμένον, ἀλλὰ πῦρ ἐποίησαν τὴν ἀρχὴν καὶ ἐκ πυρὸς ποιοῦσι τὰ ὄντα). For this 'it' (neuter) cf. Simp. in *Phys.* 22.27 'a single principle or rather the one being-and-all' (μίαν δὲ τὴν ἀρχὴν ἦτοι ἓν τὸ ὄν καὶ πᾶν), which shows that in this Simplician/Theophrastean context the assumption of a single principle cannot only be equivalent to the assumption that there is a single All, but also that the All is one.

⁸⁶ Diog. Laert. 8.84 'Hippiasus of Metapontum ... said the All is finite and ever-moving' ('Ιππασος Μεταποντῖνος ... ἔφη πεπερασμένον εἶναι τὸ πᾶν καὶ ἀεικίνητον).

⁸⁷ See above n. 71, text to n. 76, and below, n. 141 and text thereto.

⁸⁸ The soul's immortality at A 4.2.2 (Alcmaeon) in the chapter on the incorporeal substance of the soul belongs with ch. A 4.7 on its indestructibility, where no Alcmaeon lemma is found. This could happen because the lemma reproduces Arist. *de An.* 1.2 405a29–b1, see Mansfeld (2014).

⁸⁹ As Elter (1880) 20 n.1 prefers, though he admits being at a loss to have this lemma agree with that of P and S.

⁹⁰ DG 45.

(Diogenes ἐκ τοῦ ἀέρος ἔφη ξυστῆναι τὸ πᾶν), just as above at 4.12 for Hippasus and Heraclitus as compared with 2.9.

5. τὸ πᾶν: ‘the universe’, and τὸ ἓν: ‘the One’

By way of a slight digression I would like to point out that a considerable body of scholarly literature on the history of the word κόσμος is at our disposal, but so far as I know there is nothing comparable dealing with the history of the phrase τὸ πᾶν (‘the All’) in a cosmological sense.⁹¹ τὸ πᾶν, in this meaning of ‘the universe’, is first found in Empedocles (verbatim), then frequently in Plato’s *Timaeus*, and often in Aristotle and later literature.⁹² It seems to be prepared in Parmenides’ phrase ‘completely going through all things’ (διὰ παντὸς πάντα περῶντα) of fr. 31B1.32, said of the ‘objects of opinion’, that is, of the structuring factors of the physical world, which is thereby made into a whole. The phrase ‘the rotation of the All’ (ἡ περιφορὰ τοῦ παντός), equivalent to ‘the rotation of the cosmos’ or ‘of the heaven’, is found in Plato, Aristotle, Theophrastus and later authors.⁹³ τὸ πᾶν occurs in T’s *archai* lists and in that of ps.Plut. *Stromateis* we have been studying and comparing with A ch. 1.3, but is not found in the evidence of P and of S for this Aëtian chapter, with the exception of S on Xenocrates, on which see Sections 4 and 6.

Let us reassemble the Theodoretan evidence once again, and compare it in the first instance with that of Aristotle and Theophrastus: In the Eleatic Succession of the earlier list at T 2.10–11 there is agreement about the everlastingness of ‘the All’ among Xenophanes (τὸ πᾶν αἰδίων), his follower Parmenides, who ‘confirmed this argument in the same way’ (ὡσαύτως τόνδε τὸν λόγον ἐκράτυνε), Democritus (τὸ πᾶν ... ἀγέννητον),⁹⁴ and Epicurus (τὸ πᾶν ... ἀνάρχον καὶ αἰδίων). A similar unanimity is found on the second list, at T 4.5–7, between Xenophanes (ἐν εἶναι τὸ πᾶν ἔφησε ..., οὐ γεννητόν, ἀλλ’ αἰδίων) and Parmenides, who ‘wrote in agreement with his teacher in regard of the first doctrine’ (κατὰ μὲν τὸν πρῶτον λόγον σύμφωνα τῷ διδασκάλῳ συγγέγραφεν). At T 4.8 Melissus is now added, who was not included in the earlier list, and whose only innovation is to call ‘unlimited’ what his two predecessors had called ‘limited’. At T 4.12 the view of Hippasus plus Heraclitus is described more fully and differently than before at T 2.10, as they are made to posit this time that ‘the All is one’ (ἐν εἶναι τὸ πᾶν). This also holds for Diogenes of Apollonia, who, as we have seen at the end of the previous Section, at T 2.9 merely shares Anaximenes’ view that the principle is air, but now at T 4.12 posits that ‘the All has been composed from air’ (ἐκ τοῦ ἀέρος ἔφη ξυστῆναι τὸ πᾶν).

According to Aristotle’s foundational division, set out in the second chapter of Book 1 of the *Physics* and used in Book A of the *Metaphysics* (see the announcement at A.3 983b17–18) and elsewhere, e.g. *de Anima* 1.2 (as at 405a2–4),⁹⁵ the principles that have been proposed by others are, and have to be, either one or more than one, and if one, either unmoved, or moved, and if many, either limited in number or unlimited, and if limited either two or three

⁹¹ Stokes (1971) *passim* studies the ‘unity of the world (or of all things)’, see his general index s.v., but not with sufficient precision or attention to the detail of the doxographical sources. For some preliminary suggestions see Mansfeld and Runia (2009) 1.11–12, 1.23–24.

⁹² Emp. 31B14, B17.32 and B30.3 DK, Pl. *Tim.*, e.g. 27a4, 28c4, 29c5, 30b5, etc., Arist. *Met.* A.4 985a25, 5.986b17, 8.988b22–23, etc.

⁹³ Pl. *Tim.* 90d, Arist. *Cael.* 1.9 278b13–14, Thphr. *Met.* viii.7 10a16, Philo *Aet.* 52, etc.

⁹⁴ See above, nn. 23–24 and text thereto.

⁹⁵ See e.g. Mansfeld (1986) 7–17, with references to further literature.

or four or another number, and if unlimited different among themselves in various ways.⁹⁶ As we have observed some time ago,⁹⁷ this division is followed and reformulated by Theophrastus, who says the principle must be either one or not one, that is, more than one, and if one either moving or unmoved, and if unmoved either limited or unlimited.⁹⁸ He adds that those who say the principles are more than one make them either limited or unlimited in number,⁹⁹ while the unlimitedly many principles are either variously homoeomereous or possess an unlimited number of different shapes.¹⁰⁰ This division is applied throughout the fragments of the *Physics*, which can be arranged in sequence according to its unfolding.¹⁰¹

This single principle or element of the early physicist monists from Thales to Heraclitus, from which everything derives while it remains present,¹⁰² may be depicted as representing, or coinciding with, ‘the All’ in the sense of ‘the universe’. This occurs already both in Aristotle and in Theophrastus. The formula ‘the One and All’ (τὸ ἓν καὶ πᾶν *vel. sim.*) may therefore apply to the universe of these early monists, and it can be used by extension, so to speak, for the monism of the Eleatics. Thus, in the first Book of Aristotle’s *Metaphysics* the One qua monistic principle is attributed both to some of the early physicists and the Eleatics, and then *expressis verbis* placed on a par with the All, or universe, at *Met.* A.5 986b14–17: ‘though positing what is (τὸ ὅν) to be one (ἓν), just as some of the physicists, who nevertheless produce generation from the One (τοῦ ἐνός) as from matter, they (sc. the Eleatics) argue differently; for those others (sc. the physicists) add motion when explaining the generation of the universe (τοῦ πάντος), while they (sc. the Eleatics) say it [sc. the One] is unmoved’. The Eleatics are already referred to in similar terms at *Met.* A.3 983a27–b1, where they are said to hold that ‘the One and indeed the whole of Nature’ (τὴν φύσιν ὅλην)¹⁰³ are unmoved in respect of every kind of change.¹⁰⁴ Here the terms ἓν and φύσις ὅλη are equivalent. These early physicist monists are those who posit that ‘the All is one and that there is a single nature serving as matter’ (*Met.* A.3 988b22–23, ἓν τε τὸ πᾶν καὶ μίαν τινὰ φύσιν ὡς ὕλην).

In the fragments of Theophrastus’ *Physics* we find the same terminology. The ἓν καὶ πᾶν or ἓν τὸ πᾶν is (by extension) attributed to both Xenophanes and Parmenides, and τὸ πᾶν is

⁹⁶ Arist. *Phys.* 1.2 184b16–25.

⁹⁷ Mansfeld (1989) 138–148.

⁹⁸ Theophrastus ap. Simp. in *Phys.* 22.22–25, not included by Diels in *Phys.Op.* fr. 1, but appositely forming the first paragraph of fr. 224 FHS&G, which is the first of the fragments on the ‘doxography on nature’ in this collection.

⁹⁹ *Phys.Op.* fr. 3 Diels = 227A FHS&G ap. Simp. in *Phys.* 25.14–15.

¹⁰⁰ *Phys.Op.* fr. 4 Diels = 228A FHS&G ap. Simp. in *Phys.* 27.4–5 and fr. 8 Diels = 229 FHS&G ap. Simp. in *Phys.* 28.9–10, 28.25–26.

¹⁰¹ This has been done in different ways by Diels and in FHS&G.

¹⁰² Arist. *Met.* A.3 983b17–18 ‘for there is some nature, either one or more than one, which always persists while all other things are generated from them’. So of course this also holds for pluralists.

¹⁰³ See Alexander’s note *ad loc.*, in *Met.* 30.6–7: ‘he added “and the whole of nature”, since for them the One was the whole of nature (ἡ γὰρ φύσις ὅλη τὸ ἓν αὐτοῖς ἦν)’; repeated by Asclepius in *Met.* 27.5–6. The ‘whole of nature’ is the subject Socrates left by the wayside according to *Met.* A.6 987b1–2.

¹⁰⁴ Cf. Arist. *Phys.* 1.5 188a19–20.

also attributed.¹⁰⁵ The ‘nature of the All’ (τὴν τοῦ παντὸς φύσιν) is attributed to the physicist Diogenes of Apollonia.¹⁰⁶

6. Lemmata in T Books 2 and 4 and S 1.10 that are not paralleled in P

No one doubts that a common source has to be assumed whenever P and S agree. Such a source should also be assumed whenever S and T agree and parallels in P are absent. Lemmata found among the doxographical abstracts in CAG Books 1, 4, 5, and 6, that are shared with S but not paralleled in P, should be attributed to A as their source.¹⁰⁷ We may want to know whether this also holds for lemmata at T 4.9–12, as at a first glance one of course feels compelled to maintain. We have seen above that Diels without compunction attributed Theodorean lemmata that are paralleled in S (or in both S and P) to A 1.3.¹⁰⁸ But there are difficulties with some among these six lemmata. Let us begin with an inventory, citing for the sake of convenience the passages at issue in the order of Diels’ reconstruction of A 1.3 (adding the evidence of T 2.9–11 omitted by Diels), and not in the order of either S or T:

(1) 1.3.12 Xenophanes at S 1.10.12, and T 4.5–6 and 2.10

S 1.10.12 Xenophanes (said that the) principle of all things is the earth; for he writes in *On nature*: ‘From earth all things (come) and in earth all things terminate’ (Ξενοφάνης ἀρχὴν τῶν πάντων εἶναι τὴν γῆν· γράφει γὰρ ἐν τῷ Περὶ φύσεως (21B27 DK) ‘ἐκ γαίης γὰρ πάντα καὶ εἰς γῆν πάντα τελευτᾷ’).

T 4.5–6 Xenophanes son of Orthomenês of Colophon, the archegete of the Eleatic sect, said the All is one, spherical and limited, not generated but everlasting and entirely immobile. But then, willfully forgetting those doctrines, he said that all things grow from earth, for the following line is by him: ‘from earth are all things and into earth all things end’. These doctrines are absolutely incompatible [etc.]. (Ξενοφάνης μὲν οὖν ὁ Ὀρθομένους ὁ Κολοφώνιος, ὁ τῆς Ἑλεατικῆς αἰρέσεως ἡγησάμενος, ἐν εἶναι τὸ πᾶν ἔφησε, σφαιροειδὲς καὶ πεπερασμένον, οὐ γενητόν, ἀλλ’ αἰδίων καὶ ἀάμπαν ἀκίνητον· πάλιν δ’ αὖ τῶνδε τῶν λόγων ἐπιλαθόμενος, ἐκ τῆς γῆς φῦναι ἅπαντα εἶρηκεν. αὐτοῦ γὰρ δὴ τόδε τὸ ἔπος ἐστίν· (21B27 DK) ‘ἐκ γῆς γὰρ τάδε πάντα, καὶ εἰς γῆν πάντα τελευτᾷ’. ἀξύμφωνοι δὲ ἀντικρυς οἶδε οἱ λόγοι (κτλ.)).

T 2.10 Xenophanes of Colophon (said) the All is everlasting, though all things (come to be) from earth (Ξενοφάνης δὲ ὁ Κολοφώνιος τὸ πᾶν αἰδίων, ἐκ δὲ τῆς γῆς τὰ πάντα).

¹⁰⁵ ἐν καὶ πᾶν or ἐν τὸ πᾶν Thphr. *Phys.Op.* frs. 5 and 8 Diels = 224 and 229 FHS&G ap. Simp. *in Phys.* 22.26 and 28.7; τὸ πᾶν Thphr. *Phys.Op.* fr. 6 Diels = 227C FHS&G ap. Alex.Aphr. *in Met.* 31.10.

¹⁰⁶ Thphr. *Phys.Op.* fr. 2 Diels = 226A FHS&G ap. Simp. *in Phys.* 25.4.

¹⁰⁷ For twenty indubitable cases see Mansfeld (2016b) 158–160 = this volume pp. 000. Cf. above, nn. 5–7 and text thereto.

¹⁰⁸ In the Dielsian reconstruction S and T agree six times without a parallel lemma in P, namely for A 1.3.12 Xenophanes, 1.3.16 for the doxa of Democritus (the name-label plus a different doxa are included in P for 1.3.18, and there is a different doxa at T 2.11), for 1.3.17 Metrodorus, for 1.3.19 Ecphantus, for 1.3.25 Xenocrates, and for 1.3.26 Diogenes of Apollonia. In four cases lemmata, or at least name-labels, paralleled in S and T are also paralleled in P, namely 1.3.14 Epicurus (different doxa in T), 1.3.21 Plato, 1.3.22 Aristotle, and 1.3.25 Zeno of Citium. Lemmata in S not paralleled in either P or S are 1.3.10 Philolaus, 1.3.15 Leucippus, 1.3.24 Strato, and 1.3.27 Diodorus Cronus. Lemmata in T not paralleled in either P or S are 1.3.13 Parmenides and 1.3.14 Melissus.

(2) 1.3.14 Democritus at S 1.10.14, and T 4.9 and 2.11

S 1.10.14 Democritus (said the principles are) the ‘solids’ and ‘void’ (Δημόκριτος τὰ ναστὰ καὶ κενόν).

T 4.9 Democritus of Abdera son of Damasippus was the first to introduce the doxa of the ‘void’ and the ‘solids’ (Δημόκριτος δὲ ὁ Ἀβδηρίτης ὁ Δαμασίππου τὴν τοῦ κενοῦ καὶ τῶν ναστῶν πρῶτος ἐπεισήγαγε δόξαν).

T 2.11 Democritus of Abdera said the All is infinite and ungenerated (Δημόκριτος δὲ ὁ Ἀβδηρίτης ἄπειρον τὸ πᾶν εἶρηκε καὶ ἀγένητον).

(3) 1.3.17 Metrodorus at S 1.10.14, and T 4.9 and 2.11

S 1.10.14 Metrodorus son of Theocritus of Chios (said the principles are) the ‘indivisibles’ and the ‘void’ (Μητρόδωρος Θεοκρίτου Χίος τὰ ἀδιαίρετα καὶ τὸ κενόν).

T 4.9 Metrodorus of Chios addressed these as ‘indivisibles’ and ‘void’ (Μητρόδωρος ὁ Χίος ἀδιαίρετα καὶ κενὸν προσηγόρευσεν).

T 2.11 and Metrodorus of Chios (καὶ Μητρόδωρος δὲ ὁ Χίος).

(4) 1.3.19 Ecphantus at S 1.10.16a and T 4.11

S 1.10.16a Ecphantus of Syracuse, one of the Pythagoreans, (said that the principles) of all things are the ‘indivisible bodies’ and the ‘void’, for this man was the first to declare that the Pythagorean monads were corporeal (Ἐκφαντος Συρακούσιος, εἰς τῶν Πυθαγορείων, πάντων τὰ ἀδιαίρετα σώματα καὶ τὸ κενόν· τὰς γὰρ Πυθαγορικός μονάδας οὗτος πρῶτος ἀπεφήνατο σωματικός).

T 4.11 these men were also followed by Ecphantus of Syracuse, the Pythagorean (τούτοις καὶ Ἐκφαντος ὁ Συρακούσιος ὁ Πυθαγόρειος ἠκολούθησε).

(5) 1.3.23 Xenocrates S 1.10.12, and T CAG 4.12

S 1.10.12 Xenocrates (said that) the All is constituted from the One and the Ever-flowing,¹⁰⁹ with (the term) ‘ever-flowing’ hinting at matter on account of its multiplicity (Ξενοκράτης συνεστάναι τὸ πᾶν ἐκ τοῦ ἑνὸς καὶ τοῦ ἀέναντος, ἀέναντος τὴν ὕλην αἰνιττόμενος διὰ τοῦ πλήθους).

T 4.11 Xenocrates of Carthage [*sic*] addressed the matter from which all things have come to be as ‘ever-flowing’ (Ξενοκράτης δὲ ὁ Καρχηδόνιος [error for the somewhat less common Καλχηδόνιος] ἀέναντος τὴν ὕλην, ἐξ ἧς ἅπαντα γέγονε, προσηγόρευσεν).

(6) 1.3.26 Diogenes of Apollonia at S 1.10.14 and T CAG 4.12 and 2.9

S 1.10.14 Diogenes of Apollonia (said the principle is) infinite air (Διογένης δὲ ὁ Ἀπολλωνιάτης ἀέρα ἄπειρον).

T 4.12 Diogenes of Apollonia said the All has been composed from air (ὁ δὲ Ἀπολλωνιάτης Διογένης ἐκ τοῦ ἀέρος ἔφη ξυστῆναι τὸ πᾶν).

¹⁰⁹ For discussion of the notion of ‘streaming matter’ see Decleva Caizzi (1988) and the criticism of Isnardi Parente (1990), who for Xenocrates prefers the etymologizing ‘what negates unity’, i.e. ἀ-έναντος, to ‘streaming’, but also admits a more literal secondary sense, namely ‘inexhaustible’. The former in fact accords better with the ‘multiplicity’ of matter given as explanation in the doxa itself in the version in S. Even so, later interpreters may well have interpreted the epithet as ‘ever-flowing’, in a quasi-Pythagorean sense. Cf. Damasc. in *Parm.* 172.20–22 ‘Aristotle in his *Matters concerning Archytas* recounts that Pythagoras, too [sc. just as Plato], called matter the ‘other’, as it is flowing and continuously becoming ‘other’ (Ἀριστοτέλης δὲ ἐν τοῖς Ἀρχυτείοις (Aristoteles fr. 207 R3; Archytas 47A13 DK) ἱστορεῖ καὶ Πυθαγόραν ἄλλο τὴν ὕλην καλεῖν ὡς ῥευστὴν καὶ αἰεὶ ἄλλο γιγνόμενον). The attribution to Aristotle of this attribution to Pythagoras himself is unlikely.

T 2.9 Diogenes of Apollonia agreed in addressing air as the principle (Διογένης ὁ Ἀπολλωνιάτης τὸν ἀέρα συμφώνως ἀρχήν).

A doxa that is difficult is that of Diogenes of Apollonia, which in T 4.12 is significantly different from its parallel in S 1.10.14. In the latter ‘air’ (the principle) is said to be ‘infinite’ (ἀέρα ἄπειρον), an epitheton not found in T but paralleled in a fragment of the *Physics*, and attributed by Theophrastus to the ‘air’ of both Anaximenes and his purported follower Diogenes.¹¹⁰ T moreover writes that according to Diogenes air is the principle of ‘the All’ (τοῦ παντός), just as Theophrastus does. This means that both lemmata, that of S as well as that of T, in some way ultimately derive from Theophrastus, according to whom Diogenes declared that ‘the nature of the All [cf. T] is air which is unlimited [cf. S] and everlasting’, but do so in disparate ways. The absence of ‘the All’ in the Stobaeian lemma is consonant with its absence in the other lemmata of A 1.3.¹¹¹ It is unlikely that T added τὸ πᾶν here or replaced ἄπειρον with it, because (apart from adding an occasional ingredient of a biographical nature, such as the date for Epicurus at T 4.9 rashly regarded as authentically derived from A by Diels) he as a rule abridges rather than expands. ‘Air’ is widely mentioned as Diogenes’ principle. We have moreover noticed above that Diogenes has been separated from Anaximenes and moved to the final position.¹¹² Derivation of the Diogenes lemma at T 4.12 from A is therefore not feasible, and we should give preference to that of S.

In S Xenocrates and Xenophanes are quoted in this order, which is not chronological or one of Succession, but alphabetical — not a principle of organization in the *Placita* except coincidentally (as with Anaximander—Anaximenes). In an important study, the dissertation defended and published almost immediately after the publication of Diels’s masterpiece, Anton Elter¹¹³ argued that these lemmata were not culled by S from A 1.3, but from somewhere else (see also Wachsmuth’s reference *ad loc.*). He reasoned as follows: (1) the pair is irregularly placed between Thales and Anaximander on the one hand and Anaximenes, Anaxagoras, and Archelaus on the other. (2) Although in this way they interrupt the Ionian Succession, the Xenocrates lemma because it is placed far too early in the series, and its associate in an even more striking way because Xenophanes does not belong with the Ionian Succession, the whole series from Thales to Archelaus that in S surprisingly includes them is nevertheless called ‘Ionian’ in the lemma located after the concluding Archelaus lemma at S 1.10.12. (3) The phrase ‘the All is constituted’ (συνέσταναι τὸ πᾶν) in the Xenocrates lemma is different from similar phrases used in the other lemmata of A 1.3 according to the other evidence of S as well as all of P’s for this chapter, in which τὸ πᾶν is not found.¹¹⁴ (4) Accordingly, he hypothesizes a lost chapter ‘On the All’ (Περὶ τοῦ παντός), attested in his view

¹¹⁰ Thphr. *Phys.Op.* fr. 2 Diels (= 226A FHS&G) ap. Simp. in *Phys.* 24.26–27 (Anaximenes) and 25.5 (Diogenes), τὴν δὲ τοῦ παντός φύσιν ἀέρα καὶ οὗτός φησιν ἄπειρον εἶναι καὶ ἀίδιον. ‘Anaximeni Diogenem adiungit Theophrastus Aristotelis exemplo *Met.* A 3 p. 984 a 5’ (Diels DG 477 in app.), true enough as to the coupling itself, but Aristotle did not say this ‘air’ is infinite.

¹¹¹ If one is right in following Elter in arguing that the Xenocrates lemma does not belong with A ch. 1.3 (see below, text to n.113), of which I am not entirely sure.

¹¹² Above, p. 14.

¹¹³ Elter (1880) 19 n. 1. Like Diels, Wachsmuth, and Wilamowitz, Elter defended his dissertation at Bonn University, so he belonged. See also Wachsmuth’s reference (1884) 123 *ad loc.*, who agrees with Elter, and Mansfeld and Runia (2009) 77–78 for an attempt to explain S’s arrangement.

¹¹⁴ See above, text after n. 94.

by the heading of S 1.10, which he reads as: ‘On principles and elements and the All’ (Περὶ ἀρχῶν καὶ στοιχείων καὶ τοῦ παντός). This would have been the original context of the Xenocrates lemma, whereas that of the Xenophanes lemma so far remains unaccounted for.

Against Elter, Wachsmuth *ad loc.*¹¹⁵ points out that the καὶ before τοῦ παντός, though found in the main manuscripts as well as in Photius’ index, is not confirmed in the Florentine florilegium, and he therefore prefers the more appropriate ‘On principles and *elements of the All*’ (Περὶ ἀρχῶν καὶ στοιχείων τοῦ παντός). We may add that this τοῦ παντός without καὶ is not only paralleled in S’s Xenocrates lemma, but also linked to στοιχεῖα at S 1.10.6, where Homer is said to have really meant ‘the generative *elements of the All*’ (τὰ γεννητικὰ στοιχεῖα τοῦ παντός) at *Il.* 7.99, ‘may you all become water and earth!’¹¹⁶ And τὸ πᾶν also occurs in the Empedocles lemma at S 1.10.11b, where we read that ‘the All consists of four elements’. As a matter of fact most of the items quoted in this chapter of S speak of ‘all things’ and the like, so the final words of its heading according to Wachsmuth’s *constitutio* are appropriate enough. It is moreover difficult to find a place in A for such a lost chapter, and we do after all have A 1.5 with the heading ‘Whether the All is unique’ (εἰ ἐν τὸ πᾶν), paralleled as a sub-heading elsewhere in S.¹¹⁷

On the other hand, in favour of the assumption that S and T did derive their Xenocrates lemma from a common source is the fact that the florid term ‘ever-flowing’ (ἀέναν) shared by them is unparalleled elsewhere as standing for ‘matter’. S’s Xenocrates is a dualist with two principles, ‘the One’ and ‘the Ever-flowing, by which (term) he hints at matter’, while T’s is a monist, whose only principle is the ‘everflowing matter’. That T’s text is shorter would be in character, since often enough his abstracts from A are shorter, or even much shorter, than those of the other two sources. In favour of authenticity one could add that Xenocrates’ doctrine as described here, ‘the One and the Ever-flowing, with (the term) ever-flowing hinting at matter’ resembles that of Pythagoras’ two principles in § 1.3.8, ‘the Monad and the Undeterminate Dyad among the principles. Of his principles, the one strives towards the efficient and formal cause, which is God the Intellect, the other towards the passive and material (cause), which is the visible cosmos’. A similar link between Xenocrates and Pythagoras is found at ch. 4.2.3–4 (where §4 is extant in S only), ‘Pythagoras (says) that it (sc. the soul) is a number moving itself; he takes number as denoting Intellect; and similarly Xenocrates as well’.¹¹⁸

But the differences are considerable. Taking Xenocrates first, we see that T assigns to him his ethnicon, bungled, though he may have added this of his own accord.¹¹⁹ But S lacks the ethnicon. Ethnicon and (found less often) patronymic or some other means of identification, such as an affiliation, is required when protagonists are mentioned for the first

¹¹⁵ Wachsmuth (1884) 118 in the apparatus. He presumably thinks of perseveration of the first καὶ.

¹¹⁶ On this passage see further below, p. s (26).

¹¹⁷ Which is a sub-heading in S 1.22, p. 198.18, where S placed lemmata from A 1.5 in combination with material from ch. 2.1.

¹¹⁸ Xenocrates’ self-moving number and so Plato’s self-moving soul were retrospectively and creatively linked with Pythagorean number theory, see Burkert (1972) 63–64, 272 n. 165. This is echoed in the *Placita*.

¹¹⁹ Cf. his extra lemma for A 4.4 (printed as 4.4.2 Diels) at T 5.19: ‘Xenocrates, being third [counting inclusively] from Plato (for he had been a companion of Speusippus, Plato’s nephew ...)’.

time.¹²⁰ On the other hand, at A ch. 1.7.21 (Stobaeon evidence again, S 1.1.29b) the name-label Xenocrates is accompanied by both patronymic and ethnicon: 'Xenocrates son of Agathenor of Chalcedon' (Ξενοκράτης Ἀγαθήνορος Καλχηδόνιος), and for this feature this identification is the sole exception in this later chapter.¹²¹ This suggests that in A this new luminary was formally introduced only subsequently. Perhaps this argument is not entirely cogent, for one never knows,¹²² and in his evidence for A 1.3 S presents not only Xenophanes and Xenocrates, but also Archelaus (where P has patronymic and ethnicon), Heraclitus, Hippasus (where P has the ethnicon), Democritus (no identification in P because coalesced with Epicurus lemma), Epicurus (where P has patronymic and ethnicon), and Strato (not in P) without further identification. But combined with the argument regarding the odd position of the Xenocrates lemma in the Succession in S's chapter, and the exceptional presence of the notion of 'the All', the absence of ethnicon and patronymic may well be believed to tip the scales in favour of another derivation than from A's chapter.

All the same, although it is unlikely, I do not think that it can be proved beyond reasonable doubt that S's Xenocrates lemma cannot have been abstracted from the Aëtian chapter on the principles. If it is assumed that it is Aëtian, then its Theodorean counterpart, too, is most likely Aëtian. There are also other arguments in favour of Aëtian provenance of lemmata containing the phrase τὸ πᾶν. At S 1.1.29b (~ A 1.7.27) it is said that 'Melissus and Zeno (say that the deity is) the One and All and solely everlasting and unlimited (τὸ ἐν καὶ πᾶν καὶ μόνον αἰδίον καὶ ἄπειρον)'. And at P 1.24.1 = S 1.20.1a (~ A 1.24.1) we read that 'Parmenides, Melissus and Zeno [Zeno is absent from S] abolished coming to be and passing away because they held that the All is unmoved (ἀνήρουν γένεσιν καὶ φθορὰν διὰ τὸ νομίζειν τὸ πᾶν ἀκίνητον)'. Accordingly, 'the All' also occurs in lemmata in other chapters, and in the second case the evidence is provided not by S alone but by S and P together, an indubitable pointer at A. The evidence is moreover complementary, A 1.7.27 providing the positive and A 1.24.1 the negative side of the reinterpreted metaphysics of the Eleatics. The fact that this evidence pertains to Parmenides, Melissus, and Zeno reveals the influence of the Aristotelian and Theophrastean interpretation(s) of Parmenides and Melissus, and (as for A 1.24.1) the cosmological reinterpretation of this earlier interpretation. The position attributed to them is parallel to the metaphysics attributed to Xenophanes and Parmenides by T and in the *Stromateis* of ps.Plutarch, but the explicit reference to and illustration of the contradictory nature of their doctrines, which plays such an important part in T and is implicit in the

¹²⁰ On this point also see Elter (1880) 18–20. Diels *DG* 89 speaks of 'Placitorum consuetudo' in this context, but it is not entirely clear what he means. He clarifies his view at (1881) 348–349: the first and official presentation, with ethnicon and patronymic, as in Theophrastus ap. Simplicius, belongs in A ch. 1.3, not before (this in fact supports Elter's point about Xenocrates).

¹²¹ Generous abstracts from A 1.7 are found in S 1.1, considerably before those of A 1.3 in S 1.10, but against the assumption that for this reason S added Xenocrates' patronymic and ethnicon himself is the fact that the only other philosopher here with an ethnicon (no patronymic) is Diodorus of Tyre, mentioned A 1.7.31 for the first time, too.

¹²² Thales is assigned his standard ethnicon at his first appearance in A 1.2.2 (both sources) and at 1.3.1 (both witnesses). He had to have it again in ch. 1.3 because of the feature of the Succession introduced in the latter chapter. Aristotle and Theophrastus are mentioned A 1 prooem. 2 and Aristotle alone 1.2.2, each time without patronymic and ethnicon; for Elter (1880) 20 this proves that the proem and P 1.1 are not Aëtian, but this goes too far.

account of the *Stromateis*, is absent, which makes the parallel no more (but also no less) than a partial one.

The irregularity of the position of the Xenocrates lemma (like that of the Xenophanes lemma) is to some extent analogous to the disorderly sequences Philolaus—Strato—Pythagoras at S 1.10.12, and Metrodorus—Diogenes of Apollonia—Zeno—Leucippus at 10.12.14. Maybe S's motive merely was to arrange attractively varied sequences. The Aëtian abstracts after all also alternate with ps.Pythagorean (S 1.10.13) and Hermetic (S 1.10.15) material.

We may now look at the lemmata on Xenophanes. Because of the even more inappropriate position of an Eleatic in the Ionic Succession Diels' critic Elter, as we have seen, also excluded the Xenophanes lemma at S 1.10.12 from A ch. 1.3. This lemma is paralleled by the far richer lemma at T 4.5–6. I have argued above¹²³ that, considered as a whole, the lemma in T, with its dual doctrine amounting to self-contradiction, is very different from that in S not only in its long but even in its short version, and surprisingly similar to the Xenophanes lemma in the *Stromateis* of the other ps.Plutarch. At DG 284 Diels inserted the Stobaeian lemma as A 1.3.12.¹²⁴ But subsequently, in the Xenophanes chapters of the *Poetarum philosophorum fragmenta* and the *Fragmente der Vorsokratiker*,¹²⁵ obviously though tacitly reacting to Elter's condemnation, he ingeniously attributed this passage, now of course including the hexameter (Xenoph. 21B27 DK), to the so-called 'Homeric Allegories', the third of his alternatives for the identification of doxographical abstracts in S besides Arius Didymus and A.¹²⁶

To try and strengthen this other explanation we may again refer to S 1.10.6, where *Il.* 7.99 is cited and Homer is said to have meant 'the generative elements of the All'. Elsewhere (namely in Philoponus) this Homeric line is cited as the inspiration for the purported dualism of Xenoph. fr. 21B29 DK, 'earth and water are all things that come to be and grow', or (as in Sextus Empiricus) for that of 21B33 DK, 'we have all come to be from water and earth'. In the same context Sextus also cites Xenophanes 21B27 DK for its purported monism, though without such a venerable antecedent. Ps.Plutarch (we now meet a third ps.Plutarch), who in the section on the elements of his *On Homer* mentions Xenophanes by name and refers to water and earth but does not quote him verbatim, also cites *Il.* 7.99.¹²⁷ What is more, he adds exactly and literally the same interpretation as S, namely that 'the generative elements of the All' are meant. Heraclitus in his *Homeric Questions* also cites the Homeric line, but erroneously (see Diels DG 94) has it inspire Anaxagoras (no verbatim quotation). His

¹²³ Section 4.

¹²⁴ Cf. the conspectus at DG 141, where he quotes the lemma minus the hexameter and its introductory note (!), and adds 'cf. Theodoret. l.c.'

¹²⁵ There is no indication of a change of mind in Diels' personal copy of the DG (I have checked Oniga-Farra (1985), on which see Mansfeld and Runia (1997) 104–105 n. 19).

¹²⁶ At PPF 3.36 and 21A36 DK. For the allegorical literature on Homer see DG 88–99 (*Einquellentheorie* but much relevant material), and the multiplicity of writings as described by Hillgruber (1994) 35–49, with a stemma on p. 49.

¹²⁷ Philop. in *Phys.* 125.26–31, citing Porphyry (141bF Smith) on Xenophanes; S.E. *M.* 10.313–314; [Plu.] *de Hom.* 93, 963–967 Kindstrand. In a passage so similar to that in Philoponus that we have to assume a common tradition Simp. in *Phys.* 188.32 erroneously attributes 31B29 to Anaximenes (Diels drastically suggests to read Ξενοφάνης) and does not cite the Homeric line.

explanation of Homer's (and so of 'Anaxagoras') meaning is *ad sententiam* the same as that of S and P.¹²⁸

In S's chapters poetic quotations come first, and quotations in prose follow. This may induce him to take apart what he finds united in his sources. The Homeric line *Il.* 14.246 (on Oceanus alone) at S 1.10.2 has been separated from the Thales lemma at 1.10.12, where it is still found in P's version of A 1.3.1 (+ 3.2). In Diels' reconstruction of the Stobaeian column in the *DG* the line is restored to the original position, parallel to where it has been preserved by P. For good measure S at 10.4 also quotes *Il.* 14.201 (on Oceanus and Tethys), which he will have found in some similar account, most likely one on Thales.¹²⁹ The pseudo-poetic line at S 1.10.7 has been separated from the text of the Aëtian original of the Heraclitus and Hippasus lemma at S 1.10.14. In Diels' reconstruction of the Stobaeian column in the *DG* this line, too, is restored to a location parallel to the original position where it has been preserved by P. The Hesiodic lines on the origin of Chaos and Earth at S 1.10.1, already cited by Aristotle,¹³⁰ are frequently found in the literature dealing with Homer, and as we know this is also the case with the two Homeric lines just cited. This exegetical literature borrows on all sides, so also from its doxographical counterpart, itself ultimately dependent on more systematic expositions, just as the doxographical literature borrows from that on the poets.¹³¹ Diels' discussion of substantial parallel passages at *DG* 88–99 relating to ps.Plutarch *On Homer* is still fundamental. He attributed Sextus *M.* 10.313–314 and S 1.10.6 to the exegetical literature on Homer, and in his later editions, as we noted, he also did so for the Xenophanes lemma at S 1.10.12.

The above overview of passages where *Il.* 7.99 is linked with Xenophanes fragments 21B29 and B33 (on water and earth), or where it is linked with both 21B33 and B27 (the latter on earth alone) as in the Homeric scholion, or where, as in Sextus Empiricus, both B27 and B33 are quoted (the latter together with *Il.* 7.99), may suggest that the context from which S abstracted *Il.* 7.99 is where he also found the Xenophanes lemma which he interpolated in the Ionic Succession. He may have taken them apart, just as he separated *Il.* 14.246 from the Aëtian Thales lemma, *Il.* 14.201 from another such passage, and found a poetic line to be abstracted from the Heraclitus lemma. If this is correct, the Xenocrates lemma may also have been derived from such a context,¹³² which would help explain the presence in its doxa of the phrase 'the All', also found in the Homeric exegesis at S 1.10.6.

All the same, once again I do not think that it can be proved beyond reasonable doubt that S's Xenophanes lemma, just as the Xenocrates lemma, cannot have been abstracted from the Aëtian chapter on the principles. If it is assumed that it is Aëtian, then its Theodorean

¹²⁸ Heracl. *Qu.Hom.* 22.8–9 'for all that has grown from certain things will be resolved into the same things when it is destroyed'. Similarly one of the explanations in the Homeric scholion ABT on *Il.* 7.99 'or else he prays that they are to be resolved into those things from which they were composed'.

¹²⁹ For these lines see above, n. 15 and text thereto. Note that S.E. *M.* 10.314 quotes *Il.* 14.201 (Oceanus and Tethys) as well as *Il.* 7.99 as exemplifying the Homeric dualism Xenophanes 21B33 agreed with.

¹³⁰ Hes. *Op.* 116–119; Arist. *Met.* A.4 984b27–29.

¹³¹ See Hillgruber's stemma (1994) 49 for the Homeric literature and literature such as passages in Sextus Empiricus and ps.Probus that depend on it, with the 'doxographische Elementenliste' on the left side, on top.

¹³² As its poetic companion I may perhaps suggest Orph. fr. 22 F Bernabé, quoted S 1.10.8 and already Pl. *Crat.* 402b: 'Fair-flowing Oceanus (Ὠκεανὸς ... καλλιῖρρος) was the first to marry, and he married his sister Tethys, the daughter of his mother'.

analogue, too, is most likely Aëtian. In Diels' later editions this whole lemma, printed in the apparatus to the right-hand S-column at *DG* 284, is as we have noted still attributed to A.¹³³ But the Stobaeian counterpart to T does not go beyond the quotation of 21B27 DK and its immediate physicist exegesis. The substantial part about the ontology and argument about self-contradiction in T, paralleled as we have seen at ps.Plut. *Strom.* 4, have another origin, namely the same as this lemma of this other ps.Plutarch. This entails that also the Theodoretean lemmata on Parmenides (also with self-contradiction) and Zeno and Melissus, which have no counterpart in either P or S as sources for A 1.3, and only partial ones at A 1.7.27 and A 1.24.1, but which do have the striking parallels in ps.Plut. *Stromateis* (which have been discussed above), have another origin than the Aëtian chapter on the principles. And this also holds for the views of Democritus and especially Epicurus at T 2.11, similarly paralleled in the *Stromateis*.¹³⁴

In the reconstruction of A 1.3 in our forthcoming edition we have therefore placed both the Xenocrates and the Xenophanes lemma between double braces, in order to make clear that (though we strive to maximalize the evidence) their provenance from and position in A is not secure.

Matters are different with the remaining three lemmata shared by S and T that are not paralleled in P, namely those concerned with the three Atomists Democritus, Metrodorus and Ecphantus.

The Democritus lemma at T 2.11, as we have just seen, is entirely different from S 1.10.14 (A 1.3.16 Diels), but that at T 4.9, though formulated more fully, is absolutely in agreement with it. In the same way the Metrodorus lemma at T 4.9 (that at 2.11 lacks a doxa) is in agreement with S 1.10.14 (A 1.3.17 Diels). And this also holds for the Ecphantus lemma at T 4.11 (no Ecphantus on the earlier list) in relation to S 1.10.16a (A 1.3.19 Diels). There simply is no convincing argument against the attribution of these lemmata to the source common to S and T we should call by the name of A.

Finally, we may look at the four lemmata shared by all three sources, that is, by P, S and T: 1.3.18 Epicurus, 1.3.21 Plato (P adds Socrates), 1.3.22 Aristotle, and 1.3.25 Zeno.¹³⁵ Although the Epicurus lemma is much shorter in S than in P, the shared sections are literally identical, and different from the comparable parts of the lemma in T, so the former can and the latter cannot be attributed to A. The Plato lemma in T is a shorter version of the lemma shared by P and S, so may have been derived from A, although the bare-bones information it offers would also be easily accessible elsewhere. This also holds for the Aristotle lemma, and even for the Zeno lemma, where T will have added the reference to the discipleship with Crates *suo Marte*. Diels in his apparatus in the *DG* emphasizes that Zeno's patronymic is the same in S as in T, namely Mnasaïos (Μνασαίου), while P has the correct form Mnaseas (Μνασέου). This would not only prove communality of source for S and T, but also traces the corruption back to A (in itself of course not impossible), and attributes the emendation to an attentive copyist in the early tradition of P. But Raeder in his edition of T, following the better manuscripts,

¹³³ Also at *PPF* 3.36 and 21A36 DK.

¹³⁴ See above, section 4. For the lemmata on Parmenides and Melissus 'another doxographical source' than A was already suggested in Mansfeld and Runia (1997) 286–287.

¹³⁵ The four lemmata found in S alone, namely 1.3.10 Philolaus (S 1.10.12), 1.3.15 Leucippus (S 1.10.14), 1.3.24 Strato (S 1.10.12) and 1.3.27 Diodorus Cronus (S 1.10.15), are typical *Placita* material found in a typical *Placita* context and so should be attributed to A.

prints Μνασέου, so if he is right the corruption remains limited to the tradition of S and part of that of T.

7. Conclusion and Summing-Up

The conclusion therefore has to be that the two *archai* lists in T display a considerable overlap in those lemmata which are closely paralleled in ps.Pl. *Stromateis*.¹³⁶ One may therefore postulate a shared source that has been abstracted in varying but compatible ways. The Eleatic and Eleaticizing lemmata in T and the *Stromateis* must derive from a source other than A. This also holds for the almost universally neglected lemmata on Democritus and Epicurus at T 2.9, which show the same Eleaticizing colouring. In Book 4 T combined this material with a couple of abstracts from A 1.3, thus again utilizing the source already cannibalized in T Book 2, and to be utilized further in the next chapters of T Book 4, namely 4.13–24.

(1) The 5 lemmata in T shared (or shared to some extent) with S that are not paralleled in P and may therefore have to be attributed to a common source, i.e. A, are the following (always according to Diels' numbering in the *DG*):

- 1.3.12 Xenophanes (only the first section) at T 4.5 and S 1.10.12c
- 1.3.16 Democritus at T 4.11 and S 1.10.16a1 (different doxa at P 1.3.9)
- 1.3.17 Metrodorus at T 4.9 and S 1.10.14b
- 1.3.19 Ecphantus at T 4.11 and S 1.10.16a1
- 1.3.23 Xenocrates (perhaps) at T 4.12 and S 1.10.12c

Democritus is followed by Metrodorus, who in T is separated from Ecphantus by the Epicurus lemma. So for Democritus, Metrodorus, (Epicurus), and Ecphantus we may postulate communality of source, and these Atomists form a natural cluster.¹³⁷

The 3 lemmata in T shared with both P and S that have been abstracted from A are the following (always according to Diels' numbering in the *DG*):

- 1.3.21 Plato at T 4.11, P 1.3.11 and S 1.10.16a2
- 1.3.22 Aristotle at T 4.11, P 1.3.12 and S 1.10.16a3
- 1.3.25 Zeno at T 4.13, P 1.3.11 and S 1.10.14d

Including Xenocrates these lemmata follow upon one another in the order Plato, Aristotle, (Xenocrates), Zeno at T 4.11–12, that is, in the same order as in P. This proximity is a strong argument for a communality of source. From Plato to Zeno we moreover have a natural cluster.¹³⁸

(2) The lemmata in T (paralleled in ps.Pl. *Stromateis*) that have been abstracted from a source other than A are the following:¹³⁹

- 1.3.12 Xenophanes (only the ontology and the self-contradiction) at T 4.5–6, (plus 2.10, not cited in the A columns of the *DG*), cf. *Strom.* 4

¹³⁶ Schulte (1904) 70–72, too, attributes this (and similar material elsewhere in the *Therapy*) to a source different from A.

¹³⁷ Cf. Mansfeld and Runia (2009) 80.

¹³⁸ For this cluster cf. Mansfeld and Runia (2009) 81.

¹³⁹ At Mansfeld and Runia (1997) 287 lemmata at T 4.7–8 and 4.12 '(and some others)' are already said to have been 'most likely drawn from another doxographical source' than A ch. 1.3. The 'exhaustive analysis of the chapter' on which we could not then embark is provided in the present essay.

1.3.13 Parmenides at T 4.7–8 (plus 2.10, not cited in the A columns of the *DG*), cf.

Strom. 5 not in the *DG*; Democritus at T 2.11, cf. *Strom.* 7

1.3.14 Melissus at T 4.8

1.3.18 Epicurus at T 4.9–10 (plus 2.11, not cited in the A columns of the *DG*)

The three Eleatics plus Epicurus also form a natural cluster. To this source we may also attribute *Strom.* 6, Zeno of Elea.¹⁴⁰

With perhaps less good reason I further venture to add to this source:

1.3.26 Diogenes of Apollonia at T 4.12

1.5.5 Hippasus and Heraclitus at T 4.12 (and at 2.10, not cited in the A columns of the *DG*)

These two lemmata are appended together at the end of the list, in the order Hippasus and Heraclitus — Diogenes of Apollonia. This proximity, as well as the presence of ‘the All’ in both doxai, forms an acceptable argument for communality of source.

As for the list at T 2.9–11, it derives in part from a third source that is close to the Early Peripatos, and has been supplemented with lemmata that anticipate more substantial lemmata in the list at T 4.5–12, namely those on Xenophanes and Parmenides at T 2.10. The lemma on Hippasus and Heraclitus at T 2.10, though more immediately close to Aristotle while its counterpart at T 4.12 is very close to Theophrastus, may still be perceived as anticipating it. In a similar way T in Book 1 briefly anticipated a number of lemmata set out much more fully and systematically in Book 4.¹⁴¹

(3) This distinction between different sources in T’s *archai* lists enabled us to fish out, so to speak, the lemmata that most probably or even certainly have been abstracted from A 1.3. If next we look for clusters of lemmata with corresponding name-labels plus doxai in the same order in at least two of our three sources, or in all three, the following partial Successions can be established:

In both P and S, the series from Thales to the paragraph on the Ionian Succession form a natural cluster, while a cluster consisting of Pythagoras and Hippasus plus Heraclitus follows suit.¹⁴²

—Thales

—Anaximander (in S separated from Heraclitus and Hippasus by two interpolated lemmata, namely Xenocrates and Xenophanes)

—Anaximenes

—Anaxagoras

—Archelaus

—note on Ionic Succession (in S separated from Pythagoras by two interpolated lemmata, namely Philolaus and Strato, not paralleled in either P or T)

—Pythagoras (in S separated from Heraclitus and Hippasus by a pseudepigraphic Pythagorean text)

—Heraclitus and Hippasus

In both S and T the above-mentioned natural cluster of Atomists:

—Democritus

¹⁴⁰ Cf. Mansfeld and Runia (2009) 81.

¹⁴¹ See above, nn. 62–66 and text thereto.

¹⁴² For the first cluster cf. Mansfeld and Runia (2009) 76–78, for the second *ibid.* 78–80, for the third *ibid.* 80, and for the fourth *ibid.* 81.

- Epicurus
- Ecphantus

In both P, S and T another of these natural clusters:

- Plato
- Aristotle (in T separated from Zeno by Xenocrates, of whom we have observed that he is cited in the wrong Succession in S)
- Zeno of Citium

Four brief lemmata that we should attribute to A (see above, n. 135) are found in S alone, namely Philolaus at A 1.3.11, Leucippus at 1.3.15, Strato at 1.3.24, and Diodorus Cronus at 1.3. 27 Diels.

(4) Only limited conclusions can be drawn regarding the location or relative position of the majority of the following lemmata:

The position of the Empedocles lemma, versions of which are found in both S and P, cannot certainly be established. In S it is the first of the series of lemmata concerned with the principles, so comes even before Thales. It is placed here because in S poetic quotes precede prose, while the exegesis follows immediately upon the quoted fr. 31B6 DK. The contents of this substantial exegesis are so different from the brief explanation in P that Diels declined printing the Stobaeian lemma, or rather lemmata, in the right-hand S-column of the *DG*. Diels' location of the ps.Plutarchean version (in the left-hand P-column) immediately after the Stobaeian Ecphantus lemma (in the right-hand S-column), which is the last one of his reconstructed Atomist cluster, is inspired by its position immediately after the Epicurus and Democritus lemma in P, where Ecphantus is not found. A position before the Plato to Zeno cluster is indeed not unlikely.

Xenocrates is followed by Xenophanes in S, but in T these lemmata are situated quite far from each other, and in contexts where they are at home. This means that the location of the Xenophanes lemma in A (still assuming that we are right in making this attribution) remains uncertain, while the Xenocrates lemma (also assuming that we are right in making this attribution) should probably be located in its appropriate position in the Plato to Zeno cluster.

In T Metrodorus belongs with the Democritus–to–Ecphantus cluster and is appropriately placed before Ecphantus. In S Metrodorus is separated from the trio of the other Atomists by Diogenes of Apollonia and Zeno of Citium, who come before it. The lemma should therefore indeed be assigned to the Democritus–to–Ecphantus cluster. Zeno of Citium in S is clearly also in an unaccustomed place (above we have been able to assign this lemma to the Plato–to–Zeno cluster), and so is S's Diogenes of Apollonia, whose position remains uncertain (I have argued above that its parallel in T does not derive from A).

Philolaus and Strato are located in S before Pythagoras and after Archelaus. This position may be a relic of the original disposition of (this part of) the Aëtian chapter according to the number of principles in order of increase. We are dealing, then, with two dualists placed after the early Ionians, the first four of whom are monists and the fifth both a monist and a dualist, so an apt *Übergangsfigur*. Strato could be placed after Aristotle, but it is not so clear where Philolaus should be located.

Leucippus is found further down in S, before Democritus and Epicurus, and may certainly be included at the head of the Atomist cluster.

This results in the following relative sequence, which *mirabile dictu* is the same as that of Diels in the *DG*:¹⁴³

1. Thales	1.3.1 Diels
2. Anaximander	1.3.3 Diels
3. Anaximenes	1.3.4 Diels
4. Anaxagoras	1.3.5 Diels
5. Archelaus	1.3.6 Diels
6. note on Ionic Succession	1.3.7 Diels
7. Pythagoras	1.3.8 Diels
8. Heraclitus and Hippasus	1.3.10 Diels
9. Leucippus	1.3.15 Diels
10. Democritus	1.3.16 Diels
11. Metrodorus	1.3.17 Diels
12. Epicurus	1.3.18 Diels
13. Ecphantus	1.3.19 Diels
14. Plato	1.3.21 Diels
15. Aristotle	1.3.22 Diels
16. Zeno of Citium	1.3.25 Diels

Differences of opinion will occur when one attempts to insert the other lemmata, namely that referring to the Italic Succession (1.3.9 Diels), and those with the name-labels Philolaus (1.3.10 Diels), Xenophanes (1.3.12 Diels), Empedocles (1.3.19 Diels), Xenocrates (1.3.23 Diels), Strato (1.3.24 Diels), Diogenes of Apollonia (1.3.26 Diels), and Diodorus Cronus (1.3.27 Diels). Positions in the Successions that may be preferred are Philolaus after Heraclitus and Hippasus and the note on the Italic Succession after Philolaus (or after Pythagoras), Xenocrates after Plato (in the Succession), or after Pythagoras (because of a similar dualism), the Peripatetic Strato after Aristotle. The position of Diodorus Cronus, only mentioned in S, cannot certainly be established, though a location following after the Leucippus-to-Ecphantus cluster, and not at the very end, 1.3.27 Diels, where he is now to be found, would be appropriate. Empedocles we may place before Plato, as in P. Xenophanes, and Diogenes of Apollonia (as one would think) belong in the first half of the list rather than in the second, but where one might prefer to put them remains unclear. Diels placed Xenophanes in the first half after Heraclitus and Hippasus and Diogenes in the penultimate position of the second half. He may have been impressed by the position Diogenes, a Ionian, has been given in D.L. 9.57, between Protagoras and Anaxarchus. In this passage Diogenes of Apollonia is said by Antisthenes of Rhodes (fr. 15 Giannatasio Andria) to have been a pupil of Anaximenes, an obvious transposition or deformed echo of the doctrinal resemblance first mentioned by Aristotle, and to be a contemporary of Anaxagoras, which is not a very good synchronism.¹⁴⁴ Anaxarchus in his turn is said at D.L. 9.58 to have been a pupil of the to us obscure Diogenes of Smyrna. The widespread notion that the location of Diogenes of

¹⁴³ I retract the too strong critique of Diels at Mansfeld and Runia (2009) 76.

¹⁴⁴ Cf. above, text to n. 79.

Apollonia in D.L. Book 9 is due to the erroneous insertion of the Apollonian instead of the master of Anaxarchus has been interestingly criticized by André Laks.¹⁴⁵

¹⁴⁵ Laks (2008) 247–251.

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Appendix¹⁴⁶

I T Book 2.8–11:

(a) for Thales (fr. 329 Wöhrle), the oldest of the seven sages, assumed water as the principle of all things, since, as I believe, he relied on Homer, who said ‘Ocean birth of the gods, and mother Tethys’ (*Il.* 14.201);

but Anaximander (fr. 134 Wöhrle), who succeeded him, said the infinite is the principle;

but Anaximenes (fr. 112 Wöhrle), his successor, and Diogenes of Apollonia (—) agreed in addressing air as the principle;

but Hippasus of Metapontum (—) and Heraclitus of Ephesus (T 878 Mouraviev) assigned (being) the principle of all things to fire;

but Empedocles of Agrigento (—) spoke of the four elements;

(b) but Xenophanes of Colophon (—) (said) *the All*¹⁴⁷ is everlasting, though all things (come to be) from earth;

and Parmenides, his associate, of Elea (—), confirmed this argument in the same way, and declared the criterium of the senses/sensations to be false, stating that this least of all reaches the truth;

and Democritus of Abdera (—) said *the All* is infinite and ungenerated;

and Epicurus son of Nicocles of Athens (—) (said) *the All* consisted of atoms from the beginning, and yet is without beginning, and everlasting;

Metrodorus of Chios (—) and Zeno of Elea (—) and Diogenes of Smyrna (—), too, posited various principles of the universe.

II T 4.5–12:

(b’) Now Xenophanes son of Orthomenes of Colophon (cf. Diels’ apparatus ad A 1.3.12, 21A36 DK), the archegete of the Eleatic sect [i.e. Succession], said *the All* is one, spherical and limited, not generated but everlasting and entirely immobile. But then, willfully forgetting those doctrines, he said that all things grow from earth, for the following line (21B27 DK) is by him: ‘from earth are all things and into earth all things end’. These doctrines are absolutely incompatible. For if the cosmos is everlasting, it is also without a beginning, and if it is without a beginning, it surely does not have earth as its mother. But if it has earth as its cause, it follows that it is not without a cause; if it is not without a cause, it follows also that it is not without a beginning, and if it is not without a beginning, it is not everlasting;

and Parmenides son of Pyrrhes of Elea (cf. app. ad A 1.3.13, T 55 Coxon), having become an associate of Xenophanes, wrote in agreement with his teacher in regard of the first doctrine, for they say the following line (28B8.4 DK) is by him: ‘entire, unique of its kind and immobile and ungenerated’. Yet this man said that cause of the whole of things is not only the earth, but also the fire;

and Melissus son of Ithagenes of Miletus [*sic*] (cf. app. ad A 1.3.14, 30A9 DK) became an associate of the last-named [sc. Parmenides], but did not preserve their [sc. Xenophanes’ and

¹⁴⁶ Numbers of fragment collections have been added where available, (—) meaning that the passage has not been collected, and references to the *DG* where appropriate. Comparable lemmata have been identified by letters between round brackets, e.g. (a), (a’), (a’’).

¹⁴⁷ τὸ πᾶν: ‘the universe’, but I’ll keep to the literal translation.

Parmenides'] teaching in a pure form. For he said the cosmos is unlimited, whereas they said it is limited;

and Democritus of Abdera son of Damasippus (cf. app. ad A 1.3.16, 68A46 DK) was the first to introduce the tenet of the 'void' and the 'solids';

but Metrodorus of Chios (cf. app. ad A 1.3.17, 70A2 DK) addressed these as 'indivisibles' and 'void';

just as, again, Epicurus son of Nicocles of Athens (cf. app. ad A 1.3.18), whose *floruit* fell in the fifth generation after Democritus, addressed as 'atoms' the things they called 'solids' [sc. Democritus] and 'indivisibles' [sc. Metrodorus]. Some people say that the names 'indivisible' and 'atom' and 'solid' were given because of their impassibility, others because of their minute size, since this is incapable of admitting division. They give these names to those smallest and finest bodies which the sun, when shining inside through windows, shows to be vibrating back and forth in its light;

these men were also followed by Ecphantus of Syracuse the Pythagorean (cf. app. ad A 1.3.19, 51.2 DK);

(c) but Plato son of Aristo (cf. app. ad A 1.3.21) says the principles of the whole of things are God, matter and the Forms;

but Aristotle of Stagira son of Nicomachus (cf. app. ad A 1.3.22) (says these are) form and matter and privation; not four but five elements, for he said that the aetherial is the different [*sic*, as a rule emended to 'fifth'], which is inflexible and unchanging;

Xenocrates of Carchedon [*sic*, instead of Chalcedon] (cf. app. ad A 1.3.23, F 22 Isnardi Parente²) addresses the matter, out of which all things have come to be, as 'ever-flowing';

but Zeno of Citium son of Mnaseas (cf. app. ad A 1.3.25, SVF 1.85) the companion of Crates, the originator of the Stoic sect, said that the god and the matter are the principles;

(a1) but Hippasus of Metapontum (cf. app. ad A 1.5.5, 18A7 DK) and Heraclitus son of Bloson of Ephesus (T 200 Mouraviev) held that *the All* is one, unmoved [*sic*, generally amended to 'always in motion'] and limited, and that the principle is fire;

(a2) but Diogenes of Apollonia (cf. app. ad A 1.3.26) said *the All* has been composed from air.

III Ps.Plut. *Stromateis* 4–11

(a') 1. Thales (fr. 260 Wöhrle) [omitting the remainder of the paragraph].

2. Thales' associate Anaximander (12A9a DK) [omitting the remainder of the paragraph].

3. Anaximenes (13A6 DK) [omitting the remainder of the paragraph].

(b'') 4. Xenophanes of Colophon (21A32 DK), having traveled his own road, that is to say one deviating from of all those previously mentioned [sc. Thales, Anaximander, Anaximenes], preserves neither coming to be nor perishing, but claims that the All is always alike. For if this came to be, he says, it is necessary that it did not exist before. But what is not cannot come to be, not could what is not produce anything, or anything come to be from what is not. And he declares that the senses/sensations are unreliable, and he wholly condemns reason itself together with them. He also declares that the earth, as it is being carried down continuously and little by little, in time gives way to the sea. [omitting theology and most of physics]. And all things come from earth. [omitting some physics].

5. Parmenides of Elea (28A22 DK), an associate of Xenophanes, adopted his views and simultaneously adopted the contrary stance. For he declares that the All is everlasting and motionless according to the true account of things for it is 'single and of a single kind, unshaken, and ungenerated' (cf. 28B8.4), while coming to be belongs to things that are believed to be according to a false assumption, and he drives the senses/sensations away from the truth. He says that if something exists next to being, this is non-being, but that non-being does not exist in the whole of things. So in this way he preserves being qua being ungenerated. He says that the earth came to be from the dense {air} flowing down.

6. Zeno of Elea (29A23 DK) failed to make an original contribution, but raised even more difficulties.

7. Democritus of Abdera (68A39 DK) posited that the All is unlimited because it was not in any way produced by anyone. He also says that it is changeless, and explains in general terms what sort of All it is, literally (sc. saying that) 'the causes of present events have no beginning, but from the beginning from infinite time all things have been entirely precontained by necessity, things that were and are and will be.' He describes the origin of the sun and the moon. [Omitting the rest of the cosmology].

8. Epicurus son of Nicocles of Athens (—) attempts to reign in the nonsense about the gods. He also says that nothing comes to be from what is not, because the All always was as it is and always shall be as it is, while nothing unusual will be brought about in the All in the course of infinite time, because the All is a body and not only unchangeable, but also infinite. [Omitting the note on the *telos*, which brings along the parallel view of Aristippus in the next paragraph].

9. Aristippus [omitting almost the entire brief paragraph].

(a'') 10. Empedocles of Acragas (31A30) (says) there are four elements. [Omitting almost the entire paragraph].

11. Metrodorus of Chios (70A4 DK) says that the All is everlasting, because it would be from what is not if it were generated; and it is infinite because it is everlasting, for it has no beginning from where it began, nor any limit or termination; and the All does not partake of movement either. ... When condensed the aether produces clouds [etc., omitting most of the following cosmology].

(a''') 12. Diogenes of Apollonia (51A6 DK) posits air as the element. [Omitting the remainder of the paragraph].*

* Thanks are due to David Runia and Christian Vassallo for their comments and suggestions.

Part Two

Exploring the *Placita*

Statistical Explorations of the *Placita* of Aëtius

Edward Jeremiah

I have not changed font because of possible complications

Note the use of colour in some illustrations, starting at p. 29

Also different font in tables

Abstract. The *Placita* has a unique textual history, structure, and style that makes statistical exploration of its pages especially profitable. In this paper I probe its text using a variety of quantitative techniques that help solve some important problems and unanswered questions regarding its history, nature, status, and significance. Questions addressed include: How much of Aëtius' original work is likely contained in Mansfeld and Runia's reconstruction?; How many individual philosophers not mentioned in the reconstruction were likely mentioned in the complete work, and how much of the total philosophical population does the *Placita* likely sample? How do chronology and the logic of diaeresis affect a chapter's ordering of tenets, and how did this arrangement change in time? Who in the *Placita*'s universe are the most important philosophers, and what does this tell us about philosophical history and scientific progress? How philosophically diverse are different books and topics in *Placita*, and how does this reflect the contemporary philosophical landscape and contemporary interests? The paper is a case study in how traditional philology can, given a suitable text, be enriched by appropriately designed mathematical and statistical tools.

Key terms. Aëtius, *Placita*, statistical modelling, mathematical modelling, philology, ancient philosophers, doxai, dialectic, diaeresis, chronology, history of philosophy

Introduction

The *Placita* has an unusual structure for a philosophical text that makes it strangely suited to quantitative methods of exploration. The repetitive format of its chapters, its ordered entries, its stereotyped linguistic character, and its cast of recurring philosophers, are all features which encourage a quantitative approach to solving some outstanding questions as well as formulating

some new ones. In the following work, I develop and apply a variety of such methods. Some of the results give insight regarding Aëtius' original and its textual tradition; others shed light on philosophical history; others simply do their bit to further explicate and capture the nature of this curious text. The common thread is the statistical approach. I hope to show that such techniques can supplement the toolkit of traditional philology and provide new angles of interpretation.¹

The paper has main four sections, each of which can stand more or less on its own two feet:

1. A mathematical model of the witnesses' excerpting process that enables a systematic analysis of how much of Aëtius' original work is likely contained in Mansfeld and Runia's reconstruction. I show that for chapters where both Pseudo-Plutarch and Stobaeus have copied from the original we most likely have very close to the complete work. I also show that Lebedev's recent hypothesis² that many authorial definitions are missing from Pseudo-Plutarch's and Stobaeus' testimony is vanishingly improbable.
2. A mathematical model of the *Placita's* citation of philosophers that enables:
 - a) estimates of how many individual philosophers not mentioned in the reconstruction were likely mentioned in the complete work;
 - b) an evaluation of how philosophically diverse different books and topics in the *Placita* are;
 - c) and most remarkably, estimates of the total population size of philosophers whom the doxographical tradition could potentially have cited.
3. A statistical technique for determining how chronologically ordered a given chapter is, which allows investigation into the *Placita's* method of arrangement and how it changed in time. This will assist us in gauging the degree to which the *Placita* is a history of philosophy or an exercise in dialectic.
4. A study of rates of predicate ellipsis in the *Placita*, which is a core feature of its linguistic style and contributes to its telegram-like character.
5. Various simple bibliometric statistics that facilitate exploration of the *Placita's* perspective on philosophical history and on the uniqueness and influence of different philosophers.

¹ I owe the warmest of thanks to Professors Jaap Mansfeld and David Runia for their support of my research and invaluable comments on drafts of this paper. The research I present here is based in large part on the draft edition of Aëtius' compendium which they have made available to me. I must also thank Professor Peter Taylor for kindly taking the time to discuss with me and review its mathematical sections.

² Lebedev (2016) 600–602.

The first two sections are the most technical and mathematically laden. I appreciate that readers will be more interested in the results than the methods, so for the sake of readability step-by-step details of the equations involved have been removed to **Error! Reference source not found.**

The model in Section 1 I have constructed myself to fit the specifics of the case, but the building-blocks and methods used are standard in statistics. In Section 2 I have given a new application to a model for estimating how many unseen species there are in an environment based on species already observed. The model ultimately traces back to Ronald Fisher,³ the great statistician and biologist, but has been productively extended to solve other unseen species problems, such as estimating Shakespeare's total vocabulary from word type frequencies in his extant writings. Here my innovation is to use it to estimate the number of unseen philosophers who likely appeared (i.e. were cited) in those parts of Aëtius' text missing from the reconstruction, and indeed in doxographical writing more generally if we had more of it. In both these sections the main body has been reserved for a general description of the models and a discussion of the results and implications. For Sections 3 and 5, the techniques are much simpler and have been set out in full in the main text. Apart from the use of the tau statistic for quantifying the similarity between two lists, most of the analysis rests on simple frequencies, ratios and correlations.

Crucial to the argument in the first two sections is the distinction between the original lost text of Aëtius (henceforth *A^c*; *A* will stand for Aëtius himself) and Mansfeld and Runia's reconstruction of this original (henceforth *MR*) on the basis of its three witnesses: Pseudo-Plutarch (*P*), Stobaeus (*S*), and Theodoret (*T*). *MR* currently exists only as a first version, but the actual data that undergirds our modelling is not subject to any major change that would compromise the results presented here. The data utilised concerns the macroscopic structure of the text and not finer matters such as specific readings. They have been collected and published in three appendices, whose content is as follows:

Appendix 1: A list of all the chapters in *MR* including: the number of doxai copied by each witness and the number of matches between them; the number of doxai in the reconstructed chapter; the expected and maximum likelihood sizes of the original chapter in *A^c* according to our model; and the totals for each book.

³ Fisher, Corbet, and Williams (1943).

Appendix 2: A table of Stobaeus' replacement of material from *A^c* with excerpts from Arius Didymus' doxography and Plato's works. Such replacements can be treated as proxies for their counterpart *A^c*.

Appendix 3: A list of all the name-labels in *MR*, together with their citations and total counts.

Before beginning, let us review in brief those features of the *Placita* which make quantitative exploration a profitable enterprise. The work comprises self-contained chapters, each on a well-defined question in philosophy, which list various philosophers' opinions on the question at hand. These opinions are self-contained units in themselves, and each is typically introduced with a single name-label or a list of name-labels citing those who held the view, together with a verb (often elliptical) of saying or thinking. The archetypal scheme is 'such and such says' followed by the content of the opinion in indirect speech.

Such well-defined textual units are the property that makes the modelling of the first section possible. There is even a sense in which it is these units that drive the wider doxographical tradition, providing little packages of thought ripe for excerptors, anthologists, epitomators and compilers to pluck and copy. Their compact size means that, like genes, they are generally copied whole. Even when a writer like Stobaeus mixes and matches them, their gene-like nature makes them relatively easy to spot and isolate. The upshot for us is that we can treat the excerpting of doxographical units as a discrete, probabilistic process, so as to draw inferences about the structure of the parent on the basis of patterns among the descendants.

The name-labels attached to the doxai also contain useful information about whose opinions are most unique and whose are most influential; about who shares opinions with who, and whose opinions are opposed to who. We can also examine diachronic trends in citations to sketch a history of philosophical progress from within the *Placita*'s worldview. The regular use of name-labels allows us to collect frequency statistics on the *Placita*'s cast of philosophers that is more than just the tedious curation of numbers: hidden in this data we can uncover traces of the population structure of philosophers outside the text.

Lastly, because the constituents of doxographical discourse are typically so concise and encapsulated, they can be ordered in ways that are meaningful, with doxai arranged to highlight contrasts, sharpen conceptual distinctions, and to provide an exhibit of dialectic in action. Such arrangement is also amenable to quantitative treatment, via strategies that have been developed

to assess the similarity of ranked lists. My aim here is to see whether such techniques can show us anything interesting about the *Placita*'s method of ordering its basic materials and how this process changed in time. I hope to show that they can.

1. Modelling the completeness of Mansfeld and Runia's reconstruction of Aëtius

An important question that has not yet been answered is how complete Mansfeld and Runia's reconstruction of Aëtius is. How many doxai in the original were not copied by Pseudo-Plutarch, Stobaeus or Theodoret? As I will demonstrate, this is a question that can be modelled mathematically under reasonable assumptions. We can divide the problem into chapters where we have more than one witness, and those where we only have P (henceforth P only chapters). Tackling the first part of the problem is more complicated since there is more information to take into account. We will begin here.

P and S copy some lemmata and omit others. Since both can be selective in their excerpting, though P evidently more so than S, it is possible that there are chapters in which both happen to omit the same entry or entries. We know of a few definite cases like chapter 4.3, where T contributes 2 additional doxai omitted by both P and S. Such mutual omission becomes harder the more entries they copy relative to the size of the original chapter. For example, if P, S and T each copy 6 doxai from a chapter, it will be harder for them all to omit the same item if the original chapter size was 7 rather than 10.

By the same reasoning, mutual citation, or matches in the selections of our witnesses, also varies in probability with chapter size. Intuitively, if we keep the sizes of their samples constant, it becomes less probable that P and S copy the same lemmata as we increase the hypothetical size of A^c , just as it is less probable that you and I will pick the same number if we have to choose one between 1 and 100 than if we have to choose one between 1 and 10. All else being equal, a larger number of matches suggests to us that A^c is smaller and that there are less missing lemmata. The model we will build hinges on this basic insight.

This section has two main aims. First, we wish to find the original chapter sizes in A^c that maximise the probability of us observing the data we have, a common statistical method known as Maximum Likelihood Estimation. Second, we wish to find the weighted average of hypothetical chapter sizes in A^c that may have produced these same data, the hypothetical sizes

being weighted according to their posterior probability (their probability given the observed data). The second estimate gives the expected value of original chapter sizes and is a more conservative measure of the reconstruction's completeness since it takes the whole posterior distribution into account and not just its maximum. For some probability distributions, like the so-called 'bell-curve', the maximum (often called the mode) of the distributed variable and the expected value (the average) coincide, while for others they do not. The distribution of original chapter sizes will be of this latter kind, in which case it is useful to know both the maximum and the average.

1.1. A model of the complete text of Aëtius' *Placita* for chapters with more than one witness

To proceed we first assume that each witness chooses whether to copy a doxa or not by independently flipping a yes/no coin weighted according to his own selective probability. This probability will come in two varieties, *provisional* and *real*. We do not know the real probability because we do not have A^c . We can however form a provisional estimate based on Mansfeld and Runia's reconstruction. As it only includes lemmata that are attested in one of the witnesses, the reconstruction gives the minimum possible size of A^c . The provisional selective probability will therefore be the maximum possible given the evidence. If there are missing lemmata, the real probability will be lower than the provisional one. How much lower requires some modelling to answer.

The assumption of a constant selective probability for each witness may appear simplistic because it assumes that P and S are not biased towards selecting doxai based on some feature or set of features. For example, we might suppose that our witnesses' selective choices are influenced by the name-label(s) attached to the doxai – which, in P's case at least, is evidently true (see Section 2.1). If P and S's biases overlap, then it will be easier for them to pick matches, which means the random model will underestimate the number of missing chapters. However, if we calculate a selective probability for each name-label in each witness, there is no significant positive correlation between P's selective probabilities and S's, so such preferences should not bias the model downwards.⁴ Furthermore, besides making calculations far easier, the use of a

⁴ Calculated from data in *MR*, $r = 0.078$, where the selective probability of a name-label in a witness is the number of doxai with that label copied by that witness, divided by the number of doxai with that label in chapters attested by that witness. This lack of correlation is already expected if we observe that there is little variability in S's probabilities: he has an overwhelming tendency to copy all attested doxai in the chapter's to which he is a witness.

constant selective probability for all doxai avoids the problems that come with estimating too many parameters from limited data.

We should also note that a sceptic who believes our estimates of missing lemmata are too low may always postulate the existence of further hidden features which conspire to make P and S choose the same doxai. But unless such features are clearly identified and shown to significantly bias the model, we can hardly incorporate them into the model. The sceptic has the burden of proof to justify his scepticism.

Let us begin with a list of our model's variables. Some of them reference observed quantities which can be found in Appendix 1, while the others (asterisked) require estimation.:

P is the set $\{p_1, p_2, \dots, p_n\}$ of the number of lemmata in Pseudo-Plutarch for each chapter.

S is the set $\{s_1, s_2, \dots, s_n\}$ of the number of lemmata in Stobaeus for each chapter.

T is the set $\{t_1, t_2, \dots, t_n\}$ of the number of lemmata in Theodoret for each chapter.

M^p is the set $\{m_1^p, m_2^p, \dots, m_n^p\}$ of the number of matching lemmata between P and S in each chapter.

M^t is the set $\{m_1^t, m_2^t, \dots, m_n^t\}$ of the number of matching lemmata between T and P or S in each chapter.

* A^c is the set $\{a_1, a_2, \dots, p_n\}$ of the number of lemmata in each chapter of the original text of A.

* $\vartheta_p, \vartheta_s, \vartheta_t$ are the selective probabilities of P, S and T.

Ultimately we want to use the observed data to estimate the original chapter sizes of A^c , and thus require some way of connecting the two. Under our coin-flipping assumption, we can calculate the probability of observing our data for any chosen chapter size and any chosen set of selective probabilities by constructing a joint distribution of the binomial random variables $p_i, s_i, t_i, m_i^p, m_i^t$. In practice, because we have estimated the selective probabilities as the proportion of witnessed doxai copied by each witness, these probabilities will be a function of the chapter sizes in A^c . Once these relationships have been formalised, Maximum Likelihood Estimation finds the combination of chapter sizes and corresponding selection rates that make our data most probable. Sometimes a neat solution can be found analytically through calculus. Our case has some thorns that make solution by computer program far easier. The solution gives the most likely size of the individual chapters in A^c .

Before maximising the model over the set of relevant chapters we have to make some distinctions in our dataset. First, we have to separate out those chapters where S's testimony is poor due not to his selections but to bad transmission of the text, as inclusion of such chapters would distort his selective probability. In some places Byzantine copyists have clearly abridged the text by keeping only Platonic and Aristotelian doxai; in others, the transmission is mutilated. The affected chapters are 3.5, 3.7, 3.15, 4.4, 4.7, 4.19, 5.18, 5.20, 5.26, 5.28. These chapters have been given their own selection probability that is independent of the selection rate for healthy Stobaeian chapters. Next, chapter 5.30 is exceptional in being the only chapter where the material in S comes from the second part of his monumental anthology, the so-called *Florilegium*, and so this chapter has also been given a unique selective probability. The other change we have to make is to correct for S's habit of replacing material from Aëtius with extracts from Arius Didymus and quotations from Plato. Since these substitutions can be cross-checked against P, we should treat them as a proxy for A in S and not as omissions. Replacements of Aëtius with Arius Didymus occur at chapters 1.9, 1.10, 1.11, 1.18, 1.19, 1.21, 2.4, 2.20, 2.23; replacements of Platonic doxai with quotations at chapters 2.5, 2.7, 4.2.⁵ Finally, I have omitted the recapitulatory lemmata 1.3.6, which both P and S copy, and 1.3.8, which only P copies. Though *MR* print these as separate lemmata in their text, they contain no philosophical content and are merely transitional. All in all, we are left with 87 chapters to model.⁶

The results are strikingly emphatic. All the chapters witnessed by both P and S (excluding the chapters where the transmission of S is poor) are most likely complete. Because the selective probabilities for both T and poorly transmitted chapters in S are relatively low, chapters with only P plus poor S and/or T are most likely incomplete. For example, chapter 4.5 only has P and T as witnesses ($p = 13, t = 11, mr = 14$). The maximum likelihood estimate for this chapter is 16, so there are most likely 2 doxai missing.

Thus, for those chapters with both P and healthy S, if A's lost work was suddenly unearthed and you were asked to gamble on the original size of each of these chapters, you would maximise your winnings by going with complete for every one of these chapters. The information in the data driving this result is the fact that nearly every one of P's doxai has a match in S, so that S as a general rule must copy out an entire chapter when he chooses to copy

⁵ See Appendix 2. for a list. On Stobaeus' use of Arius Didymus and the problem of differentiating which material in Stobaeus' *Eclogae* derives from him and which from Aëtius, see Runia (1996).

⁶ Chapters 1.2, 1.3, 1.5, 1.7, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30, 2.31, 2.32, 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.15, 3.17, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.7a, 4.8, 4.9, 4.10, 4.13, 4.14, 4.15, 4.16, 4.17, 4.19, 5.18, 5.20, 5.26, 5.28, 5.30.

it at all. If missing lemmata were rampant, we would expect many more instances of doxai in P that are not in S. The result that many of the reconstruction's chapters are most likely complete is certainly satisfying. It vindicates both Diels' original vision and Mansfeld and Runia's decision to produce a definitive single text.

Nevertheless, we should be careful to distinguish maximum likelihood from the expected size of A^c , which in many ways will be a more informative measure of A^c 's probability. If a chapter's maximum likelihood size represents the most rational one-off gamble on the condition that you get paid for guessing exactly the right size, then its expected size represents the most rational gamble if the wager is repeated with many different versions of the original chapter and you win more the closer you are to the right answer on average. Although it is correct to say that each of the P and healthy S chapters is mostly likely complete when each is taken by itself, it is almost certain that some of them are not, as improbable events become increasingly probable with more trials. We do not know which chapters these will be exactly, just as we do not know which of a large number of dice rolls will be a six. But we can estimate the most likely number of missing lemmata (just like we can estimate the most likely number of sixes rolled in a large number of trials) when the chapters are taken all together, because the expected value of the sum of all the chapters in A^c is equal to the sum of the expected value of each chapter in A^c . Let us now pursue this second aim and calculate an expected size of A^c , which will give us the most likely number of missing lemmata when the text is taken as a whole.

Making good on this promise requires a few more moves. First we flip the conditional relation to turn the probability of our data given a chosen size of A^c into the probability of a particular size of A^c given our data. We do this with a workhorse of probability theory known as Bayes' theorem, which allows us to attach a specific probability to any hypothetical chapter size. The weighted average of these chapter sizes is then computed to give a weighted average size for each chapter in A^c , and these are then added together to give a weighted average size for the whole original work. For instance, if a chapter in Aëtius has, according to our model, 50% chance of containing 5 items, 30% 6 items, and 20% 7 items, then the expected original size of the chapter is $(0.5 \times 5) + (0.3 \times 6) + (0.2 \times 7) = 5.7$. Of course, in reality there cannot be a fractional chapter. If there was a three-sided die with faces '5', '6' and '7', loaded so that it landed with a '5' 50% of the time, '6' 30% of the time, and '7' 20% of the time, then 5.7 is the expected long-run average of repeated throws. If each face represents an original chapter size that may have produced our observed data, and each throw an empirical determination of the original chapter size, then the weighted average can be envisaged as the long-run average

outcome of such experiments. Alternatively, to revisit the gambling analogy, it is the best choice of number if we want to minimise the average difference between each throw's outcome and our choice. In other words, it is the number that makes one the least wrong on average.

The final step involves making our model learn. You will remember that the true selective probabilities for each of our witnesses are ultimately hidden from us. If we begin with the provisional rates based on the reconstruction, we can revise them after running the model by using the model's estimation of total lemmata rather than Mansfeld and Runia's reconstruction (as we will recall, their reconstruction does not consider potentially missing lemmata). We can then run the model again with these new revised selective probabilities to get yet another estimation of the original size of these chapters. The procedure of refinement can be continued in circular fashion by repeating the above process until the model's output equals its input, beyond which there is nothing new for our model to learn and it has reached its final estimates for the selective probabilities and original size of the *Placita*.

1.2. Running the multiple witnesses model

Before we run the model over the relevant set of chapters, let us first get a feel for it by seeing it perform on a test chapter. I will use ch. 1.18, which is attested by all three witnesses.⁷ For this chapter, the values of our variables are as follows:

$$p = 5, s = 6, t = 4, m^p = 5, m^t = 4, mr = 6, \vartheta_p = 0.65, \vartheta_s = 0.95, \vartheta_t = 0.49$$

Note that the values of θ are those based on *MR*: we will not be able to revise these until we run the model over the whole set. For the test the maximum number of missing lemmata I have allowed the model to consider is 10. I have also included the results of 2 partial models, each of which considers only some of the complete set of informative variables available to us. The three models in increasing order of completeness are:

- Model 1 $P(a \mid s, \vartheta_s)$
- Model 2 $P(a \mid p, s, m^p, \vartheta_p, \vartheta_s)$
- Model 3 $P(a \mid p, s, t, m^p, m^t, \vartheta_p, \vartheta_s, \vartheta_t).$

⁷ The final lemma of this chapter is troublesome due to differences in the versions of P and S. S has worked in additional material from another source, if not outright replaced the original lemma in A. As stated above, any such replacement can be treated as a proxy for the original lemma in our model.

The results show both the likelihood, $P(data|a)$, as well as the posterior, $P(a|data)$, for each size a :

Table 1. Likelihood and posterior probabilities for different original chapter sizes of A 1.8

a	$P(data a)$			$P(a data)$		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
6	0.735092	0.179113	0.040285	0.698337	0.883747	0.939173
7	0.257282	0.021941	0.002517	0.244418	0.108259	0.058675
8	0.051456	0.001536	8.99E-05	0.048884	0.007578	0.002095
9	0.007718	8.06E-05	2.41E-06	0.007333	0.000398	5.61E-05
10	0.000965	3.53E-06	5.37E-08	0.000917	1.74E-05	1.25E-06
11	0.000106	1.36E-07	1.05E-09	0.000101	6.7E-07	2.46E-08
12	1.06E-05	4.75E-09	1.88E-11	1.01E-05	2.35E-08	4.39E-10
13	9.85E-07	1.54E-10	3.12E-13	9.36E-07	7.62E-10	7.27E-12
14	8.62E-08	4.73E-12	4.87E-15	8.19E-08	2.33E-11	1.14E-13
15	7.19E-09	1.38E-13	7.24E-17	6.83E-09	6.81E-13	1.69E-15
16	5.75E-10	3.86E-15	1.03E-18	5.46E-10	1.91E-14	2.41E-17
WEIGHTED AVERAGE (a):				6.368421	6.124682	6.063038

As can be seen from the table, in the case of this chapter including more information in the model increases the probability that the chapter is complete. There is a small probability that the chapter is missing a doxa, but the chances that it is missing any more quickly plummet and approach zero after that. The table can also be used to reiterate the difference between maximum likelihood and expected value. The most likely size of the original version of ch. 1.18 is the size in the rightmost column with the largest probability, which is 6. If, on the other hand, P and S were to copy at their respective probabilities from a chapter that randomly had between 6 and 16 doxai, and this experiment was repeated infinite times, then the average of the chapter sizes where the outcome matched our observed data would be 6.06. This more conservative figure factors in the possibility of relatively improbable events.

Table 2 summarises a complete run of the model over the whole set of 87 chapters. Any model of this kind requires that we make a judgement about the relative probability of different original chapter sizes prior to taking our new information (the observed data) into account. In probability theory, this is known as a prior. In our case, a very conservative prior would be to start from a principle of indifference and assign equal probability to any possible chapter size from mr to infinity. If we assume such a prior (commonly called a uniform prior), then we are saying that before we consider the evidence presented here, we think it just as likely that, for

example, ch. 1.18 contains one hundred or even one million doxai as it is that it contains six (the size of the reconstructed chapter). With such a prior we need to limit the largest possible chapter sizes the model is to consider to stop the calculation from continuing forever. In our implementation we have made it so that the model considers all sizes from mr to $mr + n$, where $mr + n$ is the largest hypothetical size chapter to pass a certain threshold of probability, set in this case to 0.001. As in the calculation of maximum likelihood, separate selective probabilities have been estimated for healthy S chapters, poorly transmitted chapters in S, and chapters excerpted in the *Florilegium*. The model was implemented and run in Microsoft's Visual Basic for Applications programming language.

Table 2. *Expected number of missing lemmata for chapters with multiple witnesses in Mansfeld and Runia's reconstruction of Aëtius, assuming uniform prior*

Iteration	miss.	σ	θ_p	θ_s	θ_{s_bad}	$\theta_{s\_florilegium}$	θ_t
1	28.66	5.83	0.6805	0.9527	0.2545	0.6667	0.4975
2	37.34	6.77	0.6496	0.9388	0.1940	0.5856	0.4819
3	40.28	7.05	0.6408	0.9329	0.1826	0.5569	0.4779
4	41.35	7.15	0.6379	0.9304	0.1797	0.5463	0.4766
5	41.76	7.18	0.6368	0.9294	0.1789	0.5426	0.4761
6	41.92	7.20	0.6364	0.9290	0.1786	0.5413	0.4759
7	41.98	7.21	0.6363	0.9288	0.1784	0.5408	0.4758
8	42.01	7.21	0.6362	0.9288	0.1784	0.5406	0.4758
9	42.02	7.21	0.6362	0.9287	0.1784	0.5406	0.4758

In Appendix 1 there is a column breaking down the final iteration and giving the weighted average size for each chapter. In Table 2 you can see the expected number of missing doxai rising with each iteration as the revised selective probabilities come done and it becomes easier for the witnesses to all miss copying the same doxa. By the ninth iteration there is no change in the estimate (to two decimal places) and the selective probabilities have stabilised. The selective probabilities are now consistent with the model's predictions.

The estimate of 42 missing lemmata for these 87 chapters is very conservative, since the assumption of a uniform prior is in our case as conservative as one could be. Choosing a prior that assigns a decreasing probability with increasing chapter size will reduce the estimate. One such option would be a geometric prior in which the prior probability that the original chapter size contains n lemmata is a fixed proportion of the probability that it contains $n - 1$ lemmata, which yields a geometric series (our uniform prior is a special case in which this proportion is 1). The smaller we set the ratio between the prior probabilities of successive chapter sizes, the

more hawkish our assumptions about the completeness of the chapter. Table 3 gives different estimates of the expected number of missing lemmata for a sample of geometric priors ranging from mild to aggressive.

Table 3. *Expected number of missing lemmata with different geometric priors*

Ratio of geometric prior	Expected number of missing lemmata
0.95	38
0.9	35
0.8	29
0.5	15

I leave it to the reader to form their own assessment of whether any of these priors is more reasonable than the uniform prior. There are of course logical problems with taking too forward a stance on the question of prior probabilities. In theory, we could force the conclusion we want simply by arbitrarily choosing a prior that predetermines this result, which is nothing more than begging the question. The beauty of the uniform prior is that it is immune to such accusations. However another prior worth considering is that suggested by Raftery in his discussion of Bayesian estimation of the parameter N (our a) in a binomial model.⁸ He assumes a Poisson distribution for N and applies the standard vague prior for such distributions of $1/N$. Use of such a prior in our case yields an estimate of 37 missing lemmata.

It is natural to question how accurate the model's predictions likely are. Ideally, we would have another case of doxographical excerpting where we actually possessed the original text and could therefore test the model against real data. Such a parallel is not available,⁹ so the best we can do is what is known as synthetic validation. Here we digitally concoct some original texts and then simulate witnesses copying from them to generate sample sizes and matches for our model to observe. We can then compare the model's predictions with the actual sizes of the manufactured originals. Appendix 5 gives more details on this procedure. A distribution of the prediction errors can be used to put some bounds on our model's estimates, as summarised in Table 4.

Table 4. *Upper and lower bounds for expected number of lemmata missing from chapters with multiple witnesses in Mansfeld and Runia's reconstruction of Aëtius*

	68%	95%

⁸ Raftery (1988).

⁹ We do have ps.Galen's abridgement of P (in effect and epitome of an epitome), but in this case we lack multiple witnesses.

ϑ_p lower	0.6266	0.6176
ϑ_p upper	0.6478	0.6556
Missing lemmata lower	31	23
Missing lemmata upper	52	62

It is worth reiterating that these are only rough estimates, and hold only if the model's assumptions hold.

1.3. A model of the complete text of Aëtius' *Placita* for chapters witnessed only by P or S

In cases where P is our only witness, we do not have as much to go on and our model will amount to little more than an extrapolation of P's selective probability to P-only chapters.¹⁰ If I tell you that I have thrown 6 sixes in n number of trials, then the most likely number of trials is just the number of successes divided by the probability of success. Similarly, if P copies k number of lemmata in P-only chapters, the most likely size of the original for these chapters is k/θ_p .

In determining k we must consider whether we should exclude anything from our set of P-only chapters. I have removed the prefatory chapters and editorial comments (chapters 1.0, 1.1.1, 1.8.1, 2.0, 3.0, 4.0) for obvious enough reasons. Another consideration is a bit more complicated. There are a number of chapters which have only a single doxa. These may either be labelled (chapters 1.6, 4.11, 4.12, 4.21, 5.6, 5.22) or anonymous (chapters 1.4, 3.5a, 3.6). The case of 1.20, where P has only one doxa (Zeno and his descendents) but S two (Zeno and his descendents, Epicurus), shows that P can reduce a polylemmatic chapter to a monolemmatic one. However there is no evidence for him doing this with anonymous doxai. When doxai are contrasted, they require some label to differentiate them, even if it is just a generic 'some'. From this we may infer that anonymous monolemmatic chapters in P probably did not have further contrasting doxai in Aëtius, since in that case we would have expected them to have retained some kind of label, as at 1.20. The other possibility – slim in my view – is that P only chose one doxa and then removed all trace of the label and a verb of saying by reformulating it in direct discourse. Finally, I have reduced the size of single doxa chapters like 4.11, which are broken

¹⁰I have entertained and played with more complicated linear models that include more than one predictor. For example, we might conjecture that the presence or absence of certain philosophers in a given chapter bears some relation to chapter size (e.g. if rare philosophers are mentioned then it is more likely that the original chapter was larger). However, considering the rather small size of our training sample as well as changes in the mix and prevalence of name-labels from book to book, this method is prone to overfitting and assumes too much similarity in complex structure between the training and test samples.

up by Mansfeld and Runia into a number of lemmata, to one. We are concerned with doxai, not segments of doxai.

After making these removals, there are 143 doxai left in P. If we use the selective probability for P estimated in the previous section (see Table 2), then there are most likely approximately $143/0.636 \approx 223$ doxai in the P-only chapters, so approximately $223 - 142 = 81$ missing. To put some bounds on this prediction we need to assess how accurate the simple method of extrapolation is at predicting the cumulative sum of chapters in A^c on the basis of the cumulative sum of the corresponding chapter sizes in P. One way to do this is to randomly resample the set of chapters with multiple witnesses to construct some new chapter sets for testing. For each of these test sets, we perform the same extrapolation as above and note its deviation from the correct answer. Taken together, these results will yield a distribution of predictive errors from which we may then derive prediction intervals.

Ideally, these tests sets would not include any estimated quantities. As we do not have the original chapter sizes, we will have to make do with the expected original chapter sizes estimated in the previous section. Our exact method is as follows. We take the set of 87 chapters with multiple witnesses and randomly sample from it (with replacement) until the sum of chapter sizes in P exceeds 143 doxai. We then make our extrapolation using a selective probability for P of 0.637 and record its difference from the sum of estimated chapter sizes in A^c . This procedure is repeated 1000 times to obtain a distribution of predictive errors. Bounds taken from this distribution are then added to the predicted figures of 223 total lemmata and 81 missing.

Table 5. *Upper and lower bounds for predicted number of total and missing lemmata in P-only chapters of Mansfeld and Runia's reconstruction of Aëtius*

	68%	95%
Total lemmata lower	205	184
Total lemmata upper	239	254
Missing lemmata lower	63	42
Missing lemmata upper	97	112

These bounds are only a rough guide and assume that P's selective behaviour in chapters where he is the only witness is more or less faithfully mirrored in those chapters where we have multiple witnesses. It will be seen that even where we only have P it is almost certain that we have well over half the original work.

For the sake of completeness, we have also calculated an expected original chapter size for every chapter where P is the only witness by the method applied in the previous section (see Appendix 4 for details). We have again used a uniform prior, and applied the same threshold to halt the calculation. The estimated values are included in Appendix 1.

Lastly, there is a single chapter (4.7a) for which our only witness is S. We have implemented the same procedure as for P-only chapters to find maximum likelihood and expected sizes for this chapter, using of course the selective probability for S estimated in the previous section of 0.929.

We are now in a position to offer our best estimate for the total number of doxai missing from the reconstruction. We estimated in the order of 42 doxai missing from chapters where we have multiple witnesses, and a further 81 missing for P-only chapters, which gives a grand total of 123 doxai most likely missing from the entire reconstruction. If this figure is close, then we have approximately 86% of the original lemmata, although some of those we do have may well have been abridged.¹¹ This is no doubt a welcome result, and some will probably think it too good to be true. Here we can only point the reader back to the original insight on which we built our model, and reiterate again that if there were a large amount of missing doxai, there could not be anywhere near the level of matches between P and S's testimony which we in fact observe.

1.4. A mathematical argument against Lebedev's hypothesis of many missing authorial definitions

This same approach allows us to dismiss out of hand a fanciful conjecture regarding the structure of A^c . Lebedev has proposed that the authorial definitions preserved by our witnesses in 8 of the 128 attested chapters must have had counterparts in other chapters, which were later lost through selective excerpting.¹² This claim is one plank in Lebedev's argument that the *Placita* originally had a more dogmatic function than supposed by Mansfeld and Runia, before later being reworked by P into a tool of Christian apologetics. In Lebedev's view, the *Placita* was originally conceived as a vehicle for the delivery of actual physical doctrine, and therefore would have included an authoritative definition for many, if not all, of the work's central topics. Wondering why definitions are given for shape and colour but not for god, time, and fate,

¹¹ To reach this figure I have used 751 as the total number of lemmata in the model after the adjustments described above (see the bracketed sum in Appendix 1, from which the 14 lemmata in the N/A chapters have been removed).

¹² Lebedev (2016) 600–602.

Lebedev writes that ‘the choice of the preserved definitions seems to be accidental and must be due to the omission of many others.’¹³

Lebedev’s hypothesis faces a colossal, insurmountable problem. If P and S were both excerpting independently and accidentally from an original that had a large number of authorial definitions,¹⁴ the probability that they should copy *exactly the same* 8 definitions is miniscule. In fact, if there were anything like 128 original definitions and P and S each copied 8 definitions randomly, we would expect *none* of their definitions to match.

To be precise, the probability that P and S copy the same 8 definitions from a text that contained n definitions is, on the assumption of independent and accidental excerpting, $\frac{\binom{8}{8}}{\binom{n}{8}} = \frac{1}{\binom{n}{8}}$. Even if we grant Lebedev’s identification of two extra authorial definitions that he believes have gone unnoticed in the text of S, the probability that all the 8 definitions P copies are included in the 10 S copies is $\frac{\binom{10}{8}}{\binom{n}{8}} = \frac{45}{\binom{n}{8}}$. Because the denominator in both fractions grows very quickly, perfect overlap of P’s selection with S’s quickly becomes improbable with increasing n . We can be charitable to Lebedev and assign a uniform prior distribution to n , which means that before considering any new evidence our view is that it is just as likely that there are 128 definitions in A^c as it is that there are 8 (or any other number in this interval). The posterior probabilities for different numbers of definitions in A^c (i.e. their probability given the number of matching definitions between P and S) on the assumption of random selection and a uniform prior are set out in Table 6.

Table 6. Posterior probabilities for different numbers of definitions in the original text of Aëtius, assuming a uniform prior distribution and random selection

n definitions in A^c	$P(n 8 \text{ matches}, 8 \text{ definitions in } S)$	$P(n 8 \text{ matches}, 10 \text{ definitions in } S)$
8	0.875000	
9	0.097222	
10	0.019444	0.700000
11	0.005303	0.190909
12	0.001768	0.063636
13	0.000680	0.024476
14	0.000291	0.010490
15	0.000136	0.004895
16	0.000068	0.002448
17	0.000036	0.001296

¹³ Lebedev (2016) 601.

¹⁴ It makes no difference to the mathematics whether P was excerpting directly from *PS-Placita* (Lebedev’s term for the common source of P and S) or some intermediate text, an idea he entertains.

18	0.000020	0.000720
19	0.000012	0.000417
20	0.000007	0.000250
...	...	...
128	6.12E-13	2.2E-11

We see that the probability that the 8 or 10 definitions surviving in P and S were the only definitions in A^c is 0.875 or 0.7 respectively. In other words, in both cases it is more likely than not that we have all the definitions, which is further confirmed by the fact that in both cases the expected number of definitions (8.17 and 10.5) is very close to the observed number of definitions.

Lebedev, however, wants to say that ‘the conclusion seems inevitable that the extant text of P is a truncated and heavily abridged version (or rather a personal copy) of a complete handbook of physical philosophy from which more than 90% of the authorial definitions and/or other authorial explanations, introductions and remarks have been removed.’¹⁵ From which it follows that he thinks the original contained at least 80 such definitions or remarks. But the probability that A^c contained 80 or more such definitions or remarks is far smaller than the probability of winning the lottery: approximately 3.34×10^{-10} in the first case and 1.20×10^{-8} in the second. It seems Lebedev believes in the inevitability of miracles. We most likely have all the original definitions.

2. Name-labels in text missing from the reconstruction

We can also make some educated guesses about which name-labels belonged to any doxai missing from the reconstructed text. These labels will be either a) cited elsewhere in the reconstruction, or b) not cited anywhere in the reconstruction. To estimate the former we can extrapolate P’s selective behaviour in chapters where we have P plus healthy¹⁶ S or T chapters (henceforth P & S or T) to P only chapters. In the case of the latter, though we cannot actually name names, there exist methods that can be exploited to estimate roughly how many new labels there likely would have been in any amount of missing text – and even, as promised in the introduction, in an infinite amount of missing text, and so in the doxographical universe as a whole. We will begin with the former problem.

¹⁵ Lebedev (2016) 601.

¹⁶ I.e. excluding those chapters where S’s testimony is compromised: 3.5, 3.7, 3.15, 4.4, 4.7, 4.19, 5.18, 5.20, 5.26, 5.28, 5.30. See p. 7.

2.1. Estimating missing doxai for name-labels cited in the reconstruction

Using the set of P & S or T chapters, we can estimate P's individual selective probability θ_l for each name-label l . Erring on the conservative side and assuming a uniform prior distribution for each θ_l , our estimate adds 1 to the numerator and 2 to the denominator of the ratio between the number of doxai in P with label l in *MR* and the number of citations of l in *MR* (see Appendix 6 for mathematical justification).¹⁷ Below is a complete list of name-labels cited in P only chapters with corresponding probabilities and estimates, arranged in descending order of estimated missing doxai:

Table 7. *P's selective probabilities for individual name-labels based on P & S or T chapters and extrapolated missing citations in P only chapters*

Label	Citations in P & S or T chapters	Doxai copied by P	Selective probability	Citations in P only chapters	Estimated missing doxai in P only chapters
Strato	11	2	0.231	5	17
Democritus	37	24	0.641	18	10
Empedocles	39	28	0.707	21	9
Some	30	14	0.469	7	8
Parmenides	23	11	0.480	7	8
Peripatetics	6	0	0.125	1	7
Stoics	45	36	0.787	25	7
Hippo	1	0	0.333	3	6
Aristotle	43	32	0.733	16	6
Leucippus	15	7	0.471	5	6
Anaxagoras	28	20	0.700	12	5
Epicurus	31	24	0.758	11	4
Pythagoras	26	20	0.750	10	3
Diogenes of Ap.	19	11	0.571	4	3
Xenocrates	8	3	0.400	2	3
Alcmaeon	8	6	0.700	6	3
Anaximenes	16	10	0.611	4	3
Cleanthes	7	3	0.444	2	3
Philolaus	5	3	0.571	3	2
Asclepiades	3	2	0.600	3	2
Thales	15	12	0.765	6	2
Xenophanes	17	11	0.632	3	2
Metrodorus	14	11	0.750	5	2
Ecphantus	3	1	0.400	1	2
Anaximander	17	13	0.737	4	1

¹⁷ We calculate it this way, rather than as the number of citations in P divided by citations in *MR*, because P sometimes omits the name-label but not the doxa.

Zeno the Stoic	8	5	0.600	2	1
Chrysippus	5	2	0.429	1	1
Plato	47	44	0.918	14	1
Antiphon	4	2	0.500	1	1
Dicaearchus	2	1	0.500	1	1
from Thales	5	4	0.714	2	1
Heraclides	8	5	0.600	1	1
Heraclitus	25	16	0.630	1	1
Pythagoreans	15	14	0.882	1	0

A number of points jump out at us from this list. The first is that selection rates vary widely. If P were consistent, all labels should be conserved at his overall rate, i.e. ≈ 0.64 . It is clear that he tends to preserve bigger names at a much higher rate. Indeed if we use the total word count of doxai attributed to a name-label as an indication of its importance, there is a pretty good correlation between this measure of importance and its selection probability in P.¹⁸ His aversion to omitting Platonic and Pythagorean doxai in particular betrays a man whose preferences have been shaped by the philosophical spirit of his age.

The large estimation for Strato is surprising, and caused by P's rather dismissive treatment of him in the sample set, which leads us to estimate a very low selective probability. P cites him only at 3.2.5 and 4.5.3 in chapters also witnessed by S or T. His fusion of Aristotle and Strato doxai into a single Aristotle lemma at 3.3.14 suggests that he may have seen Strato as reducible to and eclipsed by his school's archegete on most of the topics of the first four books.

Thematically, all the chapters in which P does cite Strato are either medical in nature or have substantial medical interest (four citations in Book 5 alongside a citation in chapter 4.5 on the location of the regent part); have only relatively recently become a topic (chapter 4.23 on whether the soul feels pain with the body, where the three doxai of Stoics-Epicurus-Strato show a clear Hellenistic framing – also of obvious medical interest); or involve procedural physical explanations of the thermodynamic variety. One gets the impression that on matters such as these, that gel with common depictions of Strato's interests as fundamentally mechanical in the 'how does it work' sense, P feels the need to give Strato a more prominent role. Accordingly, the above estimate for Strato's missing citations can hardly be correct, or Strato would become one of the highest cited authorities in these chapters of Aëtius, which seems inconsistent with his profile elsewhere. Such estimates are only as good as their assumptions, and nothing guarantees that P slavishly maintains the same selective probability for a label across different

¹⁸ The value of R^2 varies depending on the citation threshold that must be passed to be included in the correlation (the small sample sizes of labels with low citation counts make the estimation of selective probabilities hazardous). It hovers around 0.4 when the threshold is >5 but rises up to 0.62 if the threshold is increased to 20.

books with little variance in local probabilities. It is to be expected that he will cite a thinker more as he moves into areas with which they are more traditionally associated, and in which they face less competition and crowding out from bigger names.¹⁹

In this respect we also note, as show in Table 8, that his selective probability of all doxai, as estimated from *MR*, varies substantially across books, so that we see his rates across books varying not just at the local but the global level:

Table 8. *Pseudo-Plutarch's degree of epitomisation (θ) by book as estimated from *P* & *S* or *T* chapters in *MR**

Book 1			Book 2			Book 3			Book 4		
<i>MR</i>	<i>P</i>	θ	<i>MR</i>	<i>P</i>	θ	<i>MR</i>	<i>P</i>	θ	<i>MR</i>	<i>P</i>	θ
172	112	0.65	211	150	0.71	55	39	0.71	105	56	0.53

P seems to have been especially brutal in his epitomisation of Book 4. Theoretically we could try to incorporate such variance into our estimations, but our sample sizes are too small to reward such a distinction. We can do little better than the crude extrapolation given above.

2.2. Estimating the number of name-labels cited in A^c but not cited in the reconstruction

There is an intriguing possibility that there are philosophers uncited in the reconstruction who were cited in the missing text. As it happens, this possibility is a general instance of the problem of ‘unseen species’ which has been well studied in quantitative biology and also extended to textual analysis. In the classic textual incarnation of Efron and Thisted,²⁰ the unseen species to be estimated are word types in a writer’s vocabulary (in their study, Shakspeare) that do not appear in his surviving works but would appear if we had more works by him. Extending the biological analogy, different species amble into the text and are trapped at different rates: some species are harder to catch than others and require more text to catch them. Most fortuitously, it turns out that we can form a reasonable estimate of what we have not caught on the basis of what we have.

Reimagining this problem in our own case, we may envisage doxographical text as a trap for philosophers. Some philosophers, like Plato, it traps very easily. Other species are rarer and are trapped only once. In the case of vocabulary, due to Zipf’s famous law of type-token relations,

¹⁹ E.g. *P* does not cite Aristotle (who overshadows him elsewhere) in chapters 4.23, 5.2, 5.8, 5.24, where he does cite Strato.

²⁰ Efron and Thisted (1976).

these rare species (what the philologist calls *hapax legomena*) actually predominate and constitute a large part of a text's vocabulary, ordinarily being half the total size.²¹ As seen in Table 9, the name-label vocabulary of the *Placita* also exhibits this same property, with nearly half of the labels for individuals (36 of 86) only occur once.²²

Table 9. Number of individual philosophers who are cited a given number of times in the *Placita*

Citations	No. of individual philosophers	Citations	No. of individual philosophers
1	36	20	3
2	9	21	2
3	6	23	1
4	3	26	1
5	2	30	1
6	5	36	1
7	1	40	1
8	2	43	1
9	2	55	1
10	2	59	1
14	1	60	1
16	1	61	1
19	1	Sum	86

It is extremely unlikely that there were other Platos or Aristotles lurking out there in the environment that the *Placita*, or indeed ancient literature in general, somehow failed to mention. Such highly mentionable philosophers are so easy to catch that we do not need much doxographical text to capture all of them. On the other hand, there must have been an abundance of mediocre philosophers who were insignificant and have been forgotten by history, just as those philosophers with a single mention predominate by far in the *Placita*. Such philosophers are less deserving of being mentioned, so that if we did have more doxographical text, we would inevitably capture many more of them.

That the pattern of species counts in Table 9 is not peculiar to the *Placita* but reflects a more general property of the population structure of philosophers can be confirmed by consulting

²¹ The law is first presented in Zipf (1935) and says that, if the words in a text's vocabulary are ranked from most frequent to least frequent, the frequency of a given word is proportional to the inverse of its rank. For the observation that *hapax legomena* make up roughly half a text's vocabulary and underlying mathematics, see Baayen (2001) 17.

²² If we include schools as well as anonymous name labels, it is 54 of 118. In this latter count I have merged some of the labels into a single type where it is clear that they signify the same thing, e.g. 'Stoics' and 'those from the Stoa'.

Goulet's *Dictionnaire des Philosophes Antiques*,²³ an exhaustive dictionary of all the philosophers we know of in the ancient world. There is considerable variation in the length of entries. Aristotle has 178 pages devoted to him, while Ageas of Croton, who is only mentioned in Iamblichus' catalogue of ancient Pythagoreans, has only 2 lines. If we count the number of philosophers by pages devoted to them in the dictionary, a similar pattern emerges. The majority of philosophers have a page or less, and the frequencies quickly reduce with increasing page counts. If we take the first 300 philosophers listed in the dictionary, 230 have 1 page or less, 42 2 pages, 10 3 pages, 8 4 pages, 4 5 pages, 1 6 pages, 1 9 pages, 1 10 pages, 1 15 pages, 1 19 pages and 1 20 pages. These counts confirm that most philosophers we know of in the ancient world are minor figures that made little impact on the primary literature. Again, if we had more such literature, any new philosophers turned up would overwhelmingly be of the type worth a page or less.

Here and in the next section I apply Efron and Thisted's mathematical machinery to exploit the information contained in these patterns and to estimate the number of species of philosopher missing from the reconstruction. There is little original in the method and so I refer the reader to the original paper for any missing details and a discussion of the subtleties. Appendix 7 contains an overview of the relevant mathematics.

The basic assumption is that each philosopher s enters the *Placita*'s trap via a Poisson process with expectation λ_s captures per unit of time, where the passing of time is measured in doxai. λ varies by philosopher and quantifies how easily doxographical writing captures and cites doxai by that philosopher. It will be high for a philosopher like Plato who has lots of citable doxai, but low for someone obscure like Epidicus, who is cited only once in the reconstruction. We now examine which philosophers the reconstruction has caught, and let n_x denote the number of philosophers it has caught exactly x times (see Table 9). For example, $n_{20} = 3$ because there are precisely three philosophers (Anaximenes, Xenophanes, and Leucippus) who are cited 20 times in the reconstruction. For some new amount of doxographical text t , expressed as a ratio of the number of new doxai to the number of doxai in the reconstruction, it turns out that the expected number of new species observed for the first time in this extra text can be expressed as a function of t and the expected values of n_x , $E[n_x]$. These expected values can be estimated by using either the n_x themselves or by fitting a model (we use a two parameter negative-binomial model) to the observed species counts.

²³ Goulet (1989–).

For our calculation, we will restrict ourselves to individual philosophers and remove from the dataset schools like the Stoics and labels which refer to groups. We estimate there are around 123 lemmata missing from the reconstruction, so in our case the amount of new text t is $\frac{123}{751} = 0.164$. Both methods for estimating $E[n_x]$ give similar results. Setting $E[n_x] = n_x$ yields an estimate of approximately 6 new philosophers in the extra text, while setting $E[n_x]$ according to the fitted model gives 5 or 6 depending on number of data points used in the fitting process. Further calculations (see Appendix 7) show that these estimates are also reasonable lower bounds.

2.3. Estimating the number of individual philosophers in the entire doxographical universe from the 7th to 1st centuries BCE.

Quite remarkably, we can also estimate the number of unseen species as the amount of text goes to infinity. In Efron and Thisted's study of Shakespeare, this is equivalent to estimating the total size of Shakespeare's vocabulary. For our purposes, this same method provides a way of estimating the total number of philosophers available to doxographical literature on natural philosophy in the relevant period, *including texts both texts that are lost and texts that could have been written but were not!* This is an exciting prospect, as such an estimate would put a ballpark figure on the number of philosophers in the ancient world prominent enough that they could have been 'caught' by doxographical literature if we had had more of it.

To find a reasonable lower-bound estimate for the number of new philosophers with infinite new doxographical text, we solve by computer a linear programming problem with non-linear constraints (described in Appendix 7). Resulting lower-bound estimates for different values of t from 1 to infinity are laid out in Table 10.

Table 10. Lower-bound estimates of new philosophers that would be caught with more doxographical text

Amount of new doxographical text ($\times$ size of reconstruction)	Lower-bound estimate of new philosophers
1	28
3	65
5	90
10	142
20	163
∞	180

Thus, if we had another doxographical text equal in size to the *Placita*'s reconstruction and with a similar historical perspective, we would expect to discover in its pages at least 28 individual philosophers who are not cited in *MR*. If we found a huge text twenty times the size of *MR* we would expect another 163 philosophers, and if we had a theoretically infinite text another 180. An infinite-sized text would be like a giant dragnet that catches every philosopher within the *Placita*'s historical purview fond of grazing on doxographical topics.

History's memory is ruthless, and more individuals are forgotten the higher the cost of publishing and the more practical limitations there are constraining the production of texts. The idea of an infinite doxographical text partially restores what tradition has left out – we can at least recover the general numbers, if not the names – and imagines how many philosophers would have been mentioned if the doxographer had had infinite time and papyrus at his disposal and infinite interest in documenting contrasting views. The text of *MR* mentions 86 individual philosophers, so that an additional 180 takes us to a total of 266. As such individuals would have been real people, we may frame the figure of 266 individual philosophers as a rough conservative estimate of the *population size of philosophers with mentionable views on standard doxographical questions of natural philosophy from the 7th to 1st centuries BCE* (the length of the *Placita*'s historical coverage). It is worth taking a moment to appreciate that it is the serendipity of the *Placita*'s idiosyncratic structure that allows us this insight into the population size of mentionable philosophers. A mere list of philosophers would not permit modelling of this kind, since it would contain no probabilistic information to leverage into predictive power that reaches beyond the text. Conceived as traps, lists capture only single specimens and have no further secrets to tell us. The *Placita*, on the other hand, in capturing its philosophers at different rates, has encoded into its citation counts clues to the wider philosophical ecosystem.

The figure of 266 philosophers may seem large, but we should note that the first volume of Goulet's dictionary alone, covering 'Abam(m)on' to 'Axiothea',²⁴ cites around 500 individuals. Not all of these fall within the relevant time period or subject area, and a philosopher presumably does not have to hurdle as high a bar to be mentioned in any literature at all as to be mentioned in a doxographical literature that privileges dialectical innovation. Even so, Goulet's dictionary does show that there are many rare philosophers out there in the wild that could have been caught by more doxographical text.

Further corroboration that the *Placita* ultimately only captures a portion of the philosophical diversity available to it – a little less than a third if the figures above can be trusted – comes

²⁴ Goulet (1989–).

from a fortunate piece of evidence from an unlikely place, a text by the 3rd cent. Roman rhetor Censorinus congratulating his patron Caerilius on his 49th birthday in 238 CE. In this text Censorinus reproduces a doxographical account corresponding to chapter 2.32 in Aëtius, which deals with the length of the planetary years, the lunisolar (sometimes ‘great’) year, and the so-called ‘greatest year’ (sometimes just ‘great’), the time taken for the seven planets to return to their original positions. Though it organises its material by a similar method, Censorinus’ account is far richer than that found in *MR*, with many more doxai and name-labels (see M-R ad loc. for more detailed analysis). Compared with A, who besides his 6 anonymous labels cites only Pythagoras, Oenopides, Heraclitus and Diogenes the Stoic, Censorinus drops a total of 20 non-anonymous labels.²⁵ Diels had already connected Censorinus’ book to the *Placita* tradition in his discussion of parallels in Books 4 and 5 of A by way of Varro as an intermediary, but did not consider this particular chapter. Rocca-Serra notes in his translation of the work that Censorinus in this instance too is most likely ultimately drawing from the *Placita*’s fount.²⁶ If Censorinus’ account and A’s account ultimately go back to the same source, then it is clear that A has reduced the diversity of the original materials.

The mathematical toolkit exploited above also provides a way to compare the name-label diversity of the *Placita*’s different books. Different books or sections of doxographical text with more species diversity are drawing from a richer philosophical environment. Since new species are encountered at an ever diminishing rate with increasing amounts of text – a phenomenon which in the case of vocabulary is known as Heaps’ law²⁷ – comparisons between samples of different sizes need to be standardised. One way we might frame such a standardisation is to ask how many name-labels we would expect to observe in each scenario if each book were as long as the entire work, which consists of 734 labelled doxai.²⁸ This question can be answered through equation 28 (see Appendix 7), which predicts the number of new species that will be observed in an extra period of time t , expressed as a multiple of the time already passed, based on the numbers that have already observed. Thus, if we set t for each book so that the total time (the time already passed plus the extra time) is the same for each (734 doxai), then adding the

²⁵ Eudoxus of Cnidus, Cleostratus of Tenedos, Harpalus, Nauteles, Menestratus, Dositheus, Chaldeans, Meton, Philolaus the Pythagorean, Calippus of Cyzicus, Democritus, Hipparchus, Aristotle, Aristarchus, Arctus of Dyrrachium, Heraclitus, Linus, Dion, Orpheus, Cassander.

²⁶ Rocca-Serra (1980) xi.

²⁷ Heaps’ law is best exemplified as a relationship between the size of a text in number of words (tokens) and the size of its vocabulary (types). As a function of text size (n), the vocabulary $V(n)$ grows in the form of a power law $V(n) = Kn^\beta$ in which the exponent β is less than 1. A reader encounters new words ever more rarely as more text is read.

²⁸ This number removes anonymous doxai and editorial remarks from the total given in Appendix 1. Note that in what follows I have now included name-labels that refer to the schools and specific groups (such as the Stoics) alongside those that refer to individuals.

predicted number of new species $\Delta(t)$ to the number already observed (N) provides the estimate we want.²⁹

Table 11. Predicted number of name-label species if each book were as long as the whole work

	Labelled doxai	N	t	$\Delta(t) + N$
Book 1	171	64	3.292	120
Book 2	211	53	2.479	83
Book 3	97	38	6.567	77
Book 4	143	61	4.133	143
Book 5	112	35	5.554	60
Whole work	734	118	0.000	118

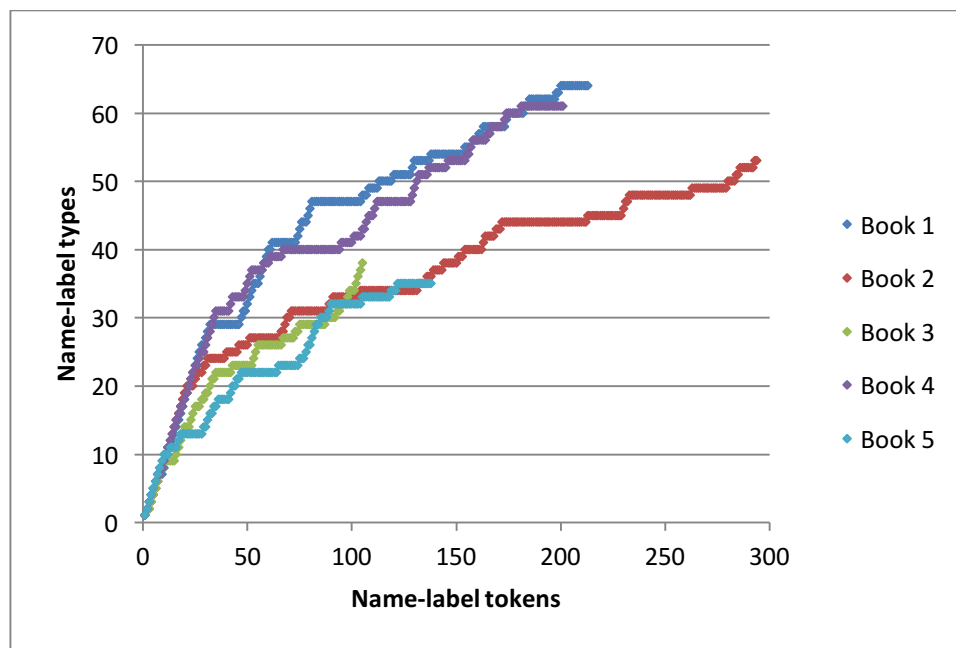
Table 11 exhibits the results, with the extrapolations given in the rightmost column. Let us continue to indulge the ecological analogy. Book 1, and even more so Book 4, handle subjects that are clearly better at attracting and trapping philosophers than the others. Philosophy has its fashions, and some areas and problems attract more competitive attention than others, breeding new philosophers like a grain silo breeds mice. Book 4's subject matter is clearly a hot topic, and no doubt reflects Hellenistic interest in psychology. We would expect around 143 name-labels rather than the observed 118 if the whole of *MR* had the name-label richness of Book 4. The richness in Book 1 is also in a sense unsurprising. It deals with metaphysical questions and the foundational categories such as time, cause, and space, that no account of physical phenomena can do without. It is however interesting that the *Placita* gives more philosophical attention to the most abstract and basic questions as well as the most familiar and anthropological. On the continuum of topics that runs from the most impersonal to the most personal, the two extremes appear the busiest, while those books that cover the empirical world in between are not as populous.³⁰ I think the *Placita*'s predilections here are not its own and confined to itself, but rather mirror patterns which are out there in ancient philosophy more generally. The Hellenistic philosophical agenda, as Mansfeld and Runia have called it,³¹ concentrated on these two areas the most.

For a visual impression of the different rates of growth in name-labels for the different books, we can plot the empirical growth in name-label types as the text increases in size (as measured by name-label tokens), as displayed in Figure 1.

²⁹ See Appendix 7, p. 77 for precise details.

³⁰ For the thematic *descensus* in the arrangement of the *Placita*, which begins with an account of the principles before descending from the cosmic periphery to the centre, see Mansfeld and Runia (2009) 27–59.

³¹ Mansfeld and Runia (2009) 14.

Figure 1. *Growth in name-label types with increasing name-label tokens by book*

The fast growth of Books 1 and 4 is again immediately apparent. In my view the most likely explanation for the low Book 5 result is just that the biological topics that dominate this book had attracted less attention because they were more peripheral to the tradition's core *physikos logos*, and thus only a selection of topics was made.³² However this claim needs some bounds put on it. Mansfeld has shown that medical doxai, perhaps, as Diels argued, originally coming from the medical compendium attributed to Aristotle's pupil Meno, had already been incorporated into a hypothetical *Vetustissima placita* – a predecessor of Diels' hypothetical first century BCE *Vetusta placita* – by the time of Chrysippus, since some important fragments from his *On the Soul* indicate familiarity with such a work.³³ So it is not as if Book 5 is a late afterthought grafted onto the more strictly philosophical material supposed to have derived from Theophrastus. Nevertheless, given the *Placita*'s Presocratic predilections and the heavy focus in the early history of philosophy on physical speculation, the marginal position of biology within a context shaped by these tastes is understandable. A possible explanation for the surprisingly low Book 2 result is that a standard cosmological model developed in the 4th century which superseded the variety of views explored by the Presocratics in the 6th and 7th.

³² The other obvious potential explanation – that Book 5 has less diversity because we lack S or T's testimony for and P has culled many of the names – may be ruled out. If we compare name-label growth for the different books in P alone, Book 5 still grows slowly compared to the others.

³³ Mansfeld (1989).

3. History vs. dialectic in the order of the *Placita*

Among the principles guiding the ordering of doxai within a chapter are the inherent diaeretic and dialectical structure of a topic and the chronological ordering of name-labels. Mansfeld and Runia have meticulously studied the former method and its historical debt to Aristotle and derivative traditions.³⁴ They have also explored the use of successions in the *Placita*, most notably in chapter 1.3, and early precedents for this kind of arrangement in Aristotle and Theophrastus.³⁵ One might imagine these principles as being in tension, each endeavouring to mould a chapter in its own image, but the final form often bears the mark of both.³⁶ Nevertheless, the diaeretic method is, as a general rule, interested in the doxa, not the name-label, while the chronological method, relatively speaking, shows more interest in the name-label.³⁷ In this section I will explore these two methods of arrangement statistically, reinforcing many of the key points made by Mansfeld and Runia but also unearthing some new relationships. I will first discuss individual labels, and then the historical structure of chapters as a whole.

We immediately see that a holistic assessment of a chapter's degree of chronological ordering requires quantification of how close its observed order is to being perfectly chronological. Kendall's tau coefficient is a statistic suited to this task, though we will need to make some adjustments so that it fits the peculiarities of our case.³⁸ The calculation of the statistic is straightforward: for two ordered lists of the same items, we compare the order of all possible pairwise combinations in both lists. If the order of a given pair in list A (the chapter to be compared) – for example Thales before Plato – matches the order of that same pair in list B (the chronological standard we'll call our 'master' list), then this counts as a *concordant* pair. If the pair has a different order in the two lists, say Plato comes before Thales in list A, then it counts as a *discordant* pair. The statistic is then equal to the number of concordant pairs C

³⁴ For an overview of this strategy of presentation see Mansfeld and Runia (2009) 3–16. For specific examples and analysis of this method in action see the *specimen reconstructionis* of Book 2 of the *Placita* in Mansfeld and Runia (2009) Part 2.

³⁵ Mansfeld and Runia (2009) 73–96.

³⁶ So for instance in chapter 1.3, on principles: 'We now hypothesize that the confused and confusing order of the lemmata in our chapter, as it appears at a first and also at a second glance, is the *result of the interweaving of a lineup according to a diaeresis according to number with the other form of organization already mentioned above, viz. that according to Succession.*' (Mansfeld and Runia (forthcoming), draft commentary on ch. 1.3)

³⁷ Though nothing prevents the different interests of both methods from overlapping on occasion. Sometimes the chronological order may also be dialectically appropriate, because (to give one reason) thinkers in the present generally frame their views in response to the tradition.

³⁸ Kendall (1948).

minus the number of discordant pairs D divided by the number of pairwise combinations,

$P(n) = \binom{n}{2} = \frac{1}{2}n(n-1)$. Algebraically, for a list of n items

$$\tau = \frac{C - D}{\frac{1}{2}n(n-1)}. \quad (1)$$

The value of tau ranges between -1 for perfect disagreement between rankings and 1 for perfect agreement, with an expected value of 0 for lists whose rankings are not correlated. The complication in our case is that in many comparisons we do not have the historical information to resolve who comes before who. Who, for example, comes first out of the shadowy fifth century Pythagorean reformer Hippasus and Anaxagoras? Given what we know, the order of these two should properly be a tie. Kendall also developed a version of the original statistic that is capable of handling ties (sometimes known as tau-b): a combination that is tied in either list of both counts as neither concordant nor discordant and the denominator is deflated to take this into account:

$$\tau_b = \frac{C - D}{\sqrt{(P(n) - T_a)(P(n) - T_b)}}, \quad (2)$$

where T_a and T_b are the number of tied combinations in lists A and B.³⁹ In situations where both lists have the same number of ties, this will reduce to $\frac{C-D}{P(n)-T}$. I will use this simplified form for the reason that the structure of a chapter in A does not allow ties but our master list does. As a result, the two example lists given below, in which all pairwise combinations apart from the tie are concordant, should be treated as identical and so should therefore have a tau coefficient of 1. If, on the other hand, we were to compute τ_b for these lists with the complex formula given above, we get the reduced value of 0.91 because List A does not have the tie:

Rank	List A	List B
1	Thales	Thales
2	Philolaus	Philolaus, Leucippus
3	Leucippus	Plato
4	Plato	

³⁹ Kendall (1948) 34–35.

The processing of ties is also complicated by the nature of the chronological information we have available to us. Our chronological master list must be structured so that it allows for ties to be broken down at ever deeper levels on an individual-by-individual basis. For example, there are some philosophers in the *Placita* like Epidicus (chapt. 2.4.3) who are not known from elsewhere. Because we do not know who is earlier out of Aristotle and Epidicus, then this comparison should count as a tie. So too should the comparison between the Stoics and Epidicus. But if we only allow for a single level of comparison, Aristotle and the Stoics should then be tied too, even though we know for sure that the former is historically prior. We thus need a method that can carry out different comparisons on different levels, adopting the shallowest depth when comparing a philosopher with an unknown like Epidicus but a deeper depth when comparing philosophers for whom we have more definite information. Our idea of depth can be better illustrated if we consider a portion of 5th century in the master list, compiled in the main from biographical information included in Brill's *New Pauly* and the *Oxford Classical Dictionary*.⁴⁰

Table 12. *Example of chronological ordering of philosophers at different depths ('ranks')*

Name	Dates	Rank 1	Rank 2	Rank 3	Rank 4
Archelaus	fl. c. 450 BCE	1	6	2	
Hippo	b. c. 480–470 BCE	1	6	2	
Diogenes	fl. 440–430 BCE	1	6	2	
Philolaus	c. 470–after 399 BCE	1	6	3	
Socrates	469–399 BCE	1	6	3	
Leucippus	fl. 2nd half 5 th cent. BCE	1	6	3	1
Democritus	b. c. 460 BCE	1	6	3	2
Critias	c. 460–403 BCE	1	6	3	
Hiketes	5 th cent. BCE	1	6		
Leophanes	5 th cent. BCE	1	6		
Epidicus	?	1			

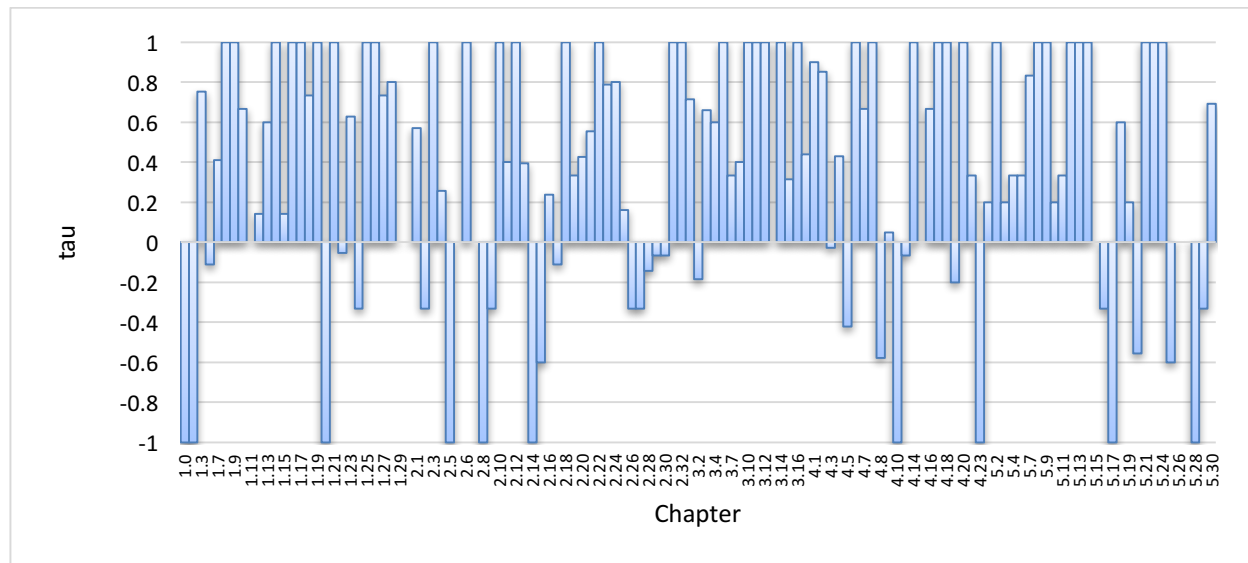
In the table, the different Ranks order the labels at different levels. At the shallowest level, which includes the unknown Epidicus, the rank of all labels is tied. The next level collects together all the labels belonging to the 5th century. This level is required because there are some labels, like Hiketes and Leophanes, whose dates cannot be further narrowed down. Subsequent levels break things down further. The last level is required to distinguish between Leucippus and

⁴⁰ There is of course scholarly controversy on some of the dates. It should be noted however that minor changes to the list will have little appreciable effect on our overall results, especially when comparing averages as we do below.

his student Democritus. Once we have structured our chronological information this way, we need to compare each pairwise combination at the maximal depth satisfying the following two constraints: (1) we know enough about both labels for them both to be assigned a rank at this level; (2) both labels share the same rank at all preceding levels. For example Leucippus and Epidicus will be compared at a maximal depth of Rank 1 (a tie), Leucippus and Hiketes at Rank 2 (a tie), Leucippus and Archelaus at Rank 3 (disjoint), and Leucippus and Democritus at Rank 4 (disjoint).

Once we have constructed our master list, we can then go about computing τ for each chapter. Firstly, however, we need to make some small modifications to our data to take care of idiosyncrasies that cannot be dealt with by our statistic. For lemmata with multiple name-labels, I have taken the first listed label as representative and removed the others from consideration. When a label is used more than once in a chapter, I have also removed all but the initial doxai from the list to be compared, since all listed items must be unique. Figure 2 provides an overall visual impression of fluctuating values for the entire work:

Figure 2. *Level of chronological ordering (tau) by chapter*



It is evident enough from visual inspection that positive values predominate, which confirms the wide use of chronological succession in chapter arrangement. Table 13 collects these results into averages by book for intratextual comparison.

Table 13. *Average chronological ordering of chapters by book*

Book	Average tau of chapters	Approximate significance

1	0.45	< 0.0017
2	0.23	0.01
3	0.62	< 0.0017
4	0.31	0.035
5	0.33	0.01
Whole work	0.35	< 0.0017

We see that all books are alike in having positive average tau. The column ‘Approximate significance’ gives the approximate probability of observing a value of tau at least this strong on the default (commonly called the ‘null’) hypothesis that the order of doxai is independent of chronology. Since all these probabilities are very small, we can confidently reject this hypothesis and conclude that chronology does affect the ordering of doxai. Computing exact levels of significance for each of these results is a difficult affair since the statistic’s distribution is unique and the nested structure of the master list complicates matter. To find the approximate levels listed above I carried out a permutation test. In our case a permutation test simulates the randomness of the null hypothesis to produce an empirical distribution of average tau for a given set of chapters. We can then inspect this distribution to see how rare instances at least as strong as the observed average value is. To do this I generated 100 random permutations of the observed order for each chapter, calculating the value of tau for each permutation. 600 sample averages for each book were then generated by randomly drawing a value of tau from each chapter’s set of 100, averaging the results, and then iterating the process 600 times. The approximate significance was calculated as the proportion of the 600 trials with averages at least as strong as that observed.

Interestingly, though all books have significantly positive tau and are thus all sensitive to historiographical considerations, there is quite a lot of variation in its strength. Book 3 is the most historical in its ordering, while Book 2 is the least. Now since we expect dialectical ordering and historical ordering to be at least partially uncorrelated due to some degree of independence between a thinker’s time and the content of his ideas, a low value of tau implies that, on average, dialectical factors have had more effect on the observed orders of a book’s chapters. So Book 2 appears to be the most dialectical of all the books, and Book 3 the least.

The tendency for historical ordering also applies to name-label sequences attached to a single doxa. Table 14 gives the average tau of such sequences calculated by book are given below.

Table 14. Average chronological ordering of name-label sequences by book

Book	Average tau of name-label sequences

1	0.54
2	0.45
3	0.63
4	0.58
5	0.49
Whole work	0.52

Again, there is a clear tendency to order these name-label sequences historically. The effect is stronger than for the ordering of the doxai themselves. This is doubtless due to the fact that because the sequenced labels all belong to the same doxa, ordering them chronologically imposes no cost on the dialectical effectiveness of a chapter. We note that Book 2 has the weakest level of historicity on this measure too.

There are a number of possible reasons for this difference in historical ordering between books. It could be that certain topics are by their very nature more suited to the kind of structural exposition typical of dialectic, in which different positions can be made to unfold in a neat and orderly manner.⁴¹ Or it may be that more effort has been invested in making the doxai of Book 2 conform to a diaeretic and dialectical scaffold than in other books. Book 2 certainly feels closest in style to Diels' imagined ideal for the *Vetusta placita* – condensed and elliptical with an emphasis on contrast – so it may well be that it has attracted more editorial attention. Anticipating the demonstration below of Book 2's heavier than usual ellipsis (see Section 4), we suggest that this book and its tradition were 'high-use' items whose contents underwent a greater degree of reorganisation and compression in the course of their transmission.

Conversely, let us also consider some possible reasons for the relatively high level of chronological arrangement in Book 3. Mansfeld has shown the ultimate dependence of sections of this book on Aristotle's *Meteorologica*,⁴² either via a meteorological handbook heavily indebted to this work, as Diels argued for ch. 3.5 on the rainbow, or an epitome of this treatise. As a general rule, Aristotle adheres closer to chronology in his doxographical presentation. Presumably, such inherited doxographical material was later reformulated and rearranged by the Hellenistic schools (especially the Peripatos, and to some degree too the Stoa) to suit the growing dominance of the practice of dialectic as a philosophical technique. This is not to say that dialectic and diaeresis are not factors in doxographical precursors in Aristotle.⁴³ Rather, we merely suggest that more weight was placed on dialectic/diaeresis as a method for ordering

⁴¹ David Runia, private communication. Structural tree diagrams like those in Mansfeld and Runia's *specimen reconstructionis* of Book 2 are not as easily drawn for the other books.

⁴² Mansfeld (2005). He focuses specifically on chs. 3.1–6 and ch. 3.18 Diels (3.5a MR).

⁴³ For the large debt owed by doxographical practice to Aristotle, see the overview of Mansfeld and Runia (2009) 158–72, and Mansfeld (2016).

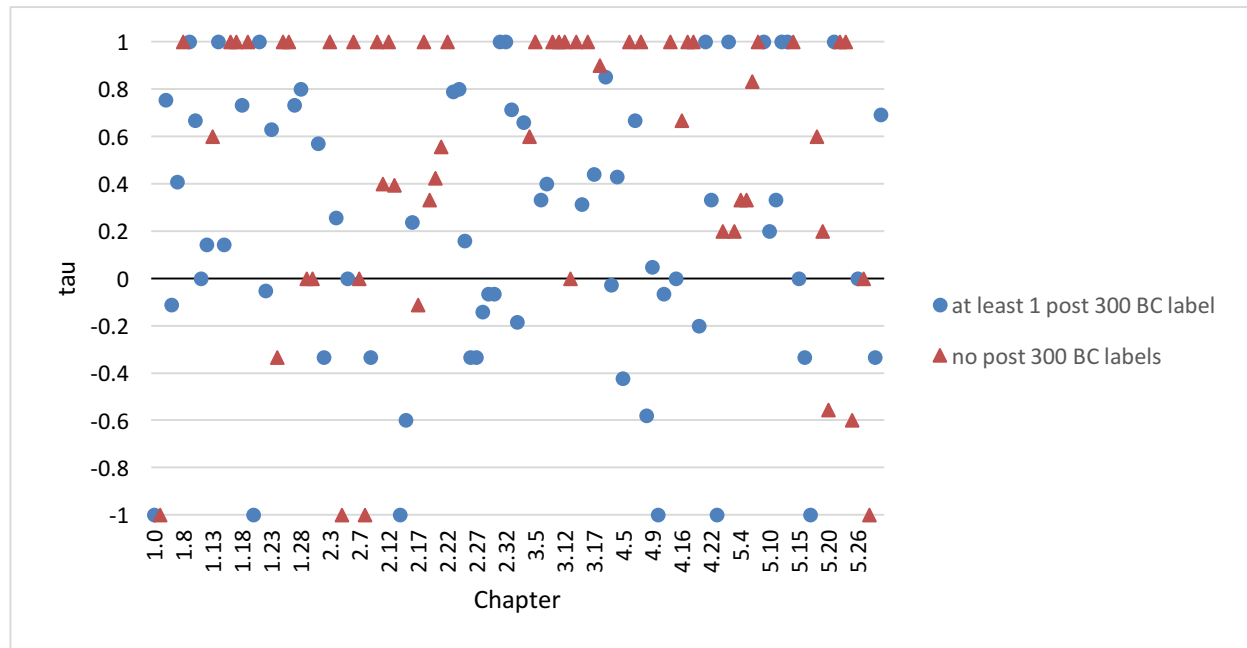
doxai as time went on. Within this broad process, we would expect some variation in the degree to which different parts of the tradition underwent such rearrangement. Book 3 may have been a case where the rearrangement was relatively conservative due to relative fidelity to the treatment in the original sources.⁴⁴

The claim that the doxai in the *Placita*'s source materials were in time rearranged to better express dialectical contrast is open to statistical proof. We proceed as follows. First, we take the principle that lower tau indicates more dialectic on average. Next, we measure the correlation between some quantity that captures the lateness of a chapter and tau. We expect it to be negative, which would indeed suggest that comparatively late chapters have comparatively low tau and are therefore higher in dialectic. Our dataset is only 126 chapters, which is too small to reward a high resolution measure of lateness. We will simply divide all name labels into early and late, adopting 300 BCE as our dividing line.⁴⁵ The mark is not arbitrary and has been chosen partly for the reason that the Stoics lie just on the other side of it. The Stoics are cited very frequently in the *Placita* and so incorporating their doxai into the work would have required appreciable modification. Our hypothesis is that this incorporation also provided an opportunity to remould the inherited structure of a chapter. We then score chapters that contain a late name-label that is either solitary or the first in a sequence with 1 and those without with 0. The reason for not considering late name-labels that have been added to already existing sequences is that these are a very minor modification to a chapter, and we reason that such minor modifications will have only minor flow-on effects. Coloured by this variable, the distribution of Kendall's tau over the *Placita*'s chapters can be seen in Figure 3 .

⁴⁴ See p. 47 for an alternative explanation.

⁴⁵ For philosophers around the turn of the century, the question of pre or post is decided by floruit, which I have calculated mechanically as 40 years after birth. Zeno the Stoic (b. 335 BCE) is thus post but Epicurus (b. 341 BCE) is pre.

Figure 3. *Level of chronological ordering (tau) for chapters with at least 1 post 300 BCE label vs. those with none*



One can clearly see by visual inspection that the blue circle data-points tend to have lower tau. The difference is encapsulated in the proportion of perfectly chronological chapters for each series. For chapters with at least 1 post 300 BCE label, $11/69 = 16\%$ have perfect chronology, while for those with none $27/56 = 48\%$ do. Further confirmation comes from the negative correlation between being a blue circle, i.e. having a late name-label, and the value of tau as a measure of historicity ($r = -0.24$). A permutation test reveals a significance level $p < 0.01$.⁴⁶ The correlation is weak but certainly significant. A very strong correlation would require that chapters with no post 300 BCE labels be far more rigidly historical. As it is, the mean value of Kendall's tau for chapters with no post 300 BCE labels is 0.52, while for those with at least one such label it is only 0.21. This result suggests that while dialectic was a factor shaping chapter order in the *Placita* tradition pre 300 BCE, it became a more dominant influence after this date, reducing the conformity of chapters to chronological order as they were altered through the addition of late name-labels. We must remember, however, that the chronological effect is clearly present in every book and was never completely erased. Moreover, as noted above, sometimes the chronological order may also be dialectically appropriate. Later thinkers often

⁴⁶ In this test I randomly permuted the observed order of each chapter 600 times and calculated the correlation between tau and lateness for each run. Only five runs out of the 600 had a correlation more extreme in the negative direction than -0.24364, the actual observed correlation.

formulate their views in response to their predecessors, creating new distinctions and oppositions that may be mapped to historical time.

As for an explanation for this shift toward more dialectical ordering, I can do little better than repeat the suggestion that it is probably the effect of dialectic's increasing use as a philosophical instrument in the Hellenistic era. Jaap Mansfeld has raised with me the possibility that it may be due to sceptical influence. The *Placita* certainly can be exploited for sceptical philosophical purposes through what we might call destructive or aporetic rather than constructive dialectic. That is, it may be used to show a hopeless, irresolvable disagreement, rather than to pave the way to a constructive resolution of an unsolved problem. This is similar to the way in which the tradition later came to be used by Christian writers like Theodoret, who extolled the concord of Christian doctrine over and against the discord found in pagan philosophy. Sceptical presence in the *Placita* on the level of doxai is virtually non-existent for obvious enough reasons (they do not have positive opinions),⁴⁷ but the wealth of conflicting material and dialectical arrangement would have been a treasure trove to anybody wanting to show an inability to obtain consensual truth in natural philosophy through reasoned argument and the evidence of the senses.⁴⁸ It is therefore quite possible that relatively late in the game an evolving *Placita* passed through some sceptical hands that wanted to arrange the material to better articulate the *equipollent diaphonia* (ἰσοσθενὴς διαφωνία) of views so central to the sceptical strategy.⁴⁹

4. Ellipsis as a feature of doxographical language

A hallmark of the *Placita*'s linguistic style is the heavy-handed ellipsis of predicates, most notably verbs of saying and thinking, that contributes to the overall compact mode of presentation, the removal of linguistic clutter allowing for the rapid-fire enumeration of doxai. Precedents for such strategies of concision are found in doxographical prototypes in Aristotle, but comparison to registers of language used for sending telegrams and note taking are also pertinent.⁵⁰ In these registers too the first thing to be sacrificed is needless cosmetic adornment. Anything that can be recovered by context is omitted, and ideas are stripped back to the bare

⁴⁷ See p. 47 below.

⁴⁸ The utility of doxography to scepticism is especially clear in the case of the Sextus Empiricus, who draws on doxographical handbooks in many places throughout his work. See the articles in Algra and Ierodiakonou (2015).

⁴⁹ Cf. Bobzien (2015) 290, who suggests that the doxography at Sextus Empiricus *M* 10.169–247, though not embedded in a larger argument, functions as a kind of implicit sceptical argument in and of itself by presenting inconsistent but *prima facie* reasonable views.

⁵⁰ E.g. Mansfeld and Runia (1997) 255; Runia (1999) 200.

essentials required to jog the note-taker's memory. A note-taker will also naturally develop private abbreviations for his own use, and in the case of a community of note-takers sharing their work, these abbreviations will normally conventionalise into a shared language of abbreviation.

It is no doubt true that one of the functions of the *Placita* and its supposed ancestors was to provide a dialectical guide in note-like form to the terrain of philosophical opinion, from which a preliminary *status quaestionis* for a given topic might be put together.⁵¹ We should therefore expect that the linguistic practices peculiar to note-taking over time had an appreciable effect on the *Placita*'s style. As a general rule, language users who need to frequently transmit similar messages develop ways of encoding these messages more efficiently. Two of the parameters determining the level of compression are token frequency and cost. We are more likely to use abbreviations for phrases that we use a lot than for those that we use a little, and we are more likely to abbreviate phrases whose cost of production (i.e. length or wordiness) are high. Such laws of functional efficiency successfully explain certain universal properties of human language, for example the tendency for frequently used words like prepositions to be short.⁵²

We can test for differences in the elliptical practice of the different books of the *Placita* by running a search on a version of the text that has been marked-up with syntactic tags. In tagging the text, I have followed the guidelines developed for the Ancient Greek Dependency Treebank by the Perseus Project.⁵³ The format requires the marking of elliptical constituents, so these can easily be searched. To ensure that we are comparing apples with apples, I have restricted the search range to exclude lemmata that either do not go with a label or are the only lemma in a chapter. I have also excluded the first section of Book 1 (chs. 1.0–1.3), due to stylistic differences with the rest of the work that might skew the results.⁵⁴ The results are given in Table 15.

Table 15. Rate of elliptical predicates in the *Placita* by book

	Elliptical predicates	Words	Rate per 100 words
Book 1	177	2892	6.12

⁵¹ Mansfeld (1998) 24–25.

⁵² Zipf (1949). Zipf's laws have been updated recently since it has been demonstrated that the average information content of a word, defined information-theoretically in terms of predictability from context, exhibits a better inverse relation with word length than brute frequency Piantadosi, Tily, and Gibson (2011). In many languages, Zipf's inverse frequency- length relation appears to be mostly a by-product of the deeper inverse relationship between information content and frequency due to collinearity between frequency and low information content.

⁵³ Bamman-Crane (2008).

⁵⁴ The full list of exclusions is Book 1: chs. 1.0–4, 1.6, 1.7.1, the initial definitional lemmata of chs. 1.8–15; Book 2: chs. 2.0.1, 2.32.1; Book 3: chs. 3.0.1, 3.1.1, 3.4.6 (first part of sentence plus name-label missing), 3.5.1–6, 3.5a.1, 3.6.1, 3.8.2; Book 4: chs. 4.0.1, 4.11–12, 4.21.

Book 2	251	3723	6.74
Book 3	112	2136	5.24
Book 4	163	3359	4.85
Book 5	175	3243	5.40

On this measure, the first two books are the most elliptical, with Book 2 coming out on top. In all books, the majority of the instances are contributed by dropped predicates (i.e. *verba dicendi*) in the opening sentence of a lemma. Table 16 divides these cases of ellipsis into those which are initial and those which are not.

Table 16. Rate of initial and non-initial elliptical predicates in the *Placita* by book

	Initial elliptical predicates	labelled lemmata	Initial rate	non-initial elliptical predicates	non-initial rate ⁵⁵
Book 1	110	143	0.77	67	0.54
Book 2	196	214	0.92	55	0.67
Book 3	82	96	0.85	30	0.54
Book 4	110	140	0.79	53	0.48
Book 5	92	110	0.84	83	0.59

It will be seen that Book 2 also has the highest rate of elliptical initial predicates, and the highest rate for non-initial cases too. If we convert these rates to z-scores showing how many standard deviations each rate is from the mean, then in each case the Book 2 rate is most extreme and least like the others. One might propose that the high initial rates are a by-product of Book 2's shorter lemmata, but the correlation between lemmata length (in words) and initial ellipsis is miniscule ($r = -0.08$). Another hypothesis might be that the length of chapters has an impact on the results, because lemmata towards the beginning of a chapter might be more likely to not drop predicates in the first sentence than lemmata towards the end. For example, if we imagined a rigid rule by which the first lemma of a chapter always had a verb of saying but subsequent lemmata always dropped it, then spreading the same number of lemmata over a different number of chapters would affect the rate as calculated above. However the differences in average chapter size are rather small and not consistent with the results here. Even then, and perhaps surprisingly, there appears to be no meaningful correlation between a lemma's order in a chapter and its tendency to retain or drop initial predicates (except at the tail⁵⁶), as shown in Table 17.

⁵⁵ I.e. the number of non-initial elliptical predicates divided by the number of non-initial sentences.

⁵⁶ Rates at the lower end (>8) are consistently low.

Table 17. *Rate of initial elliptical predicates by order of doxa*

Order	Initial elliptical predicates	Frequency of order	Rate
1	99	125	0.79
2	99	121	0.82
3	91	104	0.88
4	74	81	0.91
5	47	61	0.77
6	33	47	0.70
7	29	34	0.85
8	24	27	0.89

The rates do not reliably increase as one moves down the order. In fact doxai placed 5th and 6th both keep their initial predicates more than doxai placed fourth. The correlation calculated to a depth of 8 is 0.08, and even negative if calculated to depths 5 and 6. We may conclude that these differential rates have had no material effect on the results by book obtained above.

The Book 2 result therefore seems to be independent of other obvious properties peculiar to this book like short doxai. Put together with the fact that frequency of production is usually an important factor driving abbreviation effects such as ellipsis, this is another result suggesting that the textual history of Book 2 may have been more intensive than the others (higher use, more copying, need for a more compact form etc.), which sculpted a more heavily compressed style characterised by shorter doxai, more dialectical ordering, and more ellipsis.

5. Bibliometric statistics

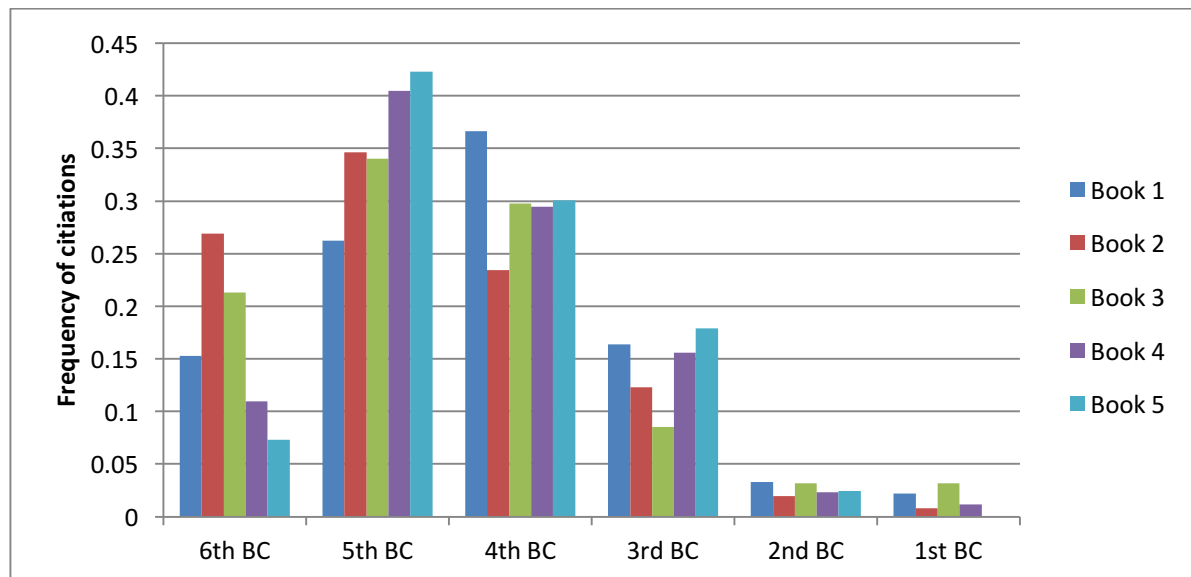
The *Placita*'s unique structure allows us to quantify some aspects of name-label usage that may inform questions of general interest to the history of philosophy. They also shed light on the ancients' own view of their philosophical history and the historiography of philosophy. In this section I present and discuss some simple statistics which help us characterise and clarify these different properties. To the extent that these statistics reveal something about intellectual history outside of the *Placita*, the methods are similar in spirit to those found in the field of citation network analysis. This field of study explores through quantification the web of citations permeating contemporary scholarship to reveal the flow, dissemination and progress of knowledge. It began with Garfield et al.'s devilish question 'Can a computer write the history of

science?’⁵⁷ and has been well fed by the ever increasing amount of data to analyse as academic publishing has boomed. A mainstream example of work in the same general area is Murray (2003), who analyses citations and allocations of space in reference works to map the trajectory of human accomplishment in various fields from 800 BCE to 1950. The *Placita* too is in some sense a reference work, though due to its particular dialectical aims we may question how accurate an image it is of historical reality. Nevertheless, we can only make do with what we have, and alongside Diogenes Laertius’ *Lives of the Philosophers*, the *Placita* is the closest extant text to a philosophical encyclopedia. Thus, if we wish to understand the ancients’ reading of their own philosophical history, the *Placita* is an indispensable text.

5.1. The *Placita*’s perspective on philosophical history

An illuminating window onto the *Placita*’s historical outlook is provided by data on the frequency of citations by century. If we confine ourselves to name-labels that can be assigned a definite floruit in one of the centuries 6th to 1st BCE,⁵⁸ we may count the number of citations by century as a proportion of total citations chapter by chapter. The histograms in Figure 4 display the results.

Figure 4. Frequency of citations from different centuries by book



⁵⁷ Garfield, Sher, and Torpie (1964) i.

⁵⁸ E.g. we omit from consideration name labels like ‘the astronomers’ and ‘the physicians’ who do not have a definite time.

All books show the same general pattern: a peak number of citations in the 5th century and then a consistent century by century decline thereafter. The notable exception is Book 1, which peaks in the 4th and not the 5th century, but otherwise shows the same decline. We see here just how historically conservative the *Placita* is, and how focused it is on the height of classicism, the 5th century. Its tradition was doubtless updated, but it is perhaps surprising how little updating in terms of cited philosophers there was in the overall scheme of things, and how the work maintained its steady gaze backward towards the foundations of philosophy.

The *Placita*'s classicism stands in stark contrast to citation practices in contemporary science, where the vast majority of references are to works written only in the last decade, and the most cited works are recent works. In a seminal study, de Solla Price revealed the bow-wave of modern science's research front: if one plots the percentage of all the papers cited in the present literature by year of publication, one gets a more or less linear trend that increases by a rough factor of 2 for every 13.5 years closer to the present, with a distinctive bump that boosts the otherwise linear growth in the most recent 13.5 year block.⁵⁹ This trend is the reverse of what we find in the *Placita*, where the citation wave peaks in the 5th–4th centuries BCE, and citations increase as one moves back in time from the present. The progress in modern science has been breathtaking in its accumulation, and is clearly reflected in the immediacy of the citation data. As I will argue further throughout this section, I do not think the opposite trend in the case of the *Placita* can be explained away as some bias against the present inherent in the genre. Instead, I read the *Placita*'s classicism as a symptom of the comparatively dismal state of progress in natural philosophy at the time of the *Placita*'s composition. The citation trend is consistent with a softer version of Cornford's pronouncement that 'in [physics] all the most important and original work was done in the three centuries from 600 to 300 B.C.'⁶⁰

If we return now to consider some specific features of the trend, the shift forward in time by a century evident in Book 1 consolidates the general impression of this book's framing, many chapters of which have clearly been filtered through 4th century debates on metaphysics and

⁵⁹ de Solla Price (1965).

⁶⁰ Cornford (1950) 83. Lloyd (1973) 154 cites this as an extreme view. The third century BCE was no doubt a creative period, with important advances in astronomy and medicine in particular made at Alexandria, and a number of opinions from the notable Alexandrian scientists of this era have made their way into the *Placita*: the physicians Erasistratus and Herophilus (cited 5 and 6 times), the astronomer Aristarchus (cited 4 times), and the geographer and all-rounder Eratosthenes (cited twice). Furthermore, as Lloyd argues, later centuries produced such giants as Ptolemy and Galen, who will have to be taken into account by anyone arguing for a precipitous decline. Nevertheless, if we weaken Cornford's statement from the rhetorical 'all' to a more measured 'the majority' or 'the bulk', it hardly seems possible to take serious issue with it. Scientific advance did not cease entirely: substantive contributions just became rarer with time.

fundamental physical concepts.⁶¹ The emphasis on the Stoic and Peripatetic divisions of philosophy in the proem certainly suggests an effort to hammer this book's source material into a shape suitable as an introduction to a larger work of ongoing relevance, and to this end we see more frequent incorporation of names from this century.

It is noteworthy in this respect that the proem is the only time that Theophrastus is mentioned in the entire work.⁶² One even suspects that this virtual absence of Theophrastus in the *Placita* is more than just a reflection of his deference to Aristotelian orthodoxy on doctrinal matters. If (admittedly, a big if) his *Physikai doxai* was the tradition's most important ancestor, it is only natural that he did not include himself in a survey of prior philosophical opinion. In degree as later revisions stuck to the format and name-labels provided in this work we would expect Theophrastus to be passed over in silence.

Though the *Placita*, as just shown, is more interested in name-labels the more remote in time they are from the present up until the 5th century, it was clearly updated from time to time. Updating at times affected the phrasing of doxai more than their attribution. Content was Platonised, Soicised, or Pythagoreanised according to prevailing trends.⁶³ It could also affect the ordering of doxai, for example by arranging more according to contrast and division than chronology. But new doxai, though comparatively rarely, were also added from more recent thinkers. A first an obvious question is the protocol for such additions. The following two seem fairly uncontroversial claims:

- (1) New labels and their doxai were added if they contributed to the dialectical dynamic of a chapter.
- (2) The addition of labels may have been influenced in some cases by partisanship.

Claim (1) suggests that it is historically *unique* doxai that will be added. Philosophical uniqueness in a doxographical context can be quantified if we take the distinction between single-labelled and multi-labelled doxai to reflect unique and non-unique views. Are later additions more unique on average?

To answer this question, for each name-label I calculated the ratio of unique doxai (i.e. those attributed to that name-label alone) to total doxai (all those attributed to that name-label). Higher

⁶¹ One example is chapter 1.11 on causes, where the Peripatetic intervention in the tradition is clear and provides an important link between Aristotle and Theophrastus on the one hand and Aëtius on the other. See Mansfeld (2002).

⁶² If we accept Mansfeld and Runia's rejection of S 2.20.5, which Diels included in his text as lemma 1.29.4, as an insertion from Arius Didymus. See their comments ad loc. for the argument. Even if we allow this further citation, the conclusion I draw here regarding the relative absence of Theophrastus still stands.

⁶³ Mansfeld and Runia (2009) 99.

ratios thus denote higher uniqueness (see further Section 0). I then divided the total set of name-labels into 4th century and earlier and 3rd century and later, and tested the correlation between this categorical variable and the uniqueness ratio. Computed for the entire set of name-labels that can be definitely assigned to one of these time periods, $r = 0.22$, another weak correlation but certainly present and significant ($p < 0.05$, t-test). If we restrict the set to exclude labels whose citation counts are smaller than 5, the correlation becomes stronger at 0.41 ($p < 0.001$, t-test). So there seems to be some indirect statistical evidence for hypothesis (1), though the relation is weak and there must be other factors motivating the addition of new name-labels. An example is the single reference to the late 2nd century Epicurean Demetrius Laco, a younger contemporary of Zeno of Sidon (b. c. 150 BCE), in chapter 1.18, where he is included in the sequence of atomists Leucippus-Democritus-Demetrius-Metrodorus-Epicurus. There is thus nothing unique about Demetrius' view (that the atoms are infinite in number and the void infinite in size). The point of his inclusion seems merely to be to indicate the continuity of the idea.

5.2. Philosophical presence

Let us now zoom in to consider the individual name-labels themselves. A first question is which philosophers are most present in the *Placita*. An obvious way to quantify textual presence is to count the number of cited doxai that each philosopher or school has. Table 18 shows the top 15 cited philosophers, including schools, by book. Note that only name-labels linked to doxai have been counted.

Table 18. Top 15 cited philosophers by book

	Book 1		Book 2		Book 3		Book 4	
1	Plato	20	Aristotle	18	Metrodorus	9	Stoics	17
2	Stoics	16	Empedocles	18	Anaxagoras	8	Democritus	17
3	Aristotle	15	Plato	18	Democritus	8	Epicurus	14
4	Epicurus	11	Stoics	17	Stoics	7	Plato	14
5	Democritus	10	Heraclitus	14	Aristotle	6	Empedocles	12
6	Empedocles	10	Anaximander	13	Anaximenes	6	Aristotle	10
7	Pythagoras	9	Anaxagoras	13	Xenophanes	5	Pythagoras	10
8	Thales	7	Parmenides	13	Anaximander	4	Anaxagoras	8
9	Heraclitus	7	Xenophanes	12	Thales	3	Diogenes of Ap.	7
10	Anaxagoras	6	Democritus	12	Leucippus	3	Leucippus	6
11	Zeno the Stoic	6	Anaximenes	11	Empedocles	3	Parmenides	6
12	Xenocrates	5	Pythagoras	11	Parmenides	3	Peripatetics	5

13	Strato	5	Epicurus	10	Heraclides	3	Alcmaeon	5
14	from Thales	5	Diogenes of Ap.	9	Diogenes of Ap.	2	Xenocrates	4
15	Pythagoreans	5	Thales	8	Philolaus	2	Academics	4

Book 5			Whole work	
1	Empedocles	17	Stoics	70
2	Stoics	13	Plato	61
3	Aristotle	10	Empedocles	60
4	Democritus	8	Aristotle	59
5	Plato	7	Democritus	55
6	Epicurus	6	Epicurus	43
7	Alcmaeon	6	Anaxagoras	40
8	Diocles	6	Pythagoras	36
9	Anaxagoras	5	Parmenides	30
10	Pythagoras	5	Heraclitus	26
11	Parmenides	5	Diogenes of Apollonia	23
12	physicians	5	Thales	21
13	Strato	5	Anaximander	21
14	Erasistratus	4	Anaximenes	20
15	Diogenes of Ap.	4	Xenophanes	20

A number of points jump out from an examination of these lists. All the main successions and schools are represented, but some are present in certain books more than others. Of those philosophers that rank highly, perhaps somewhat surprising is the prominence of Empedocles. The *Placita* is clearly one of his biggest fans. He ranks highly in all books and even comes out on top in Book 5, where his contributions to medical matters have cast a long shadow.

Metrodorus' first place in Book 3 is also a little surprising – he is rarely considered a major figure, and mainly remembered for his picturesque analogy of the absurdity of a single world in infinite space to a single ear of wheat growing in a large field (A 1.5.4). He eclipses both Aristotle and the Stoics, and is cited in more than half (9/16) of the chapters with named doxai. From the *Placita*'s standpoint, let the record show that Metrodorus has made a significant contribution to meteorology. His prominence cannot be explained by him accumulating cheap citations riding the atomist bandwagon – the atomists are elsewhere often cited as a block – as every one of his opinions in this book are original.

In fact this book is unusual for the fact that most of its doxai have a single label and there are no long name-label strings (two labels at most are found). Rather than being lumped together, the views of the different atomists are carefully distinguished. For example, in chapter 3.3 on thunders, lightnings, thunderbolts, firewinds and typhons, Metrodorus, Leucippus and Democritus each have their own separate doxa. This may be due to the nature of the subject

matter: Book 3 considers complex natural phenomena that allow for many potential points of difference when explaining their dynamics. Or perhaps the author (or even the tradition behind this book), is here more interested in faithfully representing these differences, where elsewhere he remains satisfied with stereotyping.

Such considerations lead us to consider again the relative fidelity to chronology in the ordering of doxai in this book. Perhaps here our spade has struck a deeper insight. It may be that the strong chronology and relative scarcity of multiple name-labels (only 8% of its doxai are multi-labelled – see rightmost column in Table 19) are symptoms of a common cause. If meteorological phenomena, by their very nature, demand dynamic and varied explanations, then they will inevitably be harder to reduce to a rigid schema of diaeresis and dialectic like those so prevalent in Book 2. Next, since dialectical arrangement of a chapter often works to upset the default chronological order, it follows that we would expect Book 3 to be more chronological – precisely because dialectical arrangement is not as easy to impose on such fluid subject matter.

Table 19. Breakdown by book of labelled doxai into single-labelled and multi-labelled

Book	Labelled doxai	Single-labelled	Multi-labelled	Proportion multi-labelled
1	171	141	30	0.18
2	211	170	41	0.19
3	97	89	8	0.08
4	143	117	26	0.18
5	112	89	23	0.21
Whole work	734	606	128	0.17

There are also some names we might have expected to see more of. Theophrastus, as discussed above, is a notable absence except for one lemma. The Academics and Peripatetics only figure prominently in Book 4. Indeed the Academics are only cited in Book 4 (at 4.8.13, 4.9.2, 4.9.19, 4.13.10), while 4 out of the Peripatetics' 6 citations also occur in this book (at 4.8.4, 4.8.14, 4.9.7, 4.9.13). Elsewhere they are cited as a group only in the Proem (1.0.3) and at 1.11.4. The citation of individual Peripatetics (excluding Aristotle and Strato) is also rare. Dicaearchus is cited 3 times, at 3.17.2, 4.2.7, and 5.1.4. We find Critolaus and Diodorus of Tyre together at 1.7.12; Critolaus alone at 1.22.7; and Xenarchus (the last philosopher to be cited in the *Placita*) and 'some of the same school' at 4.3.10. This last doxa contains a technical and cryptic definition of soul as τὴν κατὰ τὸ εἶδος τελειότητα καὶ ἐντελέχειαν, καθ' ἑαυτὴν οὖσαν ἅμα καὶ μετὰ τοῦ σώματος συντεταγμένην. As Mansfeld and Runia note in their commentary (as yet unpublished), the present passage is the earliest instance of this combination of the terms

εἶδος, τελειότης, and ἐντελέχεια, which is later taken over by Alexander of Aphrodisias. The addition of this late doxa from Xenarchus (he is to be dated between ca. 85 BCE and the beginning of the Common Era) nicely illustrates ἐν παρέργῳ the doxographer's keen eye for new opinions that make a dialectical contribution to a chapter, as it is likely intended as compromise position between the corporealist and incorporealist views.⁶⁴

This general scarcity leads us to a conclusion worth elaboration. If Aëtius as an author had his own philosophy, it must have been partial to the Peripatos. This comes through in a number of Peripatetic-sounding editorial criticisms that have been inserted into doxai at 1.2.2, 1.3.2, 1.3.3, 1.7.7, as well as their mention in the Proem, which defines the general shape of the work and its stance.⁶⁵ Yet outside of Book 4, the Proem, and the chapter on causes, they are not mentioned as a group at all, though Aristotle himself and Strato are frequently cited. So it seems that in matters of physical doctrine, the Peripatetics as a group, insofar as they are to be distinguished from these two early giants, added very few new constructive positions. But they did do so on the topics of Book 4, especially chapter 4.8 on sensation and sense-objects, and chapter 4.9 on whether sensations and impressions are true, where they even have two doxai each instead of the usual one. These were central questions in Hellenistic philosophy, a fact reflected in the cluster of the Stoics, Academic Sceptics, and Peripatetics at 4.8.12–14.⁶⁶ Viewed through the lens of the *Placita*, the Peripatetics main contributions (when conceived as a group) were to contemporary debates in psychology, the organisation of philosophy as a field of knowledge, and terminological or conceptual analysis. In other words, their influence on the *Placita*, just like Theophrastus', is best understood in terms of the way in which the raw material – the content of the doxai themselves – is framed and interpreted, rather than in new additions to the underlying material. On balance, we see the centre of gravity of philosophical activity shifting from creative to interpretative enterprise.⁶⁷

Taken another way, the results here also corroborate Sharples' account of a rapid decline of the Lyceum following Strato.⁶⁸ In Sharples' view the Peripatetics, with their common sense open-mindedness, lacked a distinctive identity and were caught between the systematic

⁶⁴ Mansfeld (1990) 3093.

⁶⁵ Mansfeld and Runia (forthcoming) ad loc. (draft commentary).

⁶⁶ Mansfeld and Runia (forthcoming) ad loc. (draft commentary).

⁶⁷ Lloyd (1973) 165 makes a similar point with regard to the decline of ancient science from about 200 CE, after which 'the main effort tends more and more to be spent on preserving knowledge rather than on attempting to increase it.' I think the initial stages of this change in emphasis can already be detected far earlier.

⁶⁸ Sharples (2005) 155. See also Sharples (2010) for a discussion of the historical issues. Baltussen (2016) is a little more nuanced but his results essentially the same. Thereafter, the centre of scientific enquiry shifted to Alexandria in what Glucker (1998) 313 calls a 'migration of the Peripatetic ideal of research', a transition in which Strato himself may have played some role as tutor to Ptolemy II.

dogmatism of the Epicureans and Stoics on the one side and the fervent scepticism of the Academics on the other, losing potential subscribers to both.⁶⁹ In the case of the Academics, the shift towards skepticism militated against the production of new positive opinions: they have few doxai because the school in the Hellenistic period was famously non-dogmatic. The Academics are therefore only cited on questions which have epistemological implications, such as those that deal with sense-perception. Here we can add to the picture of historical decline presented in the previous section. The Aristotelian attitude of open-minded enquiry that best lubricates the engines of productive science lost out to two kinds of philosophical excess: here to the positive dogmatism of the Stoics and Epicureans, for whom physical theory played second fiddle to a way of life with spiritual pretensions,⁷⁰ and there to the dogmatic skepticism of the Academics, for whom the slow and careful accumulation of knowledge about the physical world through sensual observation and inference is a doomed project from the start. The dominance of the schools in the Hellenistic period is also a factor. As powerful institutions, the schools could enforce a greater degree of unanimity among individual philosophers. Gone is the freewheeling individualism of the Ionian physicists.⁷¹

Another question worth asking is which philosophers have the most breadth. A philosopher with greater breadth will contribute more doxai on a greater range of topics. Since the different books of the *Placita* roughly circumscribe different fields of knowledge, a straightforward statistic capturing this aspect is a philosopher's average rank across the different books, as given in Table 20. Note that in computing the average rank ties have been allowed.

Table 20. Top 15 name-labels by philosophical breadth as measured by average citation rank across books

Average rank across books		
1	Stoics	2.6
2	Aristotle	3.6
3	Democritus	4.4
4	Empedocles	4.4
5	Plato	5
6	Anaxagoras	7.2
7	Epicurus	8.4

⁶⁹ This open-mindedness is especially visible in a willingness to tolerate internal debate on ethical theory. See McConnell (2014) 124 n. 28, who notes in this connection Cicero *Fin.* 5.14, where Piso wonders why philosophers like Hieronymus and Diodorus are called Peripatetics at all given their unorthodox views on the summum bonum.

⁷⁰ Cf. Glucker (1998) 314, who argues that Zeno of Citium and Archesilaus 'symbolize the withdrawing of Athenian philosophy, from the new ideals of Aristotle and Theophrastus, into itself and its Socratic and Platonic past.' This is a withdrawal from scientific empiricism back into what is still regarded as philosophy in a strict sense, concentrated more on questions of questions of ethics and epistemology than questions of natural science.

⁷¹ Cf. Smith (1976) 16, according to whom freedom from the dogma of any one philosophical sect helped science to flourish at Alexandria following its decline elsewhere.

8	Parmenides	10.8
9	Pythagoras	11.4
10	Leucippus	14.8
11	Diogenes of Ap.	15.2
12	Thales	15.4
13	Heraclitus	15.4
14	Anaximander	17
15	Strato	17.4

The Stoics stand out from the other Hellenistic schools in having quotable positions on the majority of topics covered by the *Placita*. They are the last group or individual to contribute anything substantial to all the books, and in this respect they are the exception that proves the rule of general decline. Moreover, the usual relationship in the *Placita* of founders or prominent members of a school to the school conceived as a whole is reversed in their case, and there seems to be a strong desire on the part of the author to identify them as a group and to minimise internal differences: the vast majority of tenets are ascribed simply to ‘the Stoics’ en bloc, with a lesser number of specific ascriptions to Zeno (10), Cleanthes (9), Chrysippus (6), Posidonius (7), Boethus (3), Crates the grammarian and philosopher (2), Diogenes of Babylon (1), Antipater of Tarsus (1), Apollophanes of Antioch (1), and Mnesarchus (1). Runia has suggested that this could be an artefact of P’s abridgement, who may have just replaced individual Stoics with the generic name-label. There is certainly a richer presentation of individual Stoic views in the doxography of Arius Didymus, so we might well conjecture that the original text of Aëtius or its anterior tradition showcased a similar level of discrimination between individual Stoic contributions.⁷² By contrast, there is only a single reference to the Epicureans as a group in the *Placita*, at 5.26.3 in a chapter on how plants grow and whether they are animals. This doxa is remarkable for the fact that the Stoics and Epicureans, normally truceless rivals, here actually share an opinion, namely that plants do not have a soul. Even then, as this chapter does not contain a doxa attributed to Epicurus himself, it is quite possible that the writer has slid into the collective designation so as to juxtapose school with school.

We note also the high rank of Democritus in equal third place. The *Placita* here confirms traditional portrayals of him as a philosopher of extraordinary breadth, as in the quotation from

⁷² Runia (1996) 321.

Thrasyllus cited by Diogenes Laertius (9.37), where he is called a ‘true philosophical all-round athlete’ (ὡς ἀληθῶς ἐν φιλοσοφίᾳ πένταθλος).⁷³

Returning to the citation counts by book again in Table 18, we may also wonder how the cast of philosophers changes from book to book as the philosophical field changes. Which books are most similar in terms of the philosophers they attract, and what may we glean about the distribution of individual philosophical expertise? We can assess these book-by-book differences by measuring the similarity between the different ranked citation lists of each book. I will use the Average Overlap metric as it has a number of features that suit our case.⁷⁴ Besides being simple to calculate, it is inherently top-biased and so weights changes in the order of items towards the top of the list more heavily than changes down below. This is a desideratum because we argue and care more about who should be first and second on the list than we do about who should be forty-first and forty-second. It is also symmetrical, which means it does not require that one of ranked lists is the objective or gold standard to which the other lists aspire.

To compute the Average Overlap between two lists we simply calculate the ratio of the size of their intersection (the number of elements they share in common) to the size of the compared subsets at ever increasing depths until the entire domain is exhausted. The Average Overlap is just the average of these results and ranges between 0 and 1. For example, given two ordered sets to be compared, $S = \{a, d, c\}$ and $T = \{a, b, d\}$, at depth one this ratio is 1/1 (the intersection of the two sets $\{a\}$ and $\{a\}$ is 1 and their sizes 1 also), at depth two 1/2 (intersection of sets $\{a, d\}$ and $\{a, b\}$ is 1 and their sizes 2), at depth three 2/3 (intersection of sets $\{a, d, c\}$ and $\{a, b, d\}$ is 2 and their sizes 3), giving an average value of 0.72.

Table 21. *The Average Overlap between the ranked citation lists of each book's name- labels*

	Book 1	Book 2	Book 3	Book 4	Book 5
Book 1	1.000	0.644	0.550	0.721	0.598
Book 2	0.644	1.000	0.652	0.622	0.579
Book 3	0.550	0.652	1.000	0.573	0.475
Book 4	0.721	0.622	0.573	1.000	0.658
Book 5	0.598	0.579	0.475	0.658	1.000
Average	0.628	0.624	0.562	0.643	0.578

⁷³ Cf. Guthrie (1965) 382 n.1: ‘From Abdera issued all those works of Democritus which constituted an encyclopedia of knowledge unparalleled until Aristotle.’

⁷⁴ Webber, Moffat, and Zobel (2010) 14. Average overlap is just a transformation of the intersection metric introduced in Fagin, Kumar, and Sivakumar (2003) 153–154, so that it measures similarity rather than dissimilarity.

The results given in Table 21 show a number of things. We can see, for example, that the lists of Book 3 and Book 5 are the most dissimilar, from which we can conclude that meteorology and medicine generally speaking attract different sets of thinkers. This in turn suggests that the subject matter of these books is the most different: the greater the difference in subject matter, the greater the degree of specialisation required to master each field, and so the less likely it is that the same thinker masters both. Today lists of the top 50 or so contributors to the field covered by each book would have very few names in common. So we may see in the relatively unique name-label lists of Book 3 and Book 5 the beginnings of the scientific specialisation that would eventually split natural philosophy into a large number of hives.

Conversely, Book 1 and Book 4 are the most similar. Why should the same thinkers be attracted to both? These books are probably the most philosophical in content by contemporary standards – Book 1 in its metaphysical and foundational interests, and Book 4 in its psychological and epistemological concerns. There is of course a certain natural connection between these fields, as seen for instance in the fact that anthropological principles like mind and soul are often included as metaphysical or foundational physical principles – a connection that grows especially strong in traditions with a tendency to idealism. In the absence of empirical evidence, human reflection on ultimate reality has a strange habit of reifying aspects of its own operation, and often ends up finding at the bottom of everything versions of itself, whether that be Plato's ideas, Descartes' *cogito* or Aristotle's divine self-thinking mind. There is also a strong epistemological link: in order to assess what at bottom exists, a conscientious thinker will in due course come to consider the conditions of the assessor which shape and frame the assessment. The mutual dependencies linking these fields encourage the same thinkers to range over both.

The row headed Average gives the average of the Average Overlap measure for each column after removing the perfect self-correlation. Book 4 is the most similar to the others on the average, Book 3 the least. This means that if you had to guess which philosophers are the most important in each of the books and their associated fields on the basis of one book alone, Book 4 would provide the best guide. Thus, philosophical performance in Book 4 would appear to predict relative performance in the other books the best, which would also suggest that questions in psychology and the other topics of Book 4 have the largest implications for other fields, insofar as insight here translates into insight there. This result chimes with the demonstration above (see Table 11) that Book 4 also has the highest level of name-label diversity. If name-label diversity may be interpreted as an indicator of the competitiveness of a philosophical field,

then we might expect philosophers who distinguish themselves here to also distinguish themselves elsewhere.

Indeed, this same result may even be read as an indication of the anthropocentric orientation of knowledge itself. If one imagines each book defining a field of study in a multidimensional philosophical landscape, and then asks the question of which field to choose in order to minimize the travel time to each of the other fields, then the territory of Book 4 would provide the best spot to camp in to have access to all the others. Another related possibility is that Book 4 most closely represents the Hellenistic philosophical agenda, and so the name-label lists are biased in this direction.

5.3. Philosophical uniqueness

Some doxai in the *Placita* have only a single name-label attached to them, others a string of labels. This distinction provides a crude method for quantifying what we might term philosophical *uniqueness*,⁷⁵ if we just calculate the proportion of single-label citations for each name-label. The following table gives the top ten name-labels with total citations >10.

Table 22. *Philosophical uniqueness as quantified by the proportion of single-label doxai*

	Citations	Single label	Proportion
Empedocles	60	49	0.817
Strato	16	13	0.813
Alcmaeon	14	11	0.786
Anaximander	21	16	0.762
Stoics	70	53	0.757
Xenophanes	20	15	0.750
Aristotle	59	44	0.746
Xenocrates	10	7	0.700
Metrodorus	19	13	0.684
Diogenes Ap.	23	15	0.652

Here again Empedocles is a standout. More of his citations are single-label than any other frequently cited philosopher, from which it follows that more of his doxai are unique to him alone. Judged by his legacy as embodied in the *Placita*, Empedocles has blazed a unique philosophical path. The *Placita* is clearly one of Empedocles' biggest fans, and it is remarkable

⁷⁵ A name-label can of course be representative of a view, as is often the case in Book 2, so we should not press this measure too far. Nevertheless, we have to ask why a single representative name-label would not suffice in all cases, so that additional name-labels presumably do indicate in some degree the prevalence of a given view.

that this 5th century philosopher played such an important role in the implementation of the dialectic of the Hellenistic era. Strato's high position also reflects his treatment in the history of philosophy as an innovator.

Interesting is the relatively high placing of the Stoics, whose treatment may be compared with another influential figure, Plato, whose proportion is lower at 0.590. Plato frequently shares his doxai with Pythagoras (14 times in all and more than a third of Pythagoras' total citations (36)), a symptom no doubt of Hellenistic pythagoreanizing. On the other hand, Stoic opinions, at least during the time of the *Placita*'s formation, appear to have resisted assimilation to and appropriation by others, maintaining instead a kind of doctrinal firewall.

In fact many of the Stoic positions appear self-consciously unique, and one gets the impression that they were formulated, at least in part, dialectically and in contrast to other prevailing opinions (e.g. the Epicureans). Dialectic becomes a kind of method for generating novel positions that are then incorporated into the tradition, and philosophical schools become as much a product of this system as its continuation. The practice of dialectic codified in the *Placita* does not just reflect philosophical history, but plays an active role in creating it.

Name-labels with a low uniqueness rank are doxographically more redundant, since more of their doxai are already covered by other labels. Significantly, no name cited in the *Placita* is without at least one unique doxa, and so there are no completely redundant labels. There is therefore a certain efficiency to the dialectic. You gain entrance to the game by having at least one unique view. We can therefore reiterate an important point raised in Sections 2.2 and 2.3: the *Placita* catches philosophers who are mentionable by virtue of having made a unique contribution to philosophical dialectic – an observation that in turn supports our argument that insofar as this dialectic provides a (rough) guide to philosophical progress, the *Placita* has something to teach us regarding the general historical trajectory of physical theory (ὁ φυσικὸς λόγος) from the 7th to the 1st century BCE.

5.4. Philosophical affinity

We may also measure the *affinity* between two philosophers by calculating the percentage of doxai they share in common when both are present in a chapter. For example, the Stoics and Plato are both present in 31 chapters, in which they share 3 doxai. Their affinity is therefore $3/31=0.097$. Tabulated below are the levels of affinity between the Stoics and those name-labels they share doxai with (only those labels which occur with the Stoics in at least 5 chapters are included):

Table 23: *Affinity between Stoics and others*

	Chapters with both	Shared doxai	Ratio
Zeno the Stoic	5	2	0.40
Thales	11	3	0.27
physicians	4	1	0.25
Posidonius	5	1	0.20
Pythagoreans	7	1	0.14
Anaxagoras	16	2	0.13
Heraclitus	16	2	0.13
Strato	8	1	0.13
Plato	31	3	0.10
Pythagoras	16	1	0.06
Aristotle	33	2	0.06
Empedocles	22	1	0.05
Democritus	24	1	0.04

One surprise may be the relatively low affinity between the Stoics and Heraclitus, given that Heraclitus is often held to have had a considerable influence on Stoic philosophy, especially its cosmology.⁷⁶ Though the contents of Heraclitus' doxai have often been Stoicised, on the level of name-labels attempts to connect their ideas have not made their way into Aëtius's text to anywhere near the extent of comparable attempts to connect Plato and Pythagoras.

To discriminate between combinations with zero affinity we can rank them by the number of chapters they both appear in, so that a combination that shares no doxai but a large number of chapters has less affinity than one that shares no doxai but a smaller number of chapters. (Alternatively, we could calculate the degree of correlation between pair-wise combinations of name-labels. If Pythagoras tends to be appended to a doxa when Plato is, these two labels will have a higher than average correlation; if Epicurus tends not to be appended when the Stoics are, they will have a lower one.) On this measure the most distant from the Stoics is Epicurus, which corroborates the view that Stoicism and Epicureanism were arch rivals who often defined themselves in opposition to one another. Apart from the one instance at 5.26.3 mentioned above, they never share an opinion in the *Placita*, though they often have opinions about the same philosophical subjects and occur together in 21 chapters.

⁷⁶ See Long (1996).

5.5. Philosophical influence

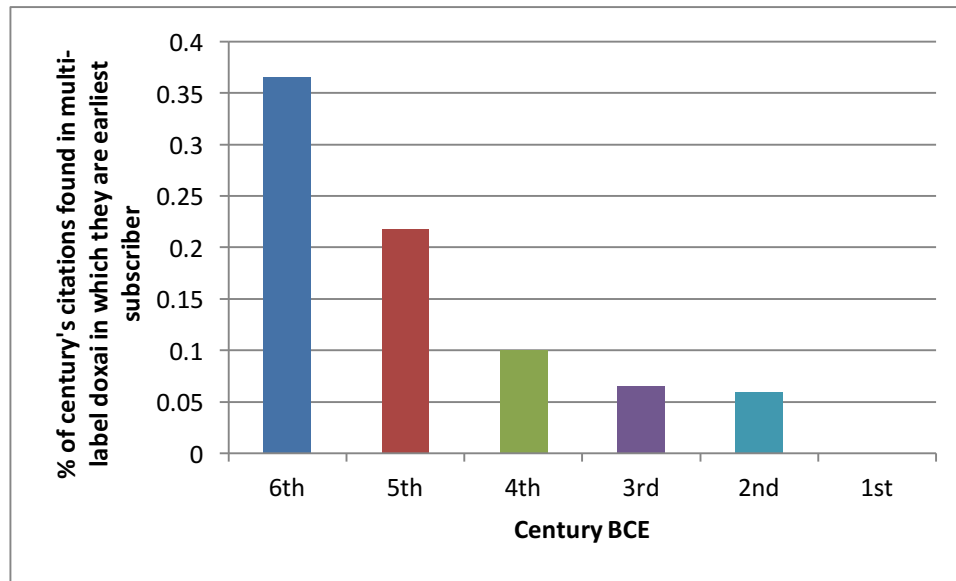
We can also conceive another measure, one of philosophical *influence*. The unique philosopher has opinions which are not held by others, but which are significant enough to rate a mention among other views. The influential philosopher, by contrast, holds views that are also shared by their successors. The notions of influence can also be tied to statistical patterns in name-label usage. If a philosopher has a higher proportion of multiple-labelled doxai in which they are the earliest figure, then they are comparatively influential – either in fact or belief, as later developments can be attributed to the archegete to promote their authority.

By influence we do not mean the ability to produce philosophical clones. There may have been any number of people who believed that the cosmos is unique, or who held to Stoic orthodoxy on all issues. But for their inclusion in a list of individuals holding a particular view to be informative, they must be notable for other reasons.⁷⁷ They must have other, discordant opinions alongside their concordant ones. Influence thus implies novelty. It is descent with modification.

Measured thus, diachronic trends in philosophical influence are immediately obvious. As Figure 5 shows, on average, the influence of name-labels decreases as time goes on. We find a diminishing proportion of citations from a given century that occur in multi-label doxai in which they are the earliest subscriber to the tenet. An interesting question is whether this trend corresponds to any historical reality, or is merely a by-product of the tradition's conservatism. Is it historically correct to say that later philosophers were in fact less influential? Was there, to resurrect the biological analogy of Section 2.2, a kind of reduction in the rate of speciation, whereby later philosophers failed to generate their own unique lines of doctrinal descent?

⁷⁷ As shown above by the fact that every label in the *Placita* has at least one unique doxa.

Figure 5. Philosophical influence by century as quantified by % of a century's citations occurring in multi-label doxai in which they are the earliest subscriber



It has been suggested that philosophy in the Hellenistic age was dominated by schools, a claim which seems to be congruent with this result. We can imagine philosophical opinion becoming more siloed in the Hellenistic period with less innovation. Earlier periods, on the other hand, appear more profuse. Here we can make use of Mansfeld's suggestion that philosophical survival in the ancient world played out according to a logic of cultural Darwinism. Discounting preservation by accident, works and ideas that were adapted to a changing environment had a better chance of survival.⁷⁸ I think this model can be extended further still to the dialectical process itself. Just as, when a creature colonises a new land, it may rapidly speciate to fill the various ecological niches available, so when philosophy itself was a new field, philosophers quickly diversified to adopt those positions that were most plausible. Afterwards there followed a kind of consolidation, the bushy outgrowth being pruned back to the most viable branches. Periodically, when new lands are again discovered, the process repeats, with philosophers quickly staking out their territory in the latest terra nullius.

An alternative explanation is just that the *Placita* was 'stuck in the past' and did not update when it easily might have. On this view, there would have been plenty of doxai it could have added from later centuries from thinkers who had original noteworthy views of their own – it just failed to do so. I find this alternative explanation unlikely. It is more plausible that philosophical productivity as measured by rates of doctrinal speciation declined. Physics – especially in the fields of cosmology and meteorology where direct experiment was impossible

⁷⁸ Mansfeld (1998) 34–35.

– remained for the most part speculative, with little experimental work to sort good theories from bad so that room could be created for new ideas to flourish. To put it in the extreme, we instead see the body of theory evolving dialectically until every possible plausible position within a generally presupposed framework of inference was taken by somebody. This proposal shares similarities with Kant’s argument that metaphysics and rational cosmology had reached a stalemate between what he called the antinomies: equally rational yet contradictory theses regarding metaphysical reality or the sum total of all sensible objects and events.⁷⁹ Though we should heed Lloyd’s warning⁸⁰ against generalising too far in either direction (it is not true that the Greek’s failed to experiment, nor did they practice it systematically), if Greek philosophy had a weakness, it was the lack of systematic experiment and the relative reliance on a priori categories and procedures of pure thought and everyday analogical reasoning to draw conclusions about the world of experience. Ultimately, this made it very difficult to find a way out of dialectical stalemate.

A close relationship between science and dialectic is already clear in Aristotle, who uses logic to structure the articulation of physical problems. Articulating problems in this way helps to clarify the points at issue and to highlight oppositions that are yet to be solved or perhaps insoluble. Dialectic is thus yoked to the advance of science.⁸¹ Without this relationship, there would be no *Placita*. Yet we may equally say that without the dialectical method of investigation exemplified so beautifully in the *Placita*, Aristotle would not have had the huge influence that he did, and there would be no ancient science as we know it. Insofar as ancient science developed under the aegis of this relationship, I think it reasonable to see the dialectical evolution of scientific questions as a moving shadow of scientific progress itself. Once we accept this view, we can study this shadow as an indirect measure of the advance of science.

One wonders whether this dialectical effect can be quantified. In their example reconstruction of Book 2, Mansfeld and Runia employ tree diagrams in order to bring out the latent dialectical information contained in a question as presented by the *Placita*. In Appendix 8 I describe a method for turning this structure into a standard measure of information known as Shannon entropy. If we then allow these trees to evolve and grow dynamically in historical time as research on a philosophical question develops, we have the beginnings of a theory for formalising the idea of philosophical progress. Furthermore, this approach would allow us to

⁷⁹ Take for instance the first antinomy of rational cosmology, in which equally reasonable arguments are advanced for and against the limitation of the world in space and time. See Grier (2001) 172–279 for an excellent discussion. Similar dialectical divisions are found in the *Placita* at ch. 2.1 (‘On the cosmos’) and ch. 2.4 (‘Whether the cosmos is indestructible’).

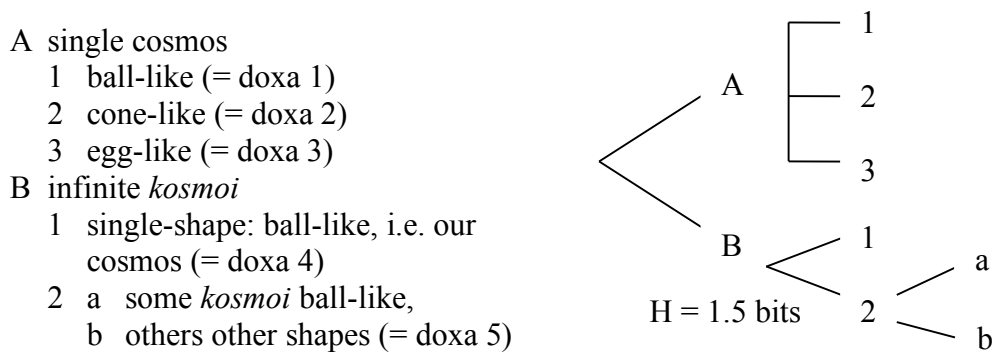
⁸⁰ Lloyd (1991).

⁸¹ See Mansfeld and Runia (2009) 171–172.

quantify each individual philosopher's contribution to the information contained in a philosophical question. Important philosophers initiate new distinctions that lead to productive new branches in a given topic, so that we could estimate their importance by calculating how much information would be lost if they were cut from the tree.

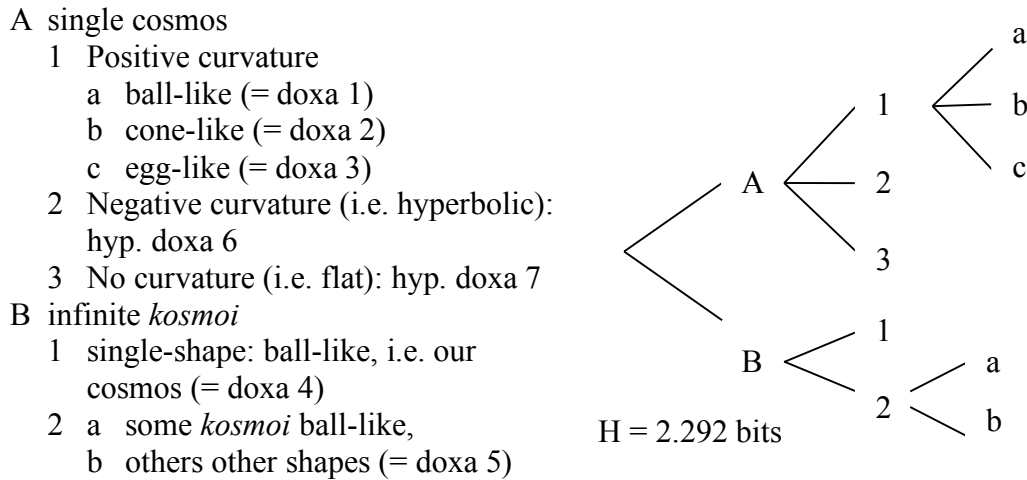
Let us explore this idea using chapter 2.2 as an example. This chapter's question is the shape of the cosmos. Its tree-form is given in Figure 6 along with a descriptive key.⁸²

Figure 6. *Diaeretic structure of chapter 2.2 on the shape of the cosmos*



As it stands, the amount of information contained in this structure (H) is 1.5 bits. More complex trees require more detailed information in order to successfully find one's way from the trunk to a given terminal node. There are two key distinctions which add structure to the tree: the distinction between a single world or multiple worlds, and that between the same shape for all or different shapes in the case of multiple worlds. By exemplifying the B branch in the structure, multiverse theorists like the atomists instantiated the first structural distinction and thereby enabled further growth in the tree. We can also imagine further hypothetical additions to the tree that go beyond the ancients. All the ancient doxai are examples of shapes with positive curvature. None of them consider shapes with no curvature (i.e. flat) or negative curvature (hyperbolic, like a saddle). If we add some hypothetical doxai which exemplify these latter two categories of shape, we get a new three-way distinction under A, as shown in Figure 7.

⁸² The diagram and description reproduce Mansfeld and Runia (2009) 328.

Figure 7. *Effect of adding hypothetical new doxai on diaeretic structure and information of chapter 2.2*

The increase in structure means an increase in information, which has gone from 1.5 to 2.292 bits. In effect, there are more intersections to navigate to get from the trunk to each doxa, so one needs a more complicated set of directions to find them. If diaeretic structure was as important to the tradition of the *Placita* as is commonly supposed, then we would expect new additions to chapters to be restricted to those which make a material contribution to the amount of information. And if this too is the case, then the comparative lack of such additions from later periods would suggest that fundamental and productive new distinctions ceased to be made.

Executing this method in full could therefore help us answer some important questions on the historical development of ancient philosophy, as well as some specific questions regarding the *Placita*, such as:

- (1) To what extent are *doxai* in the *Placita* conceptually determined by the process of diaeresis?
- (2) Which chapters and books are diaeretically more informative than others? Are there notable patterns or trends?
- (3) Which philosophers have the highest degree of dialectical functionality? (I.e. do some philosophers tend to occupy more structurally important positions in a diaeretic tree?)
- (4) When epitomising, does P try to maximise information density by aiming for a maximum amount of structural information with a minimum number of lemmata?

Answering such questions will be left to a future study.

Conclusion

Our muse has left a wandering trail, and it is now time to briefly collect together the most significant results of our study. I have demonstrated that we likely have most (approximately 86%) of Aëtius' original work. Most of the missing doxai will be from chapters where Pseudo-Plutarch is our sole witness to the text; for chapters where we also have the healthy testimony of Stobaeus, we can say with some confidence that very few if any doxai are missing. Mansfeld and Runia's reconstruction of the *Placita* is thus far from a quixotic enterprise. Their text is not the tattered scraps of a mostly lost work, but in many sections presents the body of the *Placita* mostly intact. Arguments that require that the text be more incomplete, like Lebedev's argument of many missing authorial definitions, are probabilistically implausible.

For those parts that are lost, we have estimated the number of doxai likely missing for each philosopher, as well as the number of philosophers likely cited in the missing text who are not cited in the surviving text. I have also extended the problem to consider the total number of missing philosophers who might have been cited in the *Placita* but were not. I have calculated a lower-bound estimate of 266 for the total population of philosophers with dialectically mentionable views on questions of natural philosophy in the relevant time period (7th to 1st century BCE). This figure includes those who are mentioned in the reconstructed text (86 individuals), as well as those who are not, but who would have been mentioned if we had more doxographical text. I also outline a method for comparing the philosophical diversity of the *Placita*'s books, and show that Books 1 and 4 are the most diverse. They have therefore attracted the most philosophical attention within the *Placita*'s tradition, and possibly outside of it too.

I have shown via statistical methods that both chronology and dialectical logic influence the order of doxai within a chapter, but that the balance tipped towards dialectic as time went on, likely indicating the systematic importance of dialectical practice in the Hellenistic era. Some books are more or less dialectical and chronological than others, and this may be due either to differences in subject matter, differences in textual history, or a combination thereof. Book 2 stands out for its prominent deployment of dialectical ordering (and to a lesser extent Book 1). Together with its increased incidence of ellipsis, these are two signs that this particular book and its anterior tradition may have had a longer history of relatively high use that provided more opportunity to condense and arrange the material in a way that maximised its informativeness.

I have also provided some statistics that clarify the *Placita*'s perspective on philosophical history. Trends in citation can communicate the evolution of a field of knowledge, and in this respect the *Placita* presents a scene of a rather fossilised natural philosophy whose most productive period lies centuries before the work's final composition. I have argued that this is not just an artificial side-effect of the work's idiosyncratic methods and aims, but is part of a broader story of the decline of science in the Hellenistic era, at least as carried out under the auspices of philosophy. The petering out in citations of doxai from later periods suggests the failure of an excessively dialectical programme in producing material scientific progress. Lastly, I present a new method for quantifying the amount of information contained in the diaeretic-dialectical structure of a topic, that may help us articulate the way these topics evolve.

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Appendices

Appendix 1. Witness data for Mansfeld and Runia's reconstruction of Aëtius

Note: PS gives the number of lemmata P and S have in common, TS the number of lemmata T and S have in common, etc.. The column headed MLE A gives maximum likelihood estimates of the original chapter sizes in the complete text of Aëtius, A^c . The column headed E[A] gives the expected chapter sizes of the original chapters in A^c . Chapters with bracketed counts (1.1, 1.3, 1.8, 3.8, 4.11, 4.12, 4.21) have been adjusted for the model. The bracketed counts are the adjusted quantities. Chapters marked N/A in MLE A and E[A] columns were excluded from the model. The data is based on Mansfeld and Runia's draft edition of Aëtius' compendium.

Chapt.	P	S	T	MR	PS	TS	TP	MLE A	E[A]
1.0	3	0	0	3	0	0	0	N/A	N/A
1.1	2(1)	0	0	2(1)	0	0	0	1	2.14
1.2	2	2	0	2	2	0	0	2	2.08
1.3	15(13)	23(22)	8	24(22)	14(13)	8	4	22	22.32
1.4	2	0	0	2	0	0	0	N/A	N/A
1.5	4	4	1	5	4	0	0	5	5.08
1.6	1	0	0	1	0	0	0	1	2.14
1.7	10	24	0	25	9	0	0	25	25.69
1.8	3(2)	0	0	3(2)	0	0	0	3	3.71
1.9	7	7(8)	5	8	6(7)	4(5)	4	8	8.12
1.10	4	2(5)	0	5	1(4)	0	0	5	5.16
1.11	4	6(7)	0	7	3(4)	0	0	7	7.21
1.12	5	7	0	7	5	0	0	7	7.21
1.13	2	4	0	4	2	0	0	4	4.13
1.14	2	5	0	5	2	0	0	5	5.16
1.15	6	13	0	13	6	0	0	13	13.37
1.16	3	3	0	3	3	0	0	3	3.11
1.17	4	4	0	4	4	0	0	4	4.13
1.18	5	5(6)	4	6	5	4	3	6	6.10
1.19	2	2(3)	0	3	1(2)	0	0	3	3.11
1.20	1	2	0	2	1	0	0	2	2.08
1.21	4	3(4)	0	4	3(4)	0	0	4	4.13
1.22	4	9	0	9	4	0	0	9	9.27
1.23	6	10	0	10	6	0	0	10	10.29

1.24	3	3	0	3	3	0	0	3	3.11
1.25	4	5	2	5	4	2	2	5	5.08
1.26	3	2	0	3	2	0	0	3	3.11
1.27	3	4	3	6	1	3	1	6	6.10
1.28	5	4	2	5	4	1	2	5	5.08
1.29	4	4	0	4	4	0	0	4	4.13
1.30	2	0	0	2	0	0	0	3	3.71
2.0	1	0	0	1	0	0	0	N/A	N/A
2.1	7	9	2	9	7	2	2	9	9.14
2.2	4	2	1	5	1	1	1	5	5.08
2.3	3	4	2	4	3	2	2	4	4.07
2.4	5	12(13)	3	13	4(5)	3	1	13	13.19
2.5	3	2(3)	0	3	2(3)	0	0	3	3.11
2.5a	0	4	0	4	0	0	0	N/A	N/A
2.6	6	4	0	6	4	0	0	6	6.19
2.7	6	6(7)	0	7	5(6)	0	0	7	7.21
2.8	2	2	0	2	2	0	0	2	2.08
2.9	4	4	0	4	4	0	0	4	4.13
2.10	2	2	0	2	2	0	0	2	2.08
2.11	5	5	0	5	5	0	0	5	5.16
2.12	2	2	0	2	2	0	0	2	2.08
2.13	9	15	10	15	9	10	7	15	15.22
2.14	4	3	0	4	3	0	0	4	4.13
2.15	6	7	0	7	6	0	0	7	7.21
2.16	5	7	0	7	5	0	0	7	7.21
2.17	4	6	0	6	4	0	0	6	6.19
2.18	2	1	0	2	1	0	0	2	2.08
2.19	3	3	0	3	3	0	0	3	3.11
2.20	9	13(14)	7	15	7(8)	5(6)	4	15	15.22
2.21	4	4	4	5	3	3	3	5	5.08
2.22	4	3	2	4	3	2	2	4	4.07
2.23	6	8(9)	0	9	5(6)	0	0	9	9.27
2.24	8	7	0	8	7	0	0	8	8.24
2.25	7	15	6	15	7	6	4	15	15.22
2.26	2	3	1	4	2	0	0	4	4.07
2.27	4	6	0	6	4	0	0	6	6.19
2.28	5	7	0	7	5	0	0	7	7.21
2.29	6	8	0	8	6	0	0	8	8.24
2.30	3	9	0	9	3	0	0	9	9.27
2.31	3	5	0	5	3	0	0	5	5.16
2.32	7	9	0	10	6	0	0	10	10.29
3.0	1	0	0	1	0	0	0	N/A	N/A
3.1	11	10	0	11	10	0	0	11	11.32
3.2	12	12	0	12	12	0	0	12	12.34
3.3	6	15	0	15	6	0	0	15	15.43
3.4	3	6	0	6	3	0	0	6	6.19

3.5	9	6	0	9	6	0	0	5	6.12
3.5a	1	0	0	1	0	0	0	N/A	N/A
3.6	1	0	0	1	0	0	0	N/A	N/A
3.7	3	1	0	4	0	0	0	4	5.62
3.8	2(1)	1	0	2(1)	1	0	0	1	1.05
3.9	5	0	0	5	0	0	0	7	8.42
3.10	5	0	0	5	0	0	0	7	8.42
3.11	3	0	0	3	0	0	0	4	5.27
3.12	2	0	0	2	0	0	0	3	3.71
3.13	4	0	0	4	0	0	0	6	6.85
3.14	2	0	0	2	0	0	0	3	3.71
3.15	11	1	0	11	1	0	0	14	16.10
3.16	6	0	0	6	0	0	0	9	9.99
3.17	5	9	0	9	5	0	0	9	9.27
4.0	1	0	0	1	0	0	0	N/A	N/A
4.1	7	0	0	7	0	0	0	10	11.56
4.2	6	7	7	8	5	6	5	8	8.12
4.3	6	10	6	14	4	4	3	14	14.21
4.4	5	2	5	8	2	0	2	9	9.67
4.5	13	0	11	14	0	0	10	16	17.52
4.6	2	2	0	2	2	0	0	2	2.08
4.7	4	1	5	5	1	1	4	5	6.11
4.7a	0	2	1	2	0	0	0	2	2.11
4.8	4	14	0	14	4	0	0	14	14.40
4.9	3	20	0	20	3	0	0	20	20.56
4.10	3	6	0	6	3	0	0	6	6.19
4.11	8(1)	0	0	8(1)	0	0	0	1	2.14
4.12	6(1)	0	0	6(1)	0	0	0	1	2.14
4.13	5	13	0	13	5	0	0	13	13.37
4.14	4	4	0	4	4	0	0	4	4.13
4.15	4	3	0	4	3	0	0	4	4.13
4.16	4	4	0	4	4	0	0	4	4.13
4.17	2	2	0	2	2	0	0	2	2.08
4.18	2	0	0	2	0	0	0	3	3.71
4.19	7	3	0	7	3	0	0	9	10.40
4.20	2	0	0	2	0	0	0	3	3.71
4.21	5(1)	0	0	5(1)	0	0	0	1	2.14
4.22	3	0	0	3	0	0	0	4	5.27
4.23	3	0	0	3	0	0	0	4	5.27
5.1	4	0	0	4	0	0	0	6	6.85
5.2	3	0	0	3	0	0	0	4	5.27
5.3	6	0	0	6	0	0	0	9	9.99
5.4	3	0	0	3	0	0	0	4	5.27
5.5	3	0	0	3	0	0	0	4	5.27
5.6	1	0	0	1	0	0	0	1	2.14
5.7	8	0	0	8	0	0	0	12	13.13

5.8	3	0	0	3	0	0	0	4	5.27
5.9	3	0	0	3	0	0	0	4	5.27
5.10	4	0	0	4	0	0	0	6	6.85
5.11	3	0	0	3	0	0	0	4	5.27
5.12	3	0	0	3	0	0	0	4	5.27
5.13	3	0	0	3	0	0	0	4	5.27
5.14	3	0	0	3	0	0	0	4	5.27
5.15	5	0	0	5	0	0	0	7	8.42
5.16	3	0	0	3	0	0	0	4	5.27
5.17	6	0	0	6	0	0	0	9	9.99
5.18	6	1	0	6	1	0	0	8	8.97
5.19	6	0	0	6	0	0	0	9	9.99
5.20	5	1	0	5	1	0	0	6	7.54
5.21	2	0	0	2	0	0	0	3	3.71
5.22	1	0	0	1	0	0	0	1	2.14
5.23	3	0	0	3	0	0	0	4	5.27
5.24	4	0	0	4	0	0	0	6	6.85
5.25	4	0	0	4	0	0	0	6	6.85
5.26	4	2	0	4	2	0	0	5	6.12
5.27	2	0	0	2	0	0	0	3	3.71
5.28	1	1	0	2	0	0	0	1	1.84
5.29	3	0	0	3	0	0	0	4	5.27
5.30	5	4	0	6	3	0	0	6	7.40
Totals	587(566)	518(529)	98	786(765)	328(339)	67(69)	66(66)	816	892.93

Appendix 2. Stobaeus' replacements of Aëtian doxai with quotations from Plato and doxai from Arius Didymus

Locus	Aristotle	Plato	Stoics	Pythagoras
1.9.5	1			
1.10.2,4,5	1	1	1	
1.11.5			1	
1.18.6	1			
1.19.2	1			
1.21.2a	1			
2.4.2			1	
2.5.2		1		
2.7.4		1		
2.20.11	1			
2.23.5	1	1		1
Totals	6	4	3	1

Appendix 3. Name-label data

Note: the bracketed number in the 'Citations' column gives the total number of citations. Labels comprising articulated participles will be found under 'those who'. Labels beginning with ὅσοι under 'all who'; with οἱ ἀπό under 'from'; with οἱ περί under 'those around'. Anonymus labels with no description will be found under 'some'. The data is based on Mansfeld and Runia's draft edition of Aëtius' compendium.

English	Greek variations	Citations
†pelles	† πελλῆς	4.10.3 (1)
Academics	οἱ Ἀκαδημαῖκοι, οἱ ἀπὸ τῆς Ἀκαδημίας	4.8.13, 4.9.2, 4.9.19, 4.13.10 (4)
Alcmaeon	Ἀλκμαίων	2.16.2, 2.22.1, 2.29.3, 4.2.2, 4.13.8, 4.16.2, 4.17.1, 4.18.1, 5.3.3, 5.14.1, 5.16.3, 5.17.3, 5.24.1, 5.30.1 (14)
all who assume matter is passive	ὅσοι παθητὴν τὴν ὕλην ὑποτίθενται	1.24.3 (1)
all who create a world through aggregation of fine-particled bodies	ὅσοι κατὰ συναθροισμὸν τῶν λεπτομερῶν σωμάτων κοσμοποιοῦσι	1.24.2 (1)
all who propose atoms and void	ὅσοι τὰ ἄτομα εἰσηγοῦνται καὶ τὸ κενόν	2.3.2 (1)
Anaxagoras	Ἀναξαγόρας	1.3.4, 1.7.6, 1.14.3, 1.24.2, 1.29.4, 1.30.2, 2.1.2, 2.4.7, 2.8.1,

		2.13.3, 2.16.1, 2.20.8, 2.21.3, 2.23.2, 2.25.10, 2.28.6, 2.29.7, 2.29.8, 2.30.3, 3.1.7, 3.2.3, 3.2.10, 3.3.4, 3.4.2, 3.5.8, 3.15.4, 3.16.2, 4.1.3, 4.3.2, 4.7.1, 4.7a.1, 4.9.1, 4.9.6, 4.9.16, 4.19.7, 5.7.4, 5.19.3, 5.20.3, 5.25.2, 5.27.2 (40)
Anaximander	Ἀναξίμανδρος	1.3.2, 1.7.3, 2.1.3, 2.1.4, 2.4.7, 2.11.3, 2.13.7, 2.15.6, 2.16.4, 2.20.1, 2.21.1, 2.24.3, 2.25.1, 2.28.1, 2.29.1, 3.3.1, 3.7.1, 3.10.2, 3.16.1, 4.3.2, 5.19.4 (21)
Anaximenes	Ἀναξίμενης	1.3.3, 1.7.4, 2.1.3, 2.4.7, 2.11.1, 2.13.9, 2.14.3, 2.16.5, 2.19.2, 2.20.3, 2.22.1, 2.23.1, 2.25.2, 3.3.2, 3.4.1, 3.5.7, 3.10.3, 3.15.3, 3.15.8, 4.3.2 (20)
Antipater	Ἀντίπατρος	1.27.6 (1)
Antiphon	Ἀντιφῶν	1.22.7, 2.20.4, 2.28.4, 2.29.3, 3.16.4 (5)
Apollodorus the Athenian	Ἀπολλόδωρος ὁ Ἀθηναῖος	2.16.7 (1)
Apollodorus the Corcyraean	Ἀπολλόδωρος ὁ Κερκυραῖος	3.17.8 (1)
Apollophanes	Ἀπολλοφάνης	4.4.5 (1)
Aratus	Ἄρατος	2.19.3 (1)
Archedemus	Ἀρχέδημος	2.5a.3 (1)
Archelaus	Ἀρχέλαος	1.3.5, 1.7.5, 2.1.3, 2.4.4, 2.4.7, 2.13.6, 3.3.5, 4.3.2 (8)
Aristarchus	Ἀρίσταρχος	1.15.5, 1.15.9, 2.24.7, 4.13.4 (4)
Aristotle	Ἀριστοτέλης, κατὰ τὸν Ἀριστοτέλην	1.0.3, 1.1.2, 1.3.21, 1.7.23, 1.9.5, 1.10.4, 1.11.3, 1.12.3, 1.15.10, 1.16.3, 1.18.6, 1.19.2, 1.21.2a, 1.23.2, 1.29.2, 2.1.2, 2.3.4, 2.4.10, 2.5.1, 2.7.5, 2.9.4, 2.10.1, 2.11.5, 2.13.12, 2.16.3, 2.17.5, 2.20.11, 2.23.5, 2.25.8, 2.26.3, 2.28.2, 2.29.7, 2.30.7, 3.1.9, 3.2.4, 3.3.13, 3.7.4, 3.15.5, 3.17.1, 4.2.6, 4.4.3, 4.5.7, 4.6.2, 4.7.4, 4.8.6, 4.9.3, 4.10.2, 4.13.9, 4.20.1, 5.1.4, 5.3.1, 5.4.2, 5.5.2, 5.6.1, 5.17.2, 5.20.1, 5.23.2, 5.25.1, 5.26.2 (59)
Asclepiades	Ἀσκληπιάδης	1.23.10, 4.2.8, 4.22.2, 5.10.2, 5.21.2, 5.30.6 (6)
Berosus	Βήρωσος	2.25.13, 2.28.1, 2.29.2 (3)
Boethus	Βόηθος	1.7.16, 2.31.5, 3.2.8 (3)
Chrysippus	Χρύσιππος	1.27.4, 1.28.3, 3.3.12, 4.9.14, 4.12.1, 4.15.4 (6)
Cleanthes	Κλεάνθης	1.7.8, 1.14.5, 2.5a.2, 2.14.2, 2.16.1, 2.20.6, 2.25.4, 2.27.4, 4.7a.1 (9)
Crates	Κράτης	2.15.6, 3.17.7 (2)
Critias	Κριτίας	4.3.13 (1)
Critolaus	Κριτόλαος	1.7.12, 1.22.7 (2)
Demetrius	Δημήτριος	1.18.3 (1)
Democritus	Δημόκριτος	1.3.14, 1.7.7, 1.12.6, 1.15.8, 1.18.3, 1.23.3, 1.24.2, 1.25.3, 1.26.2, 1.29.4, 2.1.3, 2.2.4, 2.3.2, 2.4.12, 2.7.2, 2.13.5, 2.15.3, 2.16.1, 2.20.8, 2.23.3, 2.25.10, 2.30.4, 3.1.8, 3.2.3, 3.3.11, 3.10.5, 3.12.2, 3.13.4, 3.15.1, 3.15.7, 4.1.4, 4.3.5, 4.4.7, 4.4.8, 4.5.1, 4.7.4, 4.7a.2, 4.8.5, 4.8.10, 4.9.1, 4.9.6, 4.9.9, 4.10.4, 4.10.5, 4.13.1, 4.14.2, 4.19.5, 5.2.1, 5.3.6, 5.4.3, 5.5.1, 5.7.7, 5.16.1, 5.19.5, 5.20.2 (55)
Dicaearchus	Δικαίαρχος	3.17.2, 4.2.7, 5.1.4 (3)
Diocles	Διοκλῆς	5.9.1, 5.13.2, 5.14.3, 5.18.3, 5.29.2, 5.30.2 (6)
Diodorus Cronus	Διόδωρος ὁ Κρόνος	1.3.18, 1.23.7 (2)

Diodorus the Tyrian	Διόδωρος ὁ Τύριος	1.7.12 (1)
Diogenes of Apollonia	Διογένης Ἀπολλωνιάτης	1.3.10, 1.7.8, 2.1.3, 2.1.8, 2.4.7, 2.8.1, 2.13.4, 2.13.10, 2.20.10, 2.23.6, 2.25.11, 3.2.9, 3.3.8, 4.3.2, 4.3.8, 4.5.8, 4.7.1, 4.9.9, 4.16.3, 4.18.2, 5.15.4, 5.20.5, 5.24.3 (23)
Diogenes the Stoic	Διογένης ὁ Στωικός	2.32.9 (1)
Diotimus	Διότιμος	2.17.3 (1)
Ecphantus	Ἐκφάντος	1.3.17, 2.1.2, 2.3.3, 3.13.3 (4)
Empedocles	Ἐμπεδοκλῆς	1.3.19, 1.5.2, 1.7.19, 1.13.1, 1.15.3, 1.17.3, 1.18.2, 1.24.2, 1.26.1, 1.30.1, 2.1.2, 2.1.6, 2.4.11, 2.6.3, 2.7.7, 2.8.2, 2.10.2, 2.11.2, 2.13.2, 2.20.13, 2.21.2, 2.23.4, 2.24.2, 2.25.6, 2.27.5, 2.28.6, 2.31.1, 2.31.4, 3.3.7, 3.8.1, 3.16.3, 4.3.12, 4.5.9, 4.7.1, 4.7a.2, 4.9.1, 4.9.6, 4.9.15, 4.13.12, 4.14.1, 4.16.1, 4.17.2, 4.22.1, 5.7.1, 5.8.1, 5.10.1, 5.11.1, 5.12.2, 5.14.2, 5.15.3, 5.18.1, 5.19.6, 5.21.1, 5.22.1, 5.24.2, 5.25.4, 5.26.4, 5.27.1, 5.28.1, 5.28.2 (60)
Empiricists	οἱ Ἐμπειρικοί	5.18.3 (1)
Ephorus	Ἐφωρος	4.1.6 (1)
Epicureans	οἱ Ἐπικούρειοι	5.26.3 (1)
Epicurus	Ἐπίκουρος	1.3.16, 1.7.25, 1.8.3, 1.12.5, 1.15.9, 1.18.3, 1.20.2, 1.22.6, 1.23.4, 1.24.2, 1.29.3, 2.1.3, 2.1.5, 2.2.5, 2.3.2, 2.4.13, 2.7.3, 2.13.15, 2.20.14, 2.21.5, 2.22.4, 3.4.5, 3.15.11, 4.3.11, 4.4.7, 4.5.6, 4.7.4, 4.8.2, 4.8.10, 4.9.5, 4.9.6, 4.9.12, 4.9.20, 4.13.1, 4.14.2, 4.19.4, 4.23.2, 5.1.2, 5.3.5, 5.5.1, 5.16.1, 5.19.5, 5.20.2 (43)
Epidicus	Ἐπίδικος	2.4.3 (1)
Epigenes	Ἐπιγένης	3.2.7 (1)
Erasistratus	Ἐρασίστρατος	4.5.4, 5.9.3, 5.10.3, 5.29.1, 5.30.3 (5)
Eratosthenes	Ἐρατοσθένης	1.21.3, 2.31.3 (2)
Eudoxus	Εὐδοξος	2.19.3, 4.1.7 (2)
Euripides	Εὐριπίδης	5.19.3 (1)
Euthymenes	Εὐθυμένης	4.1.2 (1)
from Democritus	οἱ ἀπὸ Δημοκρίτου	1.9.3 (1)
from Leucippus	οἱ ἀπὸ Λευκίππου	1.14.4 (1)
From Plato	οἱ ἀπὸ Πλάτωνος	3.16.6, 4.16.4 (2)
from Thales	οἱ ἀπὸ Θάλεω, οἱ ἐφεξῆς	1.9.2, 1.11.6, 1.16.1, 1.17.1, 1.18.1, 3.9.1, 3.11.1 (7)
from the ancients	οἱ ἀπὸ τῶν ἀρχαίων	4.8.9 (1)
from the mathematicians	οἱ ἀπὸ τῶν μαθηματικῶν	2.30.8, 2.31.2, 4.14.3 (3)
Hecataeus	Ἑκαταῖος	2.20.6 (1)
Heraclides	Ἡρακλείδης	1.13.4, 2.1.7, 2.13.14, 2.25.14, 3.2.6, 3.13.3, 3.17.1, 4.3.6, 4.9.6 (9)
Heraclitus	Ἡράκλειτος	1.3.9, 1.5.3, 1.7.13, 1.13.2, 1.23.8, 1.27.1, 1.28.1, 2.1.2, 2.4.1, 2.11.4, 2.13.8, 2.17.4, 2.20.6, 2.21.4, 2.22.2, 2.24.4, 2.25.2, 2.27.3, 2.28.7, 2.29.3, 2.32.8, 3.3.9, 4.3.4, 4.3.14, 4.7.2, 5.23.1 (26)
Herodotus	Ἡρόδοτος	4.1.5 (1)

Herophilus	Ἡρόφιλος	1.23.9, 4.5.5, 4.22.3, 5.2.3, 5.15.5, 5.29.3 (6)
Hestiaeus	Ἑστιαῖος	1.22.4, 4.13.13 (2)
Hiketes	Ἰκέτης	3.9.2 (1)
Hipparchus	Ἱππαρχος	4.13.5 (1)
Hippasus	Ἱππασος	1.3.9, 1.5.3, 4.3.4 (3)
Hippo	Ἱππων	4.3.9, 5.5.3, 5.7.3, 5.7.8 (4)
Hippocrates	Ἱπποκράτης	4.5.2 (1)
Ion	Ἴων	2.25.12 (1)
Leophanes	Λεωφάνης	5.7.5 (1)
Leucippus	Λεύκιππος	1.3.13, 1.18.3, 1.25.4, 2.1.3, 2.2.4, 2.3.2, 2.4.7, 2.7.2, 3.3.10, 3.10.4, 3.12.1, 4.3.7, 4.8.5, 4.8.10, 4.9.9, 4.13.1, 4.14.2, 5.4.1, 5.7.6, 5.25.3 (20)
mathematicians	οἱ μαθηματικοί	2.15.5, 2.16.2, 2.16.6, 2.29.7, 5.18.6 (5)
Melissus	Μέλισσος	1.7.18, 1.24.1, 2.1.2, 2.1.8, 2.4.5, 4.9.1 (6)
Metrodorus	Μητρόδωρος	1.3.15, 1.5.5, 1.18.3, 2.1.3, 2.15.6, 2.17.1, 2.18.2, 2.20.8, 2.28.6, 3.1.5, 3.2.11, 3.3.3, 3.4.3, 3.5.9, 3.7.3, 3.9.5, 3.15.6, 3.16.5, 4.9.1 (19)
Mnesarchus	Μνήσαρχος	1.7.15 (1)
more recent ones	οἱ νεώτεροι	2.29.5, 4.5.13 (2)
Ocellus	Ὀκελλος	2.25.14 (1)
Oinopides	Οἰνοπίδης	1.7.8 (1)
Parmenides	Παρμενίδης, Παρμενίδην	1.7.17, 1.24.1, 1.25.3, 2.1.2, 2.4.5, 2.7.1, 2.11.1, 2.11.4, 2.13.8, 2.15.7, 2.20.3, 2.20.15, 2.25.2, 2.26.2, 2.28.6, 2.30.5, 3.1.6, 3.14.2, 3.15.7, 4.3.4, 4.5.6, 4.7a.2, 4.9.1, 4.9.6, 4.13.6, 5.7.2, 5.7.4, 5.11.2, 5.28.2, 5.30.4 (30)
Peripatetics	οἱ Περιπατητικοί, τινες ἕτεροι τῆς αὐτῆς αἵρέσεως	1.0.3, 1.11.4, 4.3.10, 4.8.4, 4.8.14, 4.9.7, 4.9.13 (7)
Philolaus	Φιλόλαος	1.3.12, 2.5.3, 2.5a.4, 2.7.6, 2.20.12, 2.30.1, 3.11.3, 3.13.2 (8)
physicians	οἱ ἰατροί	5.8.3, 5.12.1, 5.13.1, 5.17.4, 5.30.5 (5)
physicists	οἱ φυσικοί	2.6.1 (1)
Plato	Πλάτων	1.3.20, 1.5.4, 1.7.22, 1.8.2, 1.9.4, 1.10.2, 1.11.2, 1.12.2, 1.15.4, 1.17.4, 1.19.1, 1.21.2, 1.22.1, 1.22.9, 1.23.1, 1.25.5, 1.26.3, 1.27.2, 1.28.2, 1.29.1, 2.1.2, 2.4.9, 2.5.2, 2.5a.1, 2.6.4, 2.6.6, 2.7.4, 2.9.4, 2.10.1, 2.13.11, 2.15.4, 2.16.6, 2.17.6, 2.19.1, 2.20.7, 2.23.5, 2.25.7, 2.29.7, 3.15.10, 3.17.5, 4.2.5, 4.4.1, 4.5.1, 4.6.1, 4.7.1, 4.7.5, 4.7a.1, 4.8.3, 4.9.1, 4.9.11, 4.13.7, 4.16.4, 4.19.1, 4.20.1, 5.1.1, 5.3.4, 5.4.2, 5.15.1, 5.20.1, 5.20.4, 5.26.1 (61)
Polemon	Πολέμων	1.7.20 (1)
Polybus	Πόλυβος	5.18.3, 5.18.5 (2)
Posidonius	Ποσειδώνιος	1.7.10, 1.28.5, 2.9.3, 2.25.5, 3.1.11, 3.17.4, 4.13.11 (7)
Protagoras	Πρωταγόρας	4.9.1 (1)
Pythagoras	Πυθαγόρας	1.3.7, 1.7.9, 1.8.2, 1.10.3, 1.11.3, 1.21.1, 1.23.1, 1.24.3, 1.25.2, 2.1.1, 2.1.2, 2.4.1, 2.6.2, 2.6.5, 2.10.1, 2.12.1, 2.12.2, 2.23.5, 2.25.15, 2.28.6, 3.14.1, 4.2.3, 4.4.1, 4.5.14, 4.7.1, 4.7.5, 4.7a.1, 4.9.1, 4.9.11, 4.13.6, 4.20.1, 5.1.3, 5.3.2, 5.4.2, 5.5.1, 5.20.4 (36)

Pythagoreans	οἱ ἀπὸ Πυθαγόρου, οἱ Πυθαγορικοί, οἱ Πυθαγόρειοι, οἱ Πυθαγόρου διάδοχοι	1.9.2, 1.14.2, 1.15.2, 1.15.7, 1.16.1, 2.9.1, 2.12.1, 2.13.14, 2.22.3, 2.24.2, 2.29.4, 2.30.1, 3.1.2, 3.2.1, 4.4.6, 4.14.3 (16)
Pytheas	Πυθέας	3.17.3 (1)
Seleucus	Σέλευκος	2.1.7, 3.17.9 (2)
Socrates	Σωκράτης	1.3.20, 1.7.22, 1.10.2 (3)
Some	ἔνιοι, τινες, οἱ δέ, οἱ μέν, ἄλλοι	1.15.11, 1.15.12, 1.15.13, 1.23.5, 1.23.6, 2.2.2, 2.2.3, 2.3.1, 2.14.4, 2.23.8, 2.24.6, 2.26.4, 2.27.6, 2.30.2, 2.32.3, 2.32.4, 2.32.5, 2.32.6, 2.32.7, 2.32.10, 3.1.3, 3.1.4, 3.2.2, 3.13.1, 3.15.9, 4.5.10, 4.5.11, 4.5.12, 4.8.11, 4.9.8, 4.9.17, 4.10.6, 5.17.5, 5.17.6, 5.19.1, 5.19.2, 5.23.3 (37)
Speusippus	Σπεύσιππος	1.7.11 (1)
Sphaerus	Σφαῖρος	4.15.1 (1)
Stoics	οἱ Στωικοί, οἱ ἀπὸ τῆς Στοᾶς, οἱ ἀπὸ Ζήνωνος, οἱ ἀπὸ Ζήνωνος Στωικοί, οἱ πλείους τῶν Στωικῶν, οἱ ἀπὸ τῶν Στωικῶν	1.0.2, 1.5.1, 1.6.1, 1.7.24, 1.8.2, 1.9.8, 1.10.5, 1.11.5, 1.11.7, 1.12.4, 1.18.5, 1.20.1, 1.22.2, 1.27.3, 1.28.4, 1.29.4, 2.1.9, 2.2.1, 2.4.2, 2.4.8, 2.6.1, 2.9.2, 2.14.1, 2.15.2, 2.17.4, 2.22.3, 2.23.7, 2.25.5, 2.26.1, 2.27.1, 2.28.3, 2.29.7, 2.30.6, 3.1.10, 3.3.15, 3.7.2, 3.8.1, 3.9.3, 3.10.1, 3.15.2, 4.3.3, 4.4.4, 4.5.7, 4.7.3, 4.8.1, 4.8.7, 4.8.8, 4.8.12, 4.9.4, 4.9.18, 4.10.1, 4.11.1, 4.15.2, 4.19.6, 4.20.2, 4.21.1, 4.23.1, 5.1.1, 5.9.2, 5.10.4, 5.11.3, 5.12.3, 5.13.3, 5.15.2, 5.16.2, 5.17.1, 5.23.1, 5.24.4, 5.26.3, 5.30.5 (70)
Strato	Στράτων	1.3.24, 1.12.7, 1.18.4, 1.19.3, 1.22.5, 2.11.4, 2.17.2, 3.2.5, 3.3.14, 4.5.3, 4.13.3, 4.23.3, 5.2.2, 5.4.3, 5.8.2, 5.24.4 (16)
Thales	Θαλῆς	1.2.2, 1.3.1, 1.7.2, 1.8.2, 1.11.6, 1.17.1, 1.25.1, 2.1.2, 2.12.1, 2.13.1, 2.20.9, 2.24.1, 2.25.9, 2.28.5, 2.29.7, 3.9.1, 3.10.1, 3.15.1, 4.1.1, 4.2.1, 5.26.1 (21)
the majority	οἱ πλείους	1.22.8 (1)
Theophrastus	Θεόφραστος	1.0.3 (1)
these	οὗτοι	4.3.1 (1)
those around Anaxagoras	οἱ περὶ Ἀναξαγόραν	1.17.2 (1)
those around Aristotle	οἱ περὶ Ἀριστοτέλην, οἱ περὶ τὸν Ἀριστοτέλη	1.2.1, 5.18.4 (2)
those around Democritus	οἱ περὶ Δημόκριτον	1.17.2 (1)
those around Hippocrates	οἱ περὶ Ἱπποκράτην	5.18.4 (1)
those around Plato	οἱ περὶ Πλάτωνα	1.2.1 (1)
those positing the atoms	οἱ τὰς ἀτόμους εἰσάγοντες, οἱ τὰς ἀτόμους, οἱ τὰ ἄτομα	1.9.7, 1.16.2, 4.9.10 (3)
those positing the infinitesimals	οἱ τὰ ἐλάχιστα	4.9.10 (1)
those positing the	οἱ τὰ ἀμερῇ	1.9.7, 4.9.10 (2)

partless		
those positing the simipartials	οἱ τὰ ὁμοιομερῆ	4.9.10 (1)
those who claimed the world-order is eternal	οἱ φάμενοι τὴν διακόσμησιν αἰώνιον ὑπάρχειν	2.4.6 (1)
those who say matter is water, fire, air or earth	οἱ ὕδωρ λέγοντες ἢ πῦρ ἢ ἀέρα ἢ γῆν τὴν ὕλην	1.9.6 (1)
Timaeus	Τίμαιος	3.17.6, 5.18.2 (2)
Timagoras	Τιμαγόρας	4.13.2 (1)
Xenarchus	Ξέναρχος	4.3.10 (1)
Xenocrates	Ξενοκράτης	1.3.22, 1.7.21, 1.13.3, 1.17.3, 1.22.3, 2.15.1, 4.2.4, 4.4.2, 4.7.1, 4.7a.1 (10)
Xenophanes	Ξενοφάνης	1.3.11, 2.1.3, 2.4.5, 2.13.13, 2.18.1, 2.20.2, 2.20.5, 2.24.5, 2.24.8, 2.25.3, 2.28.1, 2.29.6, 2.30.9, 3.2.12, 3.3.6, 3.4.4, 3.9.4, 3.11.2, 4.9.1, 5.1.2 (20)
Zeno the Eleatic	Ζήνων ὁ Ἐλεάτης	1.7.18, 1.24.1, 4.9.1 (3)
Zeno the Stoic	Ζήνων ὁ Στωικός	1.3.23, 1.7.14, 1.15.6, 1.18.5, 1.20.1, 1.27.5, 2.1.2, 2.11.4, 5.4.1, 5.5.2 (10)

Appendix 4. A binomial model of the complete original text of the *Placita*

Let

P be the set $\{p_1, p_2, \dots, p_n\}$ of the number of lemmata in Pseudo-Plutarch for each chapter;

S be the set $\{s_1, s_2, \dots, s_n\}$ of the number of lemmata in Stobaeus for each chapter;

T be the set $\{t_1, t_2, \dots, t_n\}$ of the number of lemmata in Theodoret for each chapter;

M^p be the set $\{m_1^p, m_2^p, \dots, m_n^p\}$ of the number of matching lemmata between P and S in each chapter;

M^t be the set $\{m_1^t, m_2^t, \dots, m_n^t\}$ of the number of matching lemmata between T and P or S in each chapter;

A^c be the set $\{a_1, a_2, \dots, p_n\}$ of the number of lemmata in each chapter of the original text of A;

$\vartheta_p, \vartheta_s, \vartheta_t$ are the selective probabilities of P, S and T.

For any chapter, we can formulate the probability of the observed data given the selective probabilities and a hypothetical original chapter size a_i as the joint probability of two events:

$$P(p_i, s_i, t_i, m_i^p, m_i^t | a_i, \vartheta_p, \vartheta_s, \vartheta_t) = P(p_i, s_i, t_i | a_i, \vartheta_p, \vartheta_s, \vartheta_t) \times P(m_i^p, m_i^t | a_i, p_i, s_i, t_i). \quad (3)$$

The first term on the right is the probability that each witness copies its observed number of lemmata. If we assume that each witness makes its selections independently, then p_i , s_i and t_i will be binomially distributed. Letting f be the probability mass function of the binomial distribution,

$$P(p_i, s_i, t_i | a_i, \vartheta_p, \vartheta_s, \vartheta_t) = f(p_i; a_i, \vartheta_p) \times f(s_i; a_i, \vartheta_s) \times f(t_i; a_i, \vartheta_t). \quad (4)$$

The second term is the probability that P picks m_i^p matches with S and T m_i^t matches with either P or S. Assuming that each witness is indifferent to which doxai they select, then by elementary combinatorial reasoning

$$P(m_i^p, m_i^t | a_i, p_i, s_i, t_i) = \frac{\binom{s_i}{m_i^p} \binom{a_i - s_i}{p_i - m_i^p}}{\binom{a_i}{p_i}} \times \frac{\binom{s_i + p_i - m_i^p}{m_i^t} \binom{a_i - s_i - p_i + m_i^p}{t_i - m_i^t}}{\binom{a_i}{t_i}}. \quad (5)$$

We now define the likelihood function

$$\mathcal{L}(A^c, \vartheta_p, \vartheta_s, \vartheta_t | P, S, T, M^p, M^t) = \prod_i P(p_i, s_i, t_i, m_i^p, m_i^t | a_i, \vartheta_p, \vartheta_s, \vartheta_t). \quad (6)$$

Any reasonable estimate of our witnesses' selective probabilities will depend on A^c , so that by estimating A^c we will also be estimating $\vartheta_p, \vartheta_s, \vartheta_t$. The simplest estimate for these selective probabilities is the proportion of total lemmata (in the chapters they choose to copy) that each witness copies. Thus, let A^p, A^s, A^t be the sets of chapter sizes in A^c that are witnessed by each of our witnesses. Next set

$$\vartheta_p = \frac{\sum_i p_i}{\sum_i a_i^p}, \vartheta_s = \frac{\sum_i s_i}{\sum_i a_i^s}, \vartheta_t = \frac{\sum_i t_i}{\sum_i a_i^t}. \quad (7)$$

Maximising the likelihood function with respect to A^c will find the original chapter sizes and corresponding selective probabilities most likely to have generated our observed set of data:

$$\hat{A}^c = \arg \max_{A^c} \mathcal{L}(A^c, \vartheta_p, \vartheta_s, \vartheta_t | P, S, T, M^p, M^t). \quad (8)$$

The problem does not have a straightforward analytic solution and has been solved by Excel's solver add-in.

To find the expected size of A^c , we begin with Bayes' theorem, which states that for two events A and B

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}. \quad (9)$$

If we let A be the event that a chapter in Aëtius had a entries, and B be the event that p, s, t, m^p, m^t take their observed values, then $P(B|A)$ is given by equation 3. We then need to

find $P(A)$ and $P(B)$ to calculate our desired probability $P(A|B)$, which is the probability that a chapter had a entries given the observed values of our variables. By the theory of total probability, if the event A may take a defined number of different values which are mutually exclusive and exhaustive, then $P(B) = \sum_j P(B|A_j)P(A_j)$. Bayes' theorem may then be rewritten

$$P(A_i|B) = \frac{P(B|A_i)P(A_i)}{\sum_j P(B|A_j)P(A_j)}. \quad (10)$$

$P(A)$ is our assessment of the probability of event A prior to some evidence B been taken into account, and is often little more than a subjective expression of uncertainty. Priors come in two types, informative and uninformative. In a case like ours in which we can offer no definite information about the expected distribution of A , we must make do with an uninformative prior. The simplest kind of uninformative prior is to follow the principle of indifference and assign equal prior probability to all possibilities. In our case the priors then cancel and Bayes' theorem then reduces to

$$P(A_i|B) = \frac{P(B|A_i)}{\sum_j P(B|A_j)}. \quad (11)$$

The denominator in equation 11 sums the probabilities of our observed data for every possible value of a . The smallest possible size of a chapter is equal to $p + s + t - m_p - m_t$, and is equivalent to the size of a reconstructed chapter in *MR*. Let mr stand for this minimum. There will be a practical limit to how big a chapter can be above mr . If we let n stand for the maximum number of potentially missing doxai, then the set $\{mr, mr + 1, mr + 2, \dots, mr + n\}$ will exhaust the possible sizes of a .

There are two obvious routes for deciding the maximum number of potentially missing lemmata for each chapter. We can set n dynamically chapter by chapter, ensuring that is high enough that the marginal effect of increasing it further is negligible. To do this we can just stop iterating the calculation with increasing n when the probability that a has n missing lemmata ceases to be larger than some threshold. More formally, the calculation will continue while

$$P(a = mr + n | a \in \{mr, mr + 1, mr + 2, \dots, mr + n\}) > threshold. \quad (12)$$

Alternatively, we can make a judgement call and set some cut-off value that applies to all chapters. On the current evidence of our witnesses, the greatest number of missing lemmata we can be sure about when we have healthy testimony from both P and S is found at §4.3, where T contributes an extra 2 lemmata. Perhaps 3 then is a reasonable setting for n . As we shall see, following this second route is less conservative and reduces the model's estimation of missing doxai.

Rewriting equation 11 in the variables of our case we get

$$P(a|p, s, t, m^p, m^t \dots) = \frac{P(p, s, t, m^p, m^t | a \dots)}{\sum_{u=mr}^{mr+n} P(p, s, t, m^p, m^t | u \dots)}. \quad (13)$$

This formula allows us to assign a definite probability to each possible size of the original Aëtian chapter given our observed data. Ultimately, however, we are interested in the expected chapter size of the original. This is the expected value of a , which we may write as the weighted average

$$E[a] = \sum_{a=mr}^{mr+n} P(a|p, s, t, m^p, m^t \dots) a. \quad (14)$$

The number of lemmata most likely missing from a given chapter is the difference between $E[a]$ and a chapter's minimal possible size, MR . The expected value of a sum of weighted random variables is simply the sum of their respected weighted means. So the expected size of Aëtius for chapters with P and S or T is just the sum

$$E[A^c] = \sum_i E[a_i]. \quad (15)$$

If we initialise the model with provisional selective probabilities based on the reconstruction, they can be revised after a single run by using the model's estimation of total lemmata in A^c rather than the total lemmata in MR . The revised selective probability for P, for instance, will be $\frac{\sum_i p_i}{\sum_i E[a_i^p]}$. We can then run the model again with these new revised selective probabilities to get yet another estimation of the original size of these chapters.

Let θ be a vector containing the estimated parameters $\vartheta_p, \vartheta_s, \vartheta_t$, and F be a function of θ that applies our model to estimate the proportion of total lemmata copied by each witness. We thus need to find θ such that

$$\theta = F(\theta|P, S, T, M^p, M^t). \quad (16)$$

This equation's solution will give expected values for both θ and A^c (the latter since θ is defined in terms of A^c).

Appendix 5. Synthetic validation of binomial model

We create a set of 100 test chapters as follows:

- 1) Arbitrarily set values for the selective probabilities of P and S.⁸³
- 2) Randomly generate values of a between 2 and 25 (the observed bounds for chapters of MR with 2 or more witnesses).
- 3) Generate values of p, s, t, m^p, m^t for each chapter based on the selective probabilities and the value of a . For instance, if a chapter's size is 5, P copies the first doxa if a randomly generated decimal is less than his selective probability, but omits it if the decimal is greater. We repeat this process for each doxa in the chapter. Again, we are flipping digital coins weighted at the selective probability to see whether each of our witnesses copies a doxa.

Now we have our test chapters, we can see how good the model is at finding the real selective probabilities on the basis of p, s, t, m^p, m^t .⁸⁴ To begin with we feed the model initial selective probabilities which are just the number of doxai in each witness as a proportion of MR. The model then uses these in conjunction with the values of p, s, t, m^p, m^t to estimate the most likely number of missing doxai. I have employed the dynamic method given in equation 12 to set n for each chapter and applied a threshold of 0.001. The model adds these missing doxai to MR,

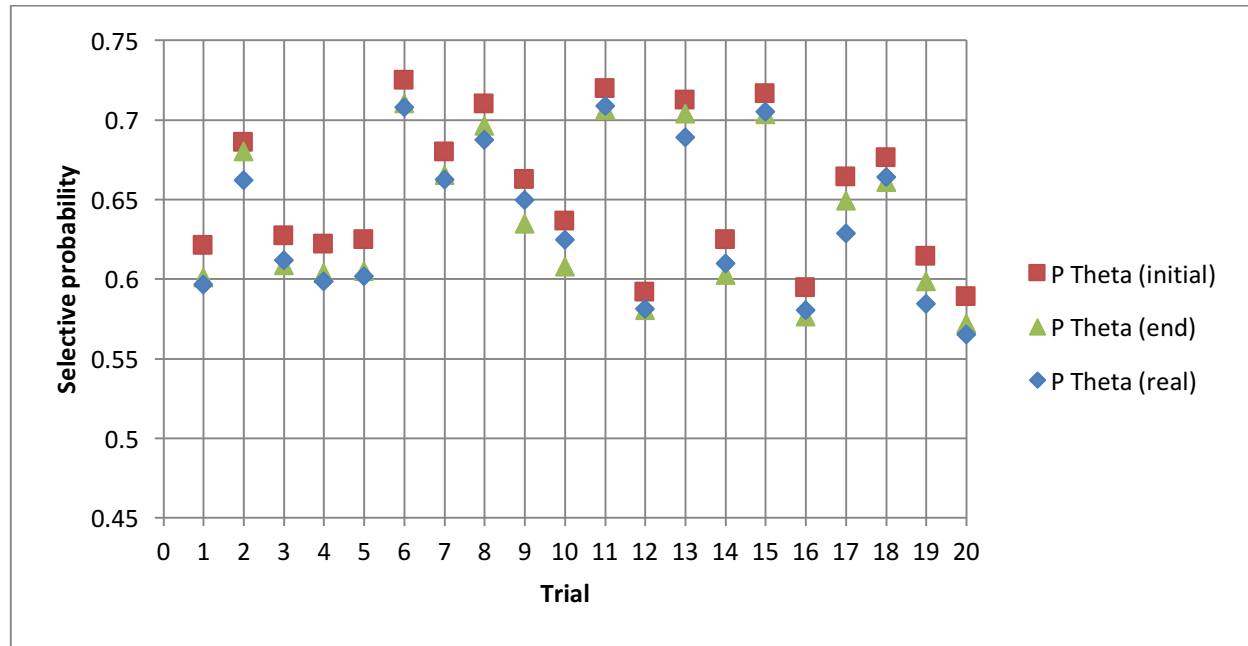
⁸³Note that validation removes T from the model for simplicity's sake. For the experiment described below, I set $\vartheta_p = 0.6362, \vartheta_s = 0.9287$.

⁸⁴Note that by the 'real' selective probability here I mean that observed in the generated test data – which in P's case, for example, is just the sum of his chapter sizes divided by the sum of a – not the probability used in the selection process itself, which is given above in note 83. This observed selective probability will vary around the procedural one but average out to it.

recalculates the selective probabilities, and runs itself again, producing new estimates of the selective probabilities with each iteration. The procedure is halted when further iterations produce a change in the estimated selective probabilities of less than 10^{-5} . These final probabilities are our solution to equation 16.

The graph below gives the outcomes of 20 repeats of the above experiment.

Figure 8. *Model performance in finding real θ*



As can immediately be seen, the model does a good job at getting closer to the real selective probabilities. The following table summarises the results of 1000 such trials:

Table 24. *Average and RMSE of model's prediction of θ_p and θ_s*

	PS-PLUTARCH			STOBAEUS		
	Theta Initial	Theta End	Theta Real	Theta Initial	Theta End	Theta Real
AVERAGE	0.6512	0.6341	0.6331	0.9584	0.9331	0.9316
RMSE	0.0191	0.0097		0.0283	0.0144	

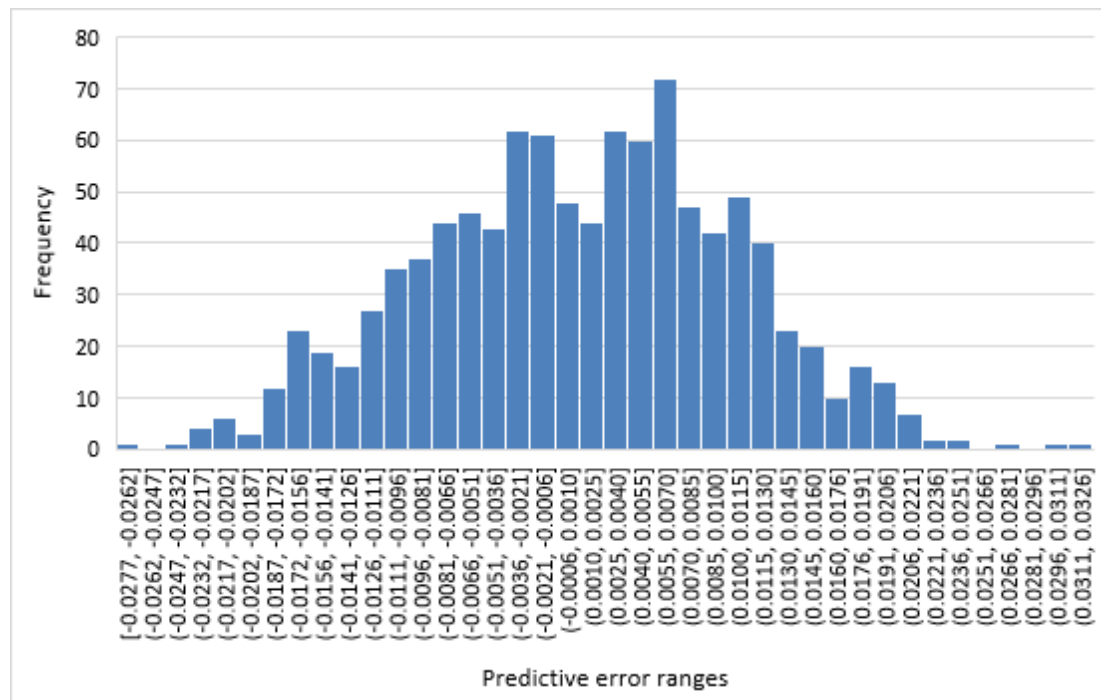
The average of the predicted selective probabilities are very close to the average of the real ones, which indicates that the model is a good fit given the assumptions. RMSE is the root mean squared error, the standard deviation of differences between the final estimation of theta and the real value. The lower its value, the better the predictive power of the model. As expected, we see

that on this measure the model improves on the initial estimate that assumes MR is complete, reducing the average error and its variation.

Since the number of missing doxai can be calculated from the selective probabilities, this result tells us that with these particular settings the model *on average* finds close to the correct number of missing doxai. Yet we do not know whether a specific given case is an average one. We thus need to examine the distribution of the predictive errors from our validation experiment to obtain a ballpark for our prediction. A complete investigation of the model's predictions would examine how the distribution of these errors changes its shape with different underlying selective probabilities, a matter too lengthy to pursue here. For our purposes, we are naturally most interested in cases similar to the one we are trying to model. If the model's assumptions are correct, then the real selective probabilities of P, S and T are bound to be somewhere in the vicinity of its predictions. We thus reason that the true distribution of predictive errors for the given set of observed data should be roughly similar to those in the synthetic validation experiment, where the procedural selective probability was set to the values predicted on the evidence of the observed data.

A frequency histogram of these errors when compartmentalised into 40 bins of equal size looks as follows:

Figure 9. Binned distribution of predictive errors of θ_p from 1000 synthetic trials



68% of the errors lie within the range $[-0.0089, 0.0108]$ and 95% within the range $[-0.0173, 0.0193]$. If we may transport these same error bounds to our own case, then then the upper and lower limits of the predictions for these intervals are as follows:

	68%	95%
ϑ_p lower	0.6273	0.6189
ϑ_p upper	0.6470	0.6555
Missing lemmata lower	32	23
Missing lemmata upper	52	60

It is worth reiterating that these are only rough estimates, and hold only if the model's assumptions hold.

Appendix 6. Expected value of selective probability for each name-label

Let mr_l be the number of doxai in *MR* labelled with name-label l , p_l the number of these doxai copied by P , and θ_l the selective probability with which P copies doxai labelled with name-label l . We need to estimate θ_l , which can range continuously over the interval $[0, 1]$. If we assume $p_l \sim \text{Binomial}(mr_l, \theta_l)$, then it follows by Bayes' theorem that

$$P(\theta_l | p_l, mr_l) = \frac{g(\theta_l)P(p_l | \theta_l, mr_l)}{\int_0^1 g(u_l)P(p_l | u_l, mr_l)du_l}, \quad (17)$$

where the function $g(\theta_l)$ specifies the prior. The expected value of θ_l is

$$E[\theta_l | p_l, mr_l] = \frac{\int_0^1 \theta_l g(\theta_l)P(p_l | \theta_l, mr_l)d\theta_l}{\int_0^1 g(u_l)P(p_l | u_l, mr_l)du_l}. \quad (18)$$

If we use a beta function $\text{Beta}(\beta_1, \beta_2)$ for our prior, then this formulation neatly analyses⁸⁵ to

$$E[\theta_l | p_l, mr_l, \beta_1, \beta_2] = \frac{\beta_1 + p_l}{\beta_1 + \beta_2 + mr_l}. \quad (19)$$

⁸⁵ Dan Navarro and Amy Perfors, 'An introduction to the Beta-Binomial model', https://www.cs.cmu.edu/~10701/lecture/technote2_betabinomial.pdf

Finally, if we assume the uniform prior $\text{Beta}(1,1)$, then

$$E[\theta_l] = \frac{1 + p_l}{2 + mr_l}. \quad (20)$$

Appendix 7. Modelling unseen species of philosopher

What follows here is a rehash of the relevant equations and methods in Efron and Thisted's paper.⁸⁶ Assume that each philosopher s enters the *Placita*'s trap via a Poisson process with expectation λ_s captures per unit of time, where the passing of time is measured in doxai. λ varies by philosopher, and we will let $G(\lambda)$ denote its empirical cumulative distribution. It follows that the expected number of philosophers caught x times in the *Placita*'s reconstruction, $E[n_x]$, is

$$\eta_x = E[n_x] = S \int_0^\infty \frac{e^{-\lambda} \lambda^x}{x!} dG(\lambda), \quad (21)$$

where S denotes the total number of philosophers in the doxographer's vocabulary. For some new amount of doxographical text t , expressed as a ratio of the number of new doxai to the number of doxai in the reconstruction, the expected number of new species observed for the first time in this extra text is

$$\Delta(t) = S \int_0^\infty e^{-\lambda} (1 - e^{-\lambda t}) dG(\lambda). \quad (22)$$

Some algebra shows $\Delta(t)$ can be reformulated without S , which we do not know, as the oscillating series

$$\Delta(t) = \eta_1 t - \eta_2 t^2 + \eta_3 t^3 - \dots. \quad (23)$$

We estimate that there are around 127 doxai missing from the reconstruction. If we set $t =$

$\frac{123}{751} = 0.164$, and plug in the empirical data n_x as estimates for η_x (see Table 9), then

⁸⁶ Efron and Thisted (1976). They in turn depend in large part upon Good and Toulmin (1956) and Fisher, Corbet, and Williams (1943).

$$\widehat{\Delta}(0.162) = 36 \times 0.164 - 9 \times 0.164^2 + 6 \times 0.164^3 - \dots = 5.66 \approx 6$$

A conservative approximation of the variance of this estimate is to treat the n_x as independent Poisson variates and take their sum

$$\text{var}\{\widehat{\Delta}(0.165)\} = \sum_{x=1}^{\infty} \eta_x \simeq \sum_{x=1}^{\infty} n_x = 86.$$

This gives a standard deviation of about 9. For their Shakespeare data, Efron and Thisted show that the standard deviation can be reduced by halting the summation in 23 at some choice of x denoted x_0 . Setting $x_0 = 4$ in our own case gets the standard deviation down to just over 7 with no appreciable difference in the estimate ($\Delta^{x_0=4}(0.164) = 5.66$). The oscillating series in 23 gets out of control with t larger than one, but convergence can be forced through an Euler transformation that averages the series over a binomial distribution so that

$$\widehat{\Delta} = \sum_{x=1}^{\infty} h_x n_x, \quad (24)$$

where

$$h_x = \begin{cases} (-1)^{x+1} t^x P(Z \geq x) & x = 1, \dots, x_0 \\ 0 & x > x_0 \end{cases}$$

and Z is a binomially distributed random variable with parameters $\{x_0, 1/(1+t)\}$. Efron and Thisted also show that $\widehat{\Delta}$ is a lower bound in expectation for $\Delta(t)$ provided that

$$H(\lambda) \leq 1 - e^{-\lambda t} \text{ for all } \lambda > 0, \quad (25)$$

$$H(\lambda) = \sum_{x=1}^{\infty} h_x \lambda^x / x!.$$

Experimentation with the data of our own case confirms that this inequality is satisfied for $t = 0.162$, so our estimate of 7 missing philosophers also serves as a reasonable lower bound for extrapolations to this amount of new text.

Efron and Thisted also describe a useful model originally due to Fisher, in which λ follows a gamma distribution with density

$$g(\lambda) = \frac{1}{\beta^\alpha \Gamma(\alpha)} \lambda^{\alpha-1} e^{-\lambda/\beta}, \quad (26)$$

where α is the shape parameter and β the rate. Substitution of 26 for $dG(\lambda)$ in 21 and 22 yields

$$\eta_x = \eta_1 \frac{\Gamma(x + \alpha)}{x! \Gamma(1 + \alpha)} \gamma^{x-1} \quad (27)$$

and

$$\Delta(t) = \begin{cases} -\eta_1 [(1 + \gamma t)^{-\alpha} - 1]/\gamma\alpha & \alpha \neq 0 \\ (\eta_1/\gamma) \log(1 + \gamma t) & \alpha = 0, \end{cases} \quad (28)$$

where $\gamma = \beta/(\beta + 1)$. Fisher's model may be fitted by maximising a multinomial distribution of the vector $(n_1, \dots, n_{x_0})$ with number of trials equal to its sum N_0 and an associated vector of probabilities proportional to 27. If we wish to fit η_1 , we may set it so that the sum of $\eta_1 + \dots + \eta_{x_0}$ matches the observed sum $n_1 + \dots + n_{x_0}$. To evaluate the goodness of fit, we compare the likelihood of an alternative hypothesis with vector of probabilities $(n_1/N_0, \dots, n_{x_0}/N_0)$ and then compute Wilks's likelihood ratio statistic, whose distribution with increasing N_0 is approximated by a chi-squared distribution of $x_0 - 3$ degrees of freedom. Table 10 displays the model's maximum likelihood fits for different values x_0 . It will be seen that the fits are relatively good and that in no case does the test statistic justify rejecting the model.

Table 25. Maximum likelihood fits of Fisher's negative binomial model to the first x_0 values of n_x

x_0	N_0	$\hat{\alpha}$	$\hat{\gamma}$	$\hat{\eta}_1$	$\chi^2_{x_0-3}$	p value	$\Delta(0.164)$
5	56	-0.4442	0.9833	35.87	0.281	0.869	6
10	68	-0.5468	1.1519	35.94	3.397	0.846	6
15	69	-0.3495	0.9776	34.96	11.364	0.498	5
20	74	-0.4819	1.0595	35.93	15.934	0.297	6
30	79	-0.4371	1.0368	35.47	29.187	0.352	6
40	81	-0.3993	1.0197	35.06	36.720	0.482	5
50	82	-0.3584	1.0062	34.50	41.997	0.679	5
61	86	-0.4140	1.0217	35.38	51.371	0.718	6

Our data differs from the Shakespearean data in that the counts are a lot lower and sparser, many n_x having no observed species at all. Though it is still good, the sparsity and low counts no doubt negatively impact the fit. The far-right column also shows estimates for $\Delta(0.164)$ comparable to that calculated above and confirms that 5 or 6 missing individuals is a reasonable estimate.

Equation 28 is of no use for estimating the number of philosophers in the doxographical universe as it goes to infinity with infinite text. But we can find a lower bound estimate of $\Delta(\infty)$ through linear programming by choosing coefficients h_x that maximise the equation $\hat{\Delta} = \sum_{x=1}^{\infty} h_x \hat{\eta}_x$ subject to the constraint in 25 as t goes to infinity. Following Efron and Thisted, we have made use of our fitted Fisher model's estimates $\hat{\eta}_x$ of the expected values of n_x and substituted them accordingly into 24. As $\lim_{t \rightarrow \infty} 1 - e^{-\lambda t} = 1$, we need the coefficients to satisfy $\sum_{x=1}^{\infty} h_x \lambda^x / x! \leq 1$ for all $\lambda > 0$. Since we cannot apply an infinite number of constraints, Efron and Thisted suggest checking the inequality over the finite set $\{\lambda_0, \lambda_1, \lambda_l, \dots, \lambda_L\}$ and set $L = 272$ and $\lambda_l = 2^{\frac{1}{16}l-10}$. In our implementation we have summed to $x = 61$, the highest observed species count, and set $L = 391$ and $\lambda_l = 2^{\frac{1}{23}l-10}$ to give better coverage to the smaller counts in our dataset.⁸⁷

To compare the species richness of the *Placita*'s different books against the standard of the entire work, we fit Fisher's negative binomial model to each book, substitute the resulting estimates $\hat{\eta}_x$ for η_x in equation 23, plug in $(734 - \text{labelled doxai})/\text{labelled doxai}$ for t , and then add the result to those species already observed. Table 26 shows the fitted parameters for each book and the extrapolation.

Table 26. Maximum likelihood fits of negative binomial model to each book with species extrapolation to whole work

	$\hat{\alpha}$	$\hat{\gamma}$	$\hat{\eta}_1$	t	N	Labelled doxai	$\Delta(t) + N$
Book 1	-0.2987	0.9668	30.40	3.292	64	171	120
Book 2	-0.3848	1.0911	19.37	2.479	53	211	83
Book 3	0.0000	0.8375	17.57	6.567	38	97	77
Book 4	-0.5000	1.0295	32.83	4.133	61	143	143
Book 5	0.0000	0.9280	12.81	5.554	35	112	60
Work	-0.4945	1.0428	61.07	0.000	118	734	118

⁸⁷ Note that in their implementation Efron and Thisted use x_0 lower than the largest observed n_x and so break both $\hat{\Delta}$ and $H(\lambda)$ down into the addition of two sums – one which sums to a chosen value of x_0 and a simpler one that sums with a single coefficient the remainder up to the highest observed value of x . We have used the maximum possible due the sparseness of our data and smaller samples.

Appendix 8. Quantifying diaeretic information

If we consider the tree diagram in Figure 6, each node represents a subclassification or specification differentiated from other specifications on the same level. Now we can think of each doxai as having an address in the tree equivalent to a sequence of these specifying nodes. The more complicated the address, the more information required to find a doxa's place in the tree. The address for doxa 4, for instance, involves two specifications (infinite: single shape), while the address for doxa 1 only one (single).

To quantify this information, we can imagine ourselves starting out from the root node and having to successfully choose the correct branch at each subsequent intersection (node) to arrive at our target. If we want to get to doxa 5, we have to choose 1 correct branch from two possibilities, and then 1 from two again. The probability of finding the correct address by chance is the product of these choices, $\frac{1}{4}$. The amount of information contained in an event is the negative logarithm of its probability. The information in bits required to encode this address is $-\log_2 \frac{1}{4}$, which is 2.

The address for doxa 3, on the other hand, will be less complicated, as it requires only a single correct decision of $\frac{1}{2}$ and thus 1 bit to encode. The total classificatory information contained in the tree is its *information entropy* (H), which is the expected value of an address's information. It is the minimum amount of information required to reconstruct the diaeretic tree.

To put the matter formally, let a diaeretic tree T be defined by the set of a_i address vectors for its terminal nodes, each address giving a unique sequence of n_j nodes whose last element is the terminal node itself. Let $C(n)$ be a function that returns the number of child nodes of a given node n . Then

$$P(a_i) = \prod_{j=1}^{|a_i|-1} \frac{1}{C(a_{ij})} \quad (29)$$

and

$$H(T) = - \sum_i P(a_i) \log_2 P(a_i). \quad (30)$$

For chapter 2.2, there are three addresses (single cosmos, infinite cosmoi: single shape, and infinite cosmoi:multiple shapes). Its entropy is $H = (0.25 \times 2) + (.25 \times 2) + (0.5 \times 1) = 1.5 \text{ bits}$.

We see on examination of chapter 2.2's tree that doxa 4 is particularly important because it is the only doxa which exemplifies its node. Without it, the address is empty and one of the contrasts is no longer instantiated. The loss in structure caused by an erased doxa can be quantified by calculating the difference in entropy between the original tree and the tree without it. To form the latter we observe the following *tree pruning rules*:

- (1) The nodes and branches unique to an uninhabited address wither and die.
- (2) A non-terminal node with only a single child node absorbs that child.

Rule (2) encapsulates the intuition that subcategorizations must at a minimum distinguish between two things that are instantiated. For the sake of comparison, removing doxa 1 and doxa 4 produce trees with 1.5 bits and 1 bit respectively. Thus doxa 4 thus contributes half a bit of information to the dialectical structure of the topic while doxa 1 is redundant in this respect.

Part Three

The *Placita* and Greek Philosophy

Epicurus and the *Placita*

David T. Runia

Abstract. The *Placita* focus primarily on the views of philosophers on the natural world organised by topics and questions, not on the thought of the philosophers themselves. Nevertheless, there is nothing wrong with looking at the doxai of a particular philosopher in the collection and investigating what these can tell us about his thought. The paper focuses on the doxai of Epicurus, who represents a unique case, because not only does his name-label frequently appear among the doxai, but there is also evidence that he himself made use of an early version of the *Placita* in his own writings. The first part of the paper thus treats Epicurus *in* the *Placita*, examining a large number of features of the occurrence of his doxai in the collection. As seventh in the total number of doxai, he is amply represented, though quite often in conjunction with other members of the atomist tradition. His doxai are positioned in accordance with the structural and generally diaeretic method of the *Placita*, but it is striking how often he brings up the rear in a chapter because he represents a distinctive point of view. The second part of the paper turns to the subject of Epicurus *on* the *Placita*. In cosmology it appears that he made use of early doxographical material, particularly for presenting multiple explanations. In the treatment of meteorological subjects this usage is less easy to demonstrate but still remains likely. The paper thus demonstrates that the prospective edition of the *Placita* will also be useful for the study of individual philosophers

Key words: Aëtius, Epicurus, atomist tradition, doxography, diaeresis, multiple explanations, cosmology, meteorology

1. Introduction

The chief aim of the new edition of Aëtius' *Placita*, which Jaap Mansfeld and I have been working on for the past three decades, is to offer an instrument of research for scholars working in the field of ancient philosophy. Naturally there is an aim in terms of pure scholarship. We wish to reconstruct and establish the text of this important witness to ancient philosophical views to the extent that this is possible and as well as we are able. We fully recognise the limitations that have to be recognised in attempting to carry out this aim. There are limitations in terms of what the evidence allows, there are limitations in terms of our own philological expertise, and there are limitations in terms of time—the project has to be brought to a conclusion. But the more important aim is to offer an instrument of research which scholars can turn to when dealing with the highly significant, if often frustrating, evidence that this compendium offers for so many areas of ancient philosophy. We continue to stand in awe of the achievement of Herman Diels. But at the same time we firmly believe that after 136 years it should be replaced by an edition with an updated and more clearly presented methodology and with a significantly increased apparatus of comparative material.

As Jaap Mansfeld has shown in many previous studies, at the heart of the *Placita* lies the πρόβλημα or ζήτημα (in Latin *quaestio infinita*), sometimes formulated as a θέσις.¹ The compendium attempts a systematic coverage of all the major topics of the φυσικὸς λόγος, extending from first principles, through cosmology and metereology, to psychology and physiology. The δόξαι of the philosophers, and to a lesser extent of the scientists and physicians, are collected in order to present answers to these topics. The *Placita* are most fruitfully approached through their philosophical subject matter (in the broad sense), i.e. through topic-based analysis. But each δόξα almost without exception starts with a name-label. The views are held by thinkers of what we might call a ‘zetemic’ bent, questioning the world around them and the principles used to understand that world. The *Placita* introduce a copious array of philosophers, placing them in a context of succession and sometimes a geographical location, but without ever attempting to present a history of philosophical investigation. Philosophers are indispensable for the work’s purpose. And from the viewpoint of the modern readers, it is very often the information on particular philosophers that is so valuable. So there is nothing wrong with focusing on the role of a particular philosopher or school of philosophers in the *Placita*, provided that the context of the information and the methodology used in supplying it is never lost out of sight.

In my paper I wish to illustrate this way of using the material that we have collected by focusing on the relationship that the philosopher Epicurus has to the *Placita*.² Why do I not say ‘the place that Epicurus occupies in the *Placita*’? The reason for this is that I will argue that Epicurus in fact has a double relationship to the *Placita*. In the first place he occupies quite a prominent place in the compendium on account of the opinions that he holds. But it will emerge that in formulating his views on certain topics, he provides evidence of an early phase in the development of the *Placita*. The double aspect makes his example particularly attractive and interesting for the task of illustrating how the material collected in our edition can be used for the study of a particular philosopher.³ My paper will therefore proceed in two steps. First I will investigate the role that Epicurus plays in the *Placita*, what that tells us about the method and content of the *Placita* and what it might tell us about the views of Epicurus himself. Second I will more briefly examine what evidence he might provide about the early phase of the doxographic method when he himself was writing at the beginning of the 3rd century BCE. For both main parts of the paper I will be drawing copiously on the material we have collected for our edition, which is now in an advanced stage of preparation. The textual basis of my analysis of the doxai attributed to Epicurus will be the reconstruction of the *Placita* in a single column that will be provided in that edition.

One of the interesting and hitherto little exploited features of the *Placita* is that it provides a considerable amount of data that can be compiled, analysed and even subjected to statistical analysis. Edward Jeremiah’s paper exploits these possibilities in a quite spectacular fashion. I am fortunate to be able to make some use of some of the data that he has prepared. I should also add that even the material collected on just one philosopher out

¹ See the essays collected in Mansfeld and Runia (2010), and also Mansfeld (1990), which was too long to include.

² The texts discussed in this paper are based on the draft edition of Aëtius’ compendium prepared by Jaap Mansfeld and myself, to be published in the near future.

³ For a similar attempt, though using a slightly different method, see Mansfeld (2016) on the presence of Aristotle in the *Placita*.

of the more than eighty included in the collection is much more than can be dealt with in all the detail that it deserves. That would require a full commentary. The same consideration applies to our edition with its commentary. It often can only skate over the surface of the rich and varied content of the *Placita*.

2. *Epicurus in the Placita*

I will commence by analysing Epicurus' presence in the *Placita*, viewing the doxai from a variety of angles, both in terms of form and of content.

(a) how is Epicurus introduced?

As is the case for many of the prominent philosophers in the *Placita*, Epicurus is formally introduced in the chapter on the principles, 1.3 Περὶ ἀρχῶν τί εἰσιν, at §16 in our edition. He is given the full gamut of (i) name Ἐπίκουρος, (ii) patronymic Νεοκλέους (iii) ethnon Ἀθηναῖος, and (iv) place in the succession κατὰ Δημόκριτον φιλοσοφίας. In the same lemma it is noted that in the case of bodies Epicurus adds a third characteristic, weight, to the two, size and shape, attributed to them by Democritus. This is the only instance of a comment within a doxa indicating a deviation on Epicurus' part from the doctrines developed in his succession. Elsewhere there are a number of cases where Epicurus' views are contrasted with other atomists by means of separate doxai. These will be examined further below in section 2(c). The only other places where biographical or historical information is given about him are two doxai in which Metrodorus is named as his teacher.⁴

(b) the record of his doxai

In our reconstruction of Aëtius (A) there are in total 43 doxai attributed to Epicurus by name. The only other name-label derived from his name is found in the combined name-label οἱ Στωικοὶ δὲ καὶ Ἐπικούρειοι at 5.26.3 on the question whether plants are living beings.⁵ In this paper I shall include this doxa as belonging to those of Epicurus, so there are 44 doxai in all.⁶ Of these 27 refer to him on his own, the remainder in combination with other names. These will be further analysed below in section 2(e).

On the basis of this statistic it is possible to give Epicurus a ranking in terms of the number of doxai attributed to him in the *Placita* as a whole. A complication here is that Aëtius has various ways of referring to the followers and successors of a particular philosopher, such as οἱ ἀπὸ Θάλεω, οἱ περὶ Δημόκριτον etc. An extreme case is the Stoics, where there are no less than six such additional circumlocutions.⁷ For name-labels of this kind we encounter considerable variation between the various witnesses to Aëtius' original

⁴ A 1.5.5 (only in S); 2.1.3.

⁵ We have not included in our text of 5.19.1 the phrase οἱ περὶ Ἐπίκουρον, which is found in the Byzantine mss. of P, Qusta and (reduced to Ἐπίκουρος) in ps.Galen. We regard it as a gloss.

⁶ The 44 doxai in the textual form that will be presented in our edition, together with a translation, as listed in Appendix 1. I have not included the doxa at 5.12.3, on which see n. 54 below.

⁷ They are: οἱ ἀπὸ Στοῦ, οἱ ἀπὸ Ζήνωνος Στωικοί, οἱ ἀπὸ τῶν Στωικῶν, οἱ πλείους τῶν Στωικῶν, οἱ πλείστοι τῶν Στωικῶν, οἱ μέχρι τῶν Στωικῶν.

text. If, however, we simply take the final reading in our edition, including all the different phrases referring to followers and successors, we obtain the following top 20 rankings:⁸

⁸ These figures are provisional. Final figures cannot be given until the edition is fully complete and revised. It includes formulae such as οἱ περὶ x, οἱ ἀπὸ x etc.

Table 1

1	Plato	71	11	Diogenes	23
2	Stoa ⁹	69	=12	Leucippus	21
3	Empedocles	60	=12	Anaximander	21
=4	Democritus	58	=12	Heraclitus	21
=4	Aristotle	58	=15	Xenophanes	20
6	Pythagoras	52	=15	Anaximenes	20
7	Epicurus	44	17	Metrodorus	19
8	Anaxagoras	42	18	Straton	17
9	Parmenides	29	19	Crates	16
10	Thales	27	20	Alcmaeon	14

Epicurus thus ranks seventh among all the philosophers named in the *Placita*. He belongs to two strongly represented groups. The first of these is the four Hellenistic schools, as denoted primarily through their founders (but less so in the case of the Stoa).¹⁰ The second is the succession of the atomists Leucippus–Democritus–Metrodorus–Epicurus, all of whom appear among the 17 most represented name-labels. The conclusion is warranted that Epicurus forms a strong presence in the *Placita*.

(c) witnesses and the *traditio proxima*

The next item of interest is the way that the Epicurean doxai have been preserved in the various witnesses to the Aëtian *Placita*, ps.Plutarch and his tradition (P), Stobaeus (S) and Theodoret (T). This can be seen in the following table:

Table 2

Doxai in P (not in S)		Doxai in S (not in P)		Doxai in T	Total
Book 1	8(1)	Book 1	11(3)	Book 1 2(1 in PS, 1 in T)	Book 1 11
Book 2	9(2)	Book 2	8(1)	Book 2 1(in PS)	Book 2 10
Book 3	2(1)	Book 3	1(0)	Book 3 0	Book 3 2
Book 4	10(5)	Book 4	9(4)	Book 4 3(1 in PS, 2 in P)	Book 4 14
Book 5	7(7)	Book 5	0(0)	Book 5 0	Book 5 7
Total	36(14)	Total	27(8)	Total 6	Total 44

The one doxa that occurs in T only is found at 1.9.3, where for the name-label PS read οἱ ἀπὸ Δημοκρίτου, whereas in T we find Δημόκριτος δὲ καὶ Μητρόδωρος καὶ Ἐπίκουρος. In our judgement, given the convergence of our two main witnesses, the two additional name-labels will have been added by T, so we should not include them in our text. Of course the phrase οἱ ἀπὸ Δημοκρίτου (found only here¹¹) implicitly includes Epicurus, but he is not actually named.

The distribution between the witnesses contains nothing that should cause any surprise. Most of the doxai in P that are missing in S are due to the very patchy preservation

⁹ Including all the name-labels listed above in n. 7.

¹⁰ Rarely they are specified as οἱ Ἀκαδημαῖοι (only in Book 4, e.g. 4.8.13) or οἱ Περιπατητικοί (also mainly Book 4, but also 1.0.3, 1.11.8, 3.2.5).

¹¹ But note also οἱ ἀπὸ Λευκίππου at 1.14.4.

of material in Books 4 and 5 in the anthology. On three occasions S deletes doxai that are placed at the end of chapters, in which Epicurus is reported as maintaining that multiple views can be held on the subject in question (2.2.5, 2.22.4, 3.15.11; slightly different case at 1.8.3). These doxai will be further discussed below in section 2(h). P tends to retain most of the doxai that are preserved in S, but some fall victim to the process of epitomisation, e.g. in 1.15, 1.22 and 4.9. In 1.20 P blunders badly by coalescing the two name-labels of the Stoa and Epicurus, whereas we know from S that A had distinguished between their two positions by means of a diaphonia. It is apparent that T has no special interest in Epicurus in the realm of first principles and physics. He names him less often than the Presocratics Heraclitus, Anaxagoras, Democritus and Diogenes of Apollonia.¹²

In the case of ps.Plutarch there are four main witnesses (in presumed chronological order):¹³ the verbatim extracts in Eusebius *Praeparatio Evangelica* (E); Ps.Galen's epitome (G); the arabic translation of Qusṭā ibn Lūqā (Q); and the Byzantine manuscripts (P^{byz}). These take up the doxai of Epicurus as follows:

Table 3

	E	G	Q	P ^{byz}
Book 1	4	4	8	8
Book 2	7	8	9	9
Book 3	0	1	2	2
Book 4	2	3	10	10
Book 5	0	6	6	5
Total	13	22	36	35

P^{byz} omits the lemma at 5.19.5 (on the generation of living beings), but it is preserved in G and Q. However, G has only the name-label Democritus, whereas Q reads Democritus and Epicurus, so Q is the only witness (in the absence of ST) that the name-label Epicurus was originally present in A. The much reduced numbers of doxai in G and E are explained by their selective practices in the inclusion of material from P in their respective works. Both show little interest, for example in the meteorological material in Book 3 and the psychology in Book 4, but G includes much from the physiology in Book 5, whereas E ignores this book completely.

It should be noted that Epicurus has a very restricted presence in what we call the *traditio proxima*, those texts which stem from parallel but slightly divergent strands of the doxographical tradition and may be regarded as 'cousin writings' of the *Placita*.¹⁴ The most important of these works is the *Isagoge* of Achilles, in which significant parallels are found for chapters and doxai of Aëtius' Books 1 and 2. Epicurus is referred to in only three texts: §5, 16.8–9 Di Maria on infinite kosmoi, cf. A 2.1.3;¹⁵ §8, 17.21 on the external void, cf. A 1.18.2; and §19, 27.12 on the substance of the sun, cf. A 2.20.14.¹⁶ The material contained in the

¹² These are all mentioned seven times each.

¹³ We do not know the chronological order of E and G, but it is generally assumed that G is later.

¹⁴ On these writings see Mansfeld and Runia (1997) 291–318.

¹⁵ Achilles also mentions Metrodorus; cf. 1.5.5.

¹⁶ There are two references to Epicurus and his followers in §13, on whether the heavenly bodies are ζῶα. This is a subject not included in the Aëtian *Placita*.

doxographies on Epicurus in Hippolytus and ps.Plutarch *Stromateis* do not contain material that has a close connection with doxographical traditions related to the *Placita*.¹⁷

Finally it is worth making a comment on modern collections of fragments. In Usener's collection *Epicurea*, of the 44 doxai of Epicurus that we have identified, all but five are included (three of these are located in 4.8–9).¹⁸ This is impressive, but of course he had the benefit of Diels' *Doxographi Graeci* and in fact it shows how dependent he was on the work of his pupil.¹⁹ A splendid performance, even if his different system of ordering does mean that their location deviates markedly from that of A's compendium, and the doxai are usually quoted without any reference to their context. The index allows quick localisation. Arrighetti includes only ten doxai among the texts scattered throughout the notes to his collection of fragments.²⁰ Even more restrictive is their presence in the much more modern collection of testimonies to Hellenistic philosophy by Long and Sedley, which has place for only three doxai.²¹ But of course their selection is much smaller and their purpose rather different.

(d) length and distribution of doxai, completeness of the record

Of the 44 doxai in our collection there is only one that is longer than ten lines in the format of our edition, 1.3.16 on first principles, which extends to 22 lines. The remainder can be divided into the following three categories:

simple doxa (1–2 lines)	1.8.3, 1.9.3, 1.15.9, 1.20.5, 1.23.4, 2.1.3, 2.1.5, 2.2.5, 2.22.4, 4.5.6, 4.7.4, 4.9.12, 4.9.20, 5.1.2, 5.3.5, 5.20.2 (16)
more complex doxa (2–3 lines)	1.18.3, 1.22.6, 1.29.3, 2.3.2, 2.4.13, 2.7.3, 2.13.15, 2.20.4, 2.21.5, 3.4.5, 4.13.1, 4.23.2, 5.5.1, 5.19.5 (14)
medium length (4–9 lines)	1.7.25 (6) 1.12.5 (5), 1.24.2 (6), 3.15.11 (5), 4.3.11 (7) 4.4.7 (4), 4.8.2 (4), 4.8.10 (4) 4.9.5 (4), 4.9.6 (4), 4.14.2 (4), 4.19.2 (7), 5.16.1 (4) (13)

The distribution in terms of length follows the general pattern of the *Placita*, with the majority of doxai very short or short. Of the 14 longer passages 10 are attributed to Epicurus only. The other four are 1.24.2 and 4.9.6 (group of aggregationists), 4.14.2 and 5.16.1 (atomists). The number of longer doxai in Book 4 is noteworthy and correlates with the larger concentration of doxai attributed to post-Socratic philosophers and physicians in that book (especially in 4.9–23).

The table in the previous section shows that the distribution of the Epicurean doxai over the five books is relatively even with the exception of Book 3 on meteorology and the earth. As might be expected, our philosopher is strongly represented in Book 1 on first principles. Similarly Book 2 shows considerable interest in his views on cosmology, though it is surprising that the seven chapters on the moon 2.25–31 contain no reference to his views

¹⁷ See Hippolytus *Ref.* 1.22; ps.Plutarch *Strom.* 8 Diels.

¹⁸ Usener (1887). Missing are 1.24.2, 4.8.10, 4.9.6, 20, 5.19.5. Two doxai are split into two: 1.12.5 and 1.29.3. Note also that 2.13.15 is only included in a footnote to D.L. 10.90 on p. 382.

¹⁹ Diels' work was published in 1879, i.e. eight years earlier.

²⁰ See the listing at Arrighetti (1973) 739. They are in the numbering of our new edition 1.3.16, 1.7.25, 1.12.5, 1.23.4, 1.29.3, 1.29.5, 2.20.14, 3.15.11, 4.3.11, 4.4.6, 5.3.5. I exclude 1.7.1 (which does not name Epicurus) and count 1.29.3 as one doxa (it is split in two by Diels).

²¹ Long and Sedley (1987). The texts are: 1.7.25 = 23M (only in vol. 2); 1.20.2 = 5C; 4.3.11 = 14C.

at all.²² His almost total absence from Book 3 is remarkable, even if that book is rather imperfectly preserved. We are not yet in a position to give a reason for this neglect. Book 4 on psychology in fact has the largest number of Epicurean doxai, with a strong interest in the corporeality of the soul and the processes of perception (six doxai occur in 4.8–9 alone, both chapters on the senses). Book 5 on physiology, despite its poor state of preservation, nevertheless contains seven doxai evenly distributed through the book.

Of the 135 chapters in the compendium, however, there are 51 which are incompletely preserved, if we define that state for all those chapters which are not witnessed by both P and S (49 not in S, 2 not in P). These are distributed over the five books as follows: Book 1 (4); Book 2 (1); Book 3 (5); Book 4 (11); Book 5 (30).²³ It is very likely, therefore, that the record of 44 preserved doxai will be incomplete. The degree of incompleteness depends for the most part on two factors, of which the first is much more significant than the second: (1) how likely is it that P epitomized away Epicurean doxai originally present in Aëtius in chapters where we do not have S as a check? (2) how likely is it that S passed over doxai attributed to Epicurus in the sections he wrote out? When discussing the evidence in Table 2 above, we saw that there are in fact relatively few Epicurean doxai of which we know that P deliberately passed them over. Of the eight cases four are found in the severely reduced chapters 1.22 (§6) and 4.9 (§§6, 12, 20), one is caused by a blunder (1.20.2) and the other three are relatively minor omissions (1.15.9, 2.15, 4.8.10). P clearly tends to preserve Epicurean material for the most part.²⁴ This is consistent with his method. As an epitomator he shows a clear preference for the major names in philosophy and in particular for the founders of the Hellenistic schools (cf. table 1 above).²⁵ As for the 14 omissions of S in table 2, we must distinguish between those where we know S has utilised the compendium and those where his chapters are missing. Of the former there are only 4 cases already mentioned in the previous section. How many S included in the chapters of the anthology which are missing or severely reduced by Byzantine epitomators we cannot know. Given the well-preserved nature of Books 1 and 2, there are not likely to be many missing there. For Book 3, since there are so few omitted doxai in the 13 chapters witnessed by both P and S, it is not likely that there are many missing in the remaining 5. It is probable that there are more missing from Books 4 and 5 because Epicurus is quite popular in what remains of both books. All in all, I would estimate that a large majority of all the doxai, at least 80–90%, will have been preserved.²⁶

(e) relation to other name-labels, quotations

Every reader of the *Placita* will observe that there is considerable variation in the use of name-labels. While the majority of these refer to a single thinker, there are numerous cases of multiple name-labels of various kinds, as well as those that are periphrastic (the instance

²² It is less surprising if his views were built up out of the opinions of others, as will emerge in the third section of our paper.

²³ The chapters missing in P are 2.5a Ποῦ ἔχει τὸ ἡγεμονικὸν ὁ κόσμος, and 4.7a Περὶ νοῦ.

²⁴ It is significant that in the case of all the doxai in which Epicurus appears as part of a multiple set of name-labels, P never excludes his name if he includes the doxa in his abridged version.

²⁵ See *Aëtiana* 1.189 and further material in the paper of Edward Jeremiah.

²⁶ This is consistent with the results of Edward Jeremiah's research presented elsewhere in this volume; see esp. his conclusion on p. 000.

at 1.9.3 was already discussed above) and anonymous. This is also the case for the way that Epicurus' name-label is utilised. The 44 doxai (with two others involving periphrases) can be divided into the following groups:

- (a) single name only (26): 1.3.16 (embellished), 1.7.25, 1.8.3, 1.12.5, 1.20.2, 1.22.6, 1.23.4, 1.29.3, 2.1.5, 2.2.5, 2.4.13, 2.7.3, 2.13.15, 2.20.14, 2.21.5, 2.22.4, 3.4.5, 3.15.11, 4.3.11, 4.8.2, 4.9.5, 4.9.12, 4.9.20, 4.19.4, 4.23.2, 5.3.5.

Of these the following have a doxa of another atomist in the same chapter (asterisks explained below) (17):²⁷ 1.3.16, 1.7.25, 1.12.5*, 1.23.4*, 1.29.3, 2.2.5*, 2.4.13*, 2.7.3*, 2.13.15, 2.20.14, 3.4.5 (Metrodorus), 3.15.11, 4.3.11, 4.8.2, 4.9.5, 4.19.4*, 5.3.5*.

- (b) group names atomist only (9 + 2): 1.18.3 (Λεύκιππος Δημόκριτος Δημήτριος Μητρόδωρος Ἐπίκουρος), 2.3.2 (Λεύκιππος δὲ καὶ Δημόκριτος καὶ Ἐπίκουρος καὶ ὅσοι τὰ ἄτομα εἰσηγούνται καὶ τὸ κενόν), 4.4.7 (Δημόκριτος Ἐπίκουρος), 4.8.10 (Λεύκιππος Δημόκριτος Ἐπίκουρος), 4.13.1 (Λεύκιππος Δημόκριτος Ἐπίκουρος), 4.14.2 (Λεύκιππος Δημόκριτος Ἐπίκουρος), 5.16.1 (Δημόκριτος Ἐπίκουρος), 5.19.5 (Δημόκριτος καὶ Ἐπίκουρος), 5.20.2 (Δημόκριτος Ἐπίκουρος); and also two periphrases which surely include him, 1.9.3 (οἱ ἀπὸ Δημοκρίτου), 1.14.4 (οἱ ἀπὸ Λευκίππου).²⁸

- (c) group names including philosophers other than atomists (5):

- 1.24.2 Ἐμπεδοκλῆς Ἀναξαγόρας Δημόκριτος Ἐπίκουρος καὶ πάντες, ὅσοι κατὰ συναθροισμὸν τῶν λεπτομερῶν σωμάτων κοσμοποιοῦσι, on generation and destruction;
 2.1.3 Ἀναξίμανδρος, Ἀναξίμενης, Ἀρχέλαος, Ξενοφάνης, Διογένης, Λεύκιππος, Δημόκριτος, Ἐπίκουρος καὶ ὁ τούτου καθηγητὴς Μητρόδωρος, on infinitely many kosmoi;
 4.7.4 Δημόκριτος Ἐπίκουρος Ἀριστοτέλης, on the mortality of the soul;
 4.9.6 Παρμενίδης Ἐμπεδοκλῆς Ἀναξαγόρας Δημόκριτος Ἐπίκουρος Ἡρακλείδης, on the mechanics of sense-perception;
 5.5.1 Πυθαγόρας Ἐπίκουρος Δημόκριτος, on whether females emit seed.

- (d) coupling with philosophers outside the atomist tradition (4):

- 1.15.9 Ἐπίκουρος καὶ Ἀρίσταρχος, on colours in the dark;
 4.5.6 Παρμενίδης ... καὶ Ἐπίκουρος, location of the soul's ruling part;
 5.1.2 Ξενοφάνης καὶ Ἐπίκουρος, on rejecting divination;
 5.26.3 οἱ Στωικοὶ δὲ καὶ Ἐπικούρειοι, on whether plants are ζῶα.

The employment of name-labels in these texts contains much of interest for an understanding of the methods of the *Placita*.

It is very clear that the name-labels, particularly but not exclusively those that are multiple, are used with strategic intent. On two occasions our doxographer uses a long phrases to designate a group of thinkers of indeterminate size. The first of these has a purely systematic basis: at 1.24.2 he refers to those who 'engage in cosmos-making through aggregation of bodies composed of fine particles.' Epicurus joins four Presocratics, but the group is not confined to the five names. It is undoubtedly an ad hoc group specifically aligned to the systematic diaeresis of the chapter. The second at 2.3.2 combines a succession with a systematic perspective, linking atomism with the denial that the cosmos is ensouled or administered by providence. Here there are the three names of the most prominent atomists, plus 'those who introduce the atoms and the void'. At 1.18.3 we find a full

²⁷ I exclude 2.1.5, since at 2.1.3 both Epicurus and Democritus are included in the list of nine names.

²⁸ There are four more name-labels that refer to the atomists in general. See the list at the end of Appendix 1. I have not taken these into account.

complement of five atomists. So at 2.3.2 perhaps only the remaining atomists Demetrius (Laco) and Metrodorus might be alluded to in the indefinite group, but A could also have had a larger, systematically defined group in mind.

There are four other non-Atomist composite lists of name-labels. The longest at 2.1.3 has no less than nine names ranging from Anaximander to Epicurus. It is a systematic group of infinitists responding to the perennial question of whether the cosmos is single or not, although the list is not defined as a group. It is interesting that the nine names are reduced in P to just the three atomists Democritus, Epicurus and Metrodorus (but leaving out Leucippus), showing the epitomator's bias toward later philosophers.²⁹ The list of three at 4.7.4 combines atomists and Aristotle as a systematic set of philosophers representing a key position in the diaeresis on whether the soul is immortal or not. The longer list of six name-labels at 4.9.6 is a heterogenous group bringing together six philosophers who hold the position that there is a correspondence between the (bodily) structure of the sense-organs and the objects of perception. We are not told whether this means the perceptions are true (the subject of the chapter), but this may be implied.

Our collection of name-labels also shows that the doxographical tradition regards the succession of atomists as a distinctive group. On eleven occasions there are group names that are atomist only.³⁰ Not surprisingly these are mostly used for distinctive atomist positions (atoms, void, providence, *eidôla*). In five of the nine groups of names Leucippus is included, which is perhaps more than one might expect. It may reflect the tendency to attribute doctrines to the founder of a succession, which is particularly prominent in the case of Pythagoras and Thales.³¹ The order of the name-labels at 5.5.1 on whether females emit seed, Πυθαγόρας Ἐπίκουρος Δημόκριτος, is unusual because it is the only occasion in which Epicurus is placed ahead of the earlier atomist Democritus. Chronology is not always a key criterion for Aëtius (for example in the doxa just above this one, 5.4.3, we read Στράτων καὶ Δημόκριτος³²), but as is clear from the list above he elsewhere always respects it in relation to the atomist tradition.

On four occasions Epicurus' name-label is joined with that of another philosopher with whom he does not have a close connection (group (d) above). Here it would seem that the doxographer has noted a convergence of similar views. This is neatly indicated at 4.5.6 where his name is tacked on at the end of the doxa (Παρμενίδης ἐν ὅλῳ τῷ θώρακι καὶ Ἐπίκουρος, i.e. 'and this is Epicurus' view too').

In the majority of cases Epicurus' name-label is used on its own (26 out of 46 doxai as listed above). Given the method of the *Placita*, however, this certainly does not mean that his views are presented in isolation. Almost always in one way or another they are contrasted with other views. This will be further discussed below. A particularly interesting subset of these cases is the seventeen occasions when Epicurus' doxa occurs in chapters which also contain other atomist views. In no less than seven of these, marked with an asterisk above, there is a direct juxtaposition amounting to a diaphonia between the views of Epicurus and Democritus. For example, in 1.23.3–4 in an ascending numerical list one form

²⁹ Noted at Mansfeld and Runia (1997) 189–190.

³⁰ This includes two that do not specifically mention Epicurus, 1.9.3 and 1.14.4.

³¹ On this tendency see Mansfeld and Runia (2009) 73–96, esp. 75, 94–95.

³² For this lemma a manuscript of Ps.Galen adds καὶ Ἐπίκουρος. The text of this chapter is not yet available in the edition of Jas (forthcoming).

of motion is accredited to Democritus (vibration), but two kinds to Epicurus (perpendicular and deviation). In the most compact form possible, therefore, the doxographer introduces disagreements (or developments) in the atomist tradition.

(f) location of doxai in chapters

Having examined the role of name-labels, we turn now to the organisation of doxai within chapters. A major aspect of our understanding of the method of the *Placita* is that chapters in the majority of cases reveal an internal structure which organises doxai in relation to each other. Sometimes this organisation may have a historical or chronological basis. For example in the long list of views on first principles Epicurus is deliberately placed as last in a group of four atomists and his views are treated in much greater detail than those of the others (1.3.13–16), while in the equally long chapter on theology he is clustered together with the four founders of the main Hellenistic schools at the end of the chapter (1.7.22–25). But the chief method of organisation is through an elaborate system of contrasts and comparisons in which doxai are juxtaposed and listed in all manner of permutations. One of the main aims of my *specimen reconstructionis* of Book 2 which I published in 2009 was to show how this informal system works in practice.³³ In the edition we will include structural analyses of every chapter, although we have not continued the practice of showing them in diagrammatic form.

Against this background it will be worthwhile to examine how Aëtius locates the Epicurean doxai within the structure of these chapters. I have compiled a list of all the doxai divided by means of a four-fold typology. The first group indicates the chapters where Epicurus' doxai are included in a *diaphonia*, i.e. a set of directly opposed views, often in the form of a contradiction (A and –A). The second group includes his doxai in a *diaeresis*, a tightly organised group of contrasting views, e.g. A, B and C where C might be a compromise view between A and B. The third group consists of chapters that are more loosely organised, in which the doxai are included in lists which show various degrees of organisation and sometimes hardly any organisation at all (although this does not occur all that often).³⁴ In a small number of cases a doxa attributed to Epicurus is attached as an additional view. Finally I also list those chapters in which the Epicurean doxa occurs last in the chapter.

diaphonia	1.8.3, 1.18.3, 1.20.2, 1.24.2, 2.1.3, 2.1.5 (secondary), 4.7.4, 4.8.10, 4.9.6, 4.13.1, 4.14.2, 5.1.2, 5.20.2 (13)
diaeresis	1.12.5, 1.23.4, 2.3.2, 2.21.5, 4.9.5, 4.9.12, 4.9.20, 4.19.2, 4.23.2, 5.5.1, 5.16.1, 5.26.3 (12)
list	1.3.16, 1.7.25, 1.22.6, 1.29.3, 2.2.5, 2.4.13, 2.7.3, 2.13.15, 2.20.14, 2.22.4, 3.4.5, 3.15.11, 4.3.11, 4.5.6, 4.8.2, 5.3.5, 5.19.5 (17)
additional view	1.15.9, 4.4.7 (2)
final position	1.7.25, 1.8.3, 1.20.2, 2.4.13, 2.13.15, 2.21.5, 2.22.4, 3.15.11, 4.9.20 (9)

This typology is only approximate, but it is already enough to demonstrate beyond all doubt that the information on Epicurus' doctrines is habitually presented in the context of the

³³ Mansfeld and Runia (2009), vol. 2 part 2 passim.

³⁴ This typology basically corresponds to the distinction between type A, B and C diaereses that I used for my *specimen reconstructionis* of Book 2, see Mansfeld and Runia (2009) 284–287.

structure of the relevant chapter, the aim of which of course is to treat a particular topic or *quaestio* to whatever degree of detail. The information may be of intrinsic interest for what it tells us about Epicurus' views, but it is meant to be understood in relation to the other doxai in its context. A few examples selected virtually at random will illustrate how this works.

The first chapter of Book 2 has as the 'umbrella' chapter³⁵ heading *Περὶ κόσμου*, but its contents are more specific, dealing with the interlinked topics of whether there is a single cosmos or an infinite number and whether a single cosmos is limited, either on its own or in relation to other kosmoi. Epicurus is listed with three other atomists, but also with five mainly earlier Presocratics, as representing the view that there are infinitely many kosmoi in infinite space (2.1.3). He is in fact the most recent philosopher in the list of nine name-labels. This doxa forms a clear diaphonia with the view stated first that there is a single cosmos, attributed to an even longer list of eleven names starting with Thales and ending with Zeno (the Stoic).³⁶ Then, immediately following the doxa which includes Epicurus, another diaphonia is recorded, contrasting the view of Anaximander that the infinitely many kosmoi are equally spaced to that of Epicurus that the distances between them are unequal (2.1.4–5). This diaphonia is thus a secondary one, dependent on one branch of the previous diaphonia. Although there are numerous parallels for Epicurus' doctrine of infinitely many kosmoi,³⁷ to my knowledge there is no further evidence on their spacing. Two points are of interest here. Aëtius does not take over the diaeresis that Epicurus himself uses at *Ep.Her.* 45 that there can be a single cosmos or an infinite number or a limited number (*πεπερασμένοι*). It does not fit into the structure that he (or one of his predecessors) planned for the chapter. From the further reference to the doctrine of infinitely many kosmoi at *Ep.Pyth.* 89, where Epicurus indicates disagreement with other thinkers (presumably atomists) who posit that a cosmos can come into existence 'in a great and wholly empty void',³⁸ it appears that he discussed the genesis and dispersal of kosmoi in space, but no further evidence of such a discussion has come down to us.

Chapter 4.9 on whether the senses and impressions are true with its twenty doxai is one of the most extensive in the compendium³⁹ and unique in having no less than four doxai attributed to Epicurus.⁴⁰ As we will be explaining in our commentary, this chapter like its predecessor 4.8 consists of a number of interrelated themes organised in blocks of lemmata. The first Epicurean doxa at 4.9.5 is the final one in a block of five. Epicurus' well-known view that the senses are true is directly opposed to the first view attributed in 4.9.1 to a long list of eleven name-labels ending with Plato (and including the atomist Democritus) that the senses are false, with in between a gliding scale of other views which (except §3 Aristotle) take the veracity of impressions into account as well. This is clearly a quite complex diaeresis. Next in 4.9.6 Epicurus himself joins a group of six (including Democritus again) on the

³⁵ This is our term for the chapter heading of the most common *περὶ x* type, in which the general topic is indicated, but no specific questions or categories are indicated.

³⁶ The full list at 2.1.2 is Thales, Pythagoras, Empedocles, Ecphantus, Parmenides, Melissus, Heraclitus, Anaxagoras, Plato, Aristotle, Zeno.

³⁷ See Usener (1887) test. 301.

³⁸ *Ep.Pyth.* 89 οὐκ ἐν μεγάλῳ εἰλικρινεῖ καὶ κενῷ. Presumably the remark relates particularly to the origin of kosmoi in the void, but their dispersal may also have been mentioned in a more detailed treatment elsewhere. This view is attributed to Leucippus at D.L. 9.30–31

³⁹ Only 1.3 on first principles and 1.7 on theology have more doxai (24 and 25 respectively).

⁴⁰ For the text and translation of this chapter see Appendix 2.

process of sense-perception, whether this occurs mechanically or that it depends on the capacities (δυνάμεις) of the sense-organs. This is plainly a diaphonia. There follow two further diaphoniai (4.9.8–9 and 10–11), both involving atomists, but in both Epicurus is excluded. In the first case (4.9.8) this is presumably because he himself never took over the Democritean slogan νόμῳ θερμόν, νόμῳ ψυχρόν κτλ, but in the second case (4.9.10) he may well be implicitly included in those who argue that sense-perceptible objects are blended as opposed to the schematic view that each of the sense-organs correspond to sense-perceptible objects consisting of one of the five elements. At 4.9.12 Epicurus reappears in the opening doxa of a complex set of diaereses (§§12–17) on the pleasant and the painful. He holds the view that these are belong to the objects of sense, which is opposed to the Peripatetic view that they are noetic (§13), followed by a compromise view attributed to Zeno that generically the pleasant is noetic, but that the individual pleasant thing is sense-perceptible (§14). This is a classic example of numerous diaereses in Aëtius (A opposed to B or –A, with C as intermediate position). Finally in the sixth block (§§18–20) there is a return to the difference between sense-perception and thought treated in §§12–14, but in relation to a particular question, namely how can you tell whether someone is a σοφός. The Stoics argue that the wise man can be grasped by sensation if one takes his form or appearance as a sign (which is the starting-point of an argument). The Academics in contrast maintain that he is known by reason (or argument). The third and final view is attributed to Epicurus. His view escapes the dilemma by applying the doctrine that like knows like and maintains the the σοφός can only be identified by another σοφός, thereby avoiding the epistemological issue. This is another example of the diaeresis with an intermediate or compromise position discussed above.

As seen in the typology above, 17 out of the 44 Epicurean doxai occur in lists. It is worth pointing out that there are lists of various kinds and that they can be structured in varying degrees. Two successive chapters in Book 1 on first principles illustrate this well. In 1.22 on the substance of time, the first six doxai all relate time to movement in some way. Epicurus comes last in this row because his view on time as a παρακολούθημα κινήσεων has a less direct connection with movement. The next view attributed to Antiphon and Critolaus regards time as purely conceptual and non-substantive. So the list has an organised structure consisting of what we might call a gliding scale. The following chapter 1.23 on movement itself begins with a lemma that explicitly gives a ‘common definition’ ascribed to Pythagoras and Plato, followed by a compact formulation of the Aristotelian definition (§§1–2). As was already noted above,⁴¹ there follows a list of four doxai, of which the Epicurean one is second. Democritus is credited with one kind of movement, Epicurus with two, while two anonymous groups follow with four and five kinds. This is a set of views in the category of quantity that progresses by number (another example is found in 4.4 on the parts of the soul). As already noted by Meineke and Diels,⁴² there must have been a missing lemma representing the view that there are three kinds of movement. We could call this a structured list, but it can also be regarded as a diaeresis based on number, and I have placed it under that grouping in the typology.

Finally it is worth pointing out that in nine cases the doxa with the name-label Epicurus comes last in the chapter. In all these his name is not conjoined with that of any

⁴¹ Section 2(e) at the end.

⁴² Diels (1879) 320.

other philosopher. This number of cases would seem greater than one might expect. Two have already been mentioned. In the chapter on theology he is recorded (1.7.25) as the last of the founders of the Hellenistic schools. In 4.9.20 his idiosyncratic view on recognising the σοφός was noted. In four of the remaining cases Aëtius utilises the key Epicurean term for multiple possibility, ἐνδέχασθαι (2.2.5, 2.13.15, 2.22.4, 3.15.11). Similarly in 2.4.13 he says that the cosmos (i.e. any cosmos?) is destroyed in a multitude of ways (but ἐνδέχασθαι is not used). I will return to these texts below in section 2(h). In 2.21.5 he is the last in a diaeresis on the size of the sun in which his view differs from the others in being phenomenological (as large as it appears) instead of being compared with something else.⁴³ In 1.8.3 in a diaphonia he is recorded as rejecting all talk of *daimones* and heroes. In another diaphonia at 1.20.2 we read that he uses the terms κενόν, τόπος and χώρα interchangeably, unlike the Stoics. In these texts the common denominator seems to be that his view differs markedly or radically from the ones that precede it. As a philosopher Epicurus is a bit of an ‘odd bod’.

(g) sources and terminology

It is comparatively rare to be able to trace the sources of the doxai recorded in the Aëtian *Placita*. In the case of Plato and Aristotle, of course, we have a good chance, though doxai are by no means always derived from original texts and some relevant Aristotelian works have not survived.⁴⁴ Occasionally doxai contain or their contents can be traced back to surviving verses of the Presocratic poets.⁴⁵ There are about a dozen quotations with references.⁴⁶ But it is all quite scanty.

In the case of Epicurus we are better placed than for most authors. Book 10 of Diogenes Laertius, now available in the splendid new edition of Tiziano Dorandi,⁴⁷ contains two original documents, the *Letter to Herodotus* and the *Letter to Pythocles*,⁴⁸ which relate directly to the contents of the first three Books of the *Placita*. The third document, the *Letter to Menoecus*, on ethics falls outside the scope of the compendium, but it can help us with a chapter in Book 1.⁴⁹ Comparison of our collection of Epicurean doxai with these documents may give us insight into the relation of the contents of the doxai to Epicurus’ own writings.

On two occasions Aëtius appears to quote Epicurus directly, but without giving a reference to the work cited. In 1.3.16 this is suggested by the parenthetical use of φησί, and also by the switch to the customary *oratio obliqua* at the end of the quote. In 4.8.2 the use of the name-label followed by a colon and a text in *oratio recta* indicates that the words that follow

⁴³ P’s text has ἐνδέχασθαι in this doxa too, but it must be a mistake.

⁴⁴ On the doxai of Plato in book 4 of the *Placita* see the analysis in Baltussen (2000). On the apparent quote from Aristotle at 2.5.1 see below n. 50.

⁴⁵ E.g. Parmenides at 2.28.6 based on 28B14 DK; Empedocles at 1.3.19 citing 31B6 DK; see also Mansfeld and Runia (2009) 219.

⁴⁶ Fifteen are listed at Runia (1992) 122, but some are not included in our definitive text because they have been inserted by Stobaeus or interpolated. On these references see Mansfeld and Runia (2009) 205–224.

⁴⁷ Dorandi (2013).

⁴⁸ I agree with Mansfeld and most more recent scholarship that the Letter is authentic; See Mansfeld and Runia (2010) 237 n. 2 and previously Bollack and Laks (1978). But its authenticity is contested by Podolak (2010) on linguistic grounds.

⁴⁹ On the subject of τύχη at 1.29.3.

are very likely a quotation. This is a relatively rare technique in the *Placita*.⁵⁰ Here too there is an immediate switch to *oratio obliqua*, in which interestingly the doxographer paraphrases the Epicurean text, replacing his technical term τὸ ἐπαίσθημα with the more neutral αἰσθητόν. The two quotations are quite brief, 12 and 16 words respectively. The actual sources of the quotations are unknown.

At D.L. 10.135 immediately following the third letter we read: μαντικήν δὲ ἅπασαν ἐν ἄλλοις ἀναίρει, ὡς καὶ ἐν τῇ Μικρᾷ ἐπιτομῇ. This is quite similar to the formulation in 5.1.2, but we should regard both texts as using a common doxographical formula rather than that Aëtius is quoting from the Epicurean manual. Nevertheless this text reminds us that we need to take into account Epicurus' method of writing. As is well known, he himself produced not only lengthy and elaborate works, notably the Περὶ φύσεως in 37 books, but also summaries and *epitomai*, of which the three letters are examples.⁵¹ It may be assumed that these shorter versions of his teachings will have been very attractive to doxographers.

Of all the doxai in our collection there are two where we can see very strong links between Aëtius and the texts in Diogenes. The former is in the chapter on space:

1.20.2 Ἐπικούρου δνόμασι πᾶσιν παραλλάττειν κενόν τόπον χώραν.	<i>Ep.Herod.</i> 40 τόπος δὲ εἰ μὴ ἦν ὁ κενὸν καὶ χώραν καὶ ἀναφή φύσιν ὀνομάζομεν, οὐκ ἂν εἶχε τὰ σώματα ὅπου ἦν οὐδὲ δι' οὗ ἐκινεῖτο ...

The doxa could be an abstract from this text or one very similar to it in another source. The other text that is very close to a text in Diogenes reports on the distribution of kosmoi in the chapter Περὶ τάξεως τοῦ κόσμου:

2.7.3 Ἐπικούρου ἐνίων μὲν κόσμων ἄραιον τὸ πέρας ἐνίων δὲ πυκνόν, καὶ τούτων τὰ μὲν τινὰ <u>κινούμενα</u> τὰ δ' <u>ἀκίνητα</u> .	<i>Ep.Pyth.</i> 88 κόσμος ἐστὶ περιοχὴ τις οὐρανοῦ, ἄστρα τε καὶ γῆν καὶ πάντα τὰ φαινόμενα περιέχουσα, ἀποτομὴν ἔχουσα ἀπὸ τοῦ ἀπείρου καὶ καταλήγουσα <u>ἐν πέρατι ἢ ἀραιῷ ἢ πυκνῷ</u> καὶ οὗ λυομένου πάντα τὰ ἐν αὐτῷ σύγχυσιν λήψεται—καὶ λήγουσα <u>ἢ ἐν</u> <u>περιαγομένῳ ἢ ἐν στάσιν ἔχοντι</u> καὶ στρογγύλην ἢ τρίγωνον ἢ οἷαν δῆποτε περιγραφὴν. πανταχῶς γὰρ ἐνδέχεται.

It is certainly not impossible that Aëtius' doxa is actually based on this text, whether directly or indirectly, adapting it for multiple kosmoi rather than a single cosmos (even though the chapter heading only speaks of the latter). Similar to what we saw in the example of 5.1.2 above, the words κινούμενα and ἀκίνητα could be simplifications of the more elaborate

⁵⁰ See for example 1.23.2 Ἀριστοτέλης· ἐντελέχεια κινητοῦ, where *Phys.* 3.2 202a8–9 and 8.5 257b8 are quoted. But in the first doxa of the same chapter the colon introduces a definition attributed to Pythagoras and Plato which is not a quotation. There is another example citing Aristotle at 2.5.1. It might appear to derive from a lost work treating the question of the cosmos' source of nourishment (e.g. the *De philosophia*), but the argument uses a Stoic mode of argumentation and is in fact a fallacy, so that is quite unlikely; see Mansfeld and Runia (2009) 370–371. But we cannot be sure that it is a quotation.

⁵¹ There is an exhaustive list of his works in Goulet (2000).

formulations ἢ ἐν περιανομένῳ ἢ ἐν στάσιν ἔχοντι. But it is equally if not more likely that it derives from another summary or a more detailed text, for example in the *Περὶ φύσεως*.

Another example involving parallel passages may further illustrate this dilemma:⁵²

2.2.5 Ἐπίκουρος δ' ἐνδέχεται μὲν εἶναι σφαιροειδεῖς τοὺς κόσμους, ἐνδέχεται δὲ καὶ ἑτέροις σχήμασι κεκρῆσθαι.

Cf. Achilles §6 Περὶ σχήματος κόσμου. σχῆμα δὲ κόσμου οἱ μὲν κωνοειδές, οἱ δὲ σφαιροειδές, οἱ δὲ ὠοειδές, ἥς δόξης ἔχονται οἱ τὰ Ὀρφικά μυστήρια τελούντες.

Ep.Her. 74 ἔτι δὲ καὶ τοὺς κόσμους οὔτε ἐξ ἀνάγκης δεῖ νομίζειν ἓνα σχηματισμὸν ἔχοντας <...> (†ἀλλὰ καὶ διαφόρους αὐτοὺς ἐν τῇ ἰβ' *Περὶ αὐτοῦ φησιν*· οὗς μὲν γὰρ σφαιροειδεῖς, καὶ ὠοειδεῖς ἄλλους, καὶ ἀλλοιοσχήμονας ἑτέρους· οὐ μέντοι πᾶν σχῆμα ἔχειν ...).

Cf. *Ep.Pyth.* 88 κόσμος ἐστὶ περιοχὴ τις οὐρανοῦ ... καὶ λήγουσα ἢ ἐν περιανομένῳ ἢ ἐν στάσιν ἔχοντι καὶ στρογγύλην ἢ τρίγωνον ἢ οἶαν δὴποτε περιγραφὴν. πανταχῶς γὰρ ἐνδέχεται.

Here the scholion included in Diogenes' text indicates that a more detailed discussion was given in Book 12 of the *Περὶ φύσεως*. Aëtius only gives the one obvious example of a cosmic shape. This example is found in the scholion. The phrase ἑτέροις σχήμασι is a simplified version of ἀλλοιοσχήμονας ἑτέρους. The second example in the scholion, ὠοειδεῖς, is intriguing because it is also found in Achilles (who has three shapes as examples). Achilles and Aëtius make use of the same anterior doxographical tradition.⁵³ So did Aëtius simplify an earlier more elaborate doxa, containing the extra material in Achilles, or do we have a hint here that Epicurus himself might have used a very early version of a doxography on the subject? The second alternative is of course quite speculative and part of the wider subject that we will examine further in section 3 of the paper. It also noteworthy that double use of the term ἐνδέχεται indicating multiple possibility is also found in Diogenes, not in the text of the letter (but it has a lacuna) or in the scholion, but in the other passage in *Ep.Pyth.* 88 that we already examined above.

It will not be possible in the present context to examine all the passages in our collection in relation to the evidence in Diogenes.⁵⁴ Suffice it to say that in the cases of at least eleven texts, including the above three, there are quite close parallels between our doxai and the actual words of Epicurus in the letters or in the extracts from the scholia interpolated in Diogenes' texts.⁵⁵ In five of these cases the doxai are in fact closer to the information in the scholia than in Epicurus' own words, which is an indication that in most cases the doxographical tradition drew on other documents than the letters we have. One of the scholia at *Ep.Her.* 66 shows us how the doxographer can go astray. In the chapter (5.3) on the essence of reproductive seed (σπέρμα) Epicurus' view is stated to be that it is a fragment of the soul and the body. This is in fact a clumsy formulation of the Stoic view.⁵⁶ The scholion

⁵² Text as found in Dorandi (2013).

⁵³ There is a mention of the Orphic writings at 2.13.14 on each star being a cosmos.

⁵⁴ Note especially the doxa at 5.12.3 on the *quaestio* why children resemble other people and not their parents. The final doxa has the name-label οἱ Στωικοί, but the contents is likely to be Epicurean and the wording of the text bears a number of similarities with *Ep.Hdt.* 48–50 which are not likely to be coincidental. We will discuss this passage in more detail in our forthcoming commentary on Aëtius' text.

⁵⁵ 1.3.16 cf. D.L. 42, 44 (scholion); 1.7.25 cf. §139 (sch); 1.12.5 cf. §44 (& sch); 1.29.3 cf. §133; 2.2.5, cf. §§74 (& sch), 88; 2.7.3, cf. §88; 2.21.5, cf. §91; 3.15.11, cf. §§105–106; 4.4.7 and 4.5.6, cf. §66 (sch); 4.19.2, cf. §§52–53, s

⁵⁶ Cf. 5.4.1 and Arius Didymus at Eus. *P.E.* 15.20.1 (= fr. 39 Diels); see also further below section 3(c) ad fin.

gives the correct view, τὸ δὲ σπέρμα ἀφ' ὅλων τῶν σωμάτων φέρεσθαι. This mistake may well have been caused by faulty transmission or by the process of P's abridgement. It would be charitable to emend to:

5.3. Τίς ἡ οὐσία τοῦ σπέρματος

§5 {Ἐπίκουρος} {οἱ Στωικοί} ψυχῆς καὶ σώματος ἀπόσπασμα.

§6 Δημόκριτος {Ἐπίκουρος} ἀφ' ὅλων τῶν σωμάτων καὶ τῶν κυριωτάτων μερῶν, οἷον ὀστέων σαρκῶν ἰνῶν.

This would mean that Aëtius (or the epitomator ps.Plutarch) is using exactly the same phrase as in the scholion, but has more specific details about which parts of the body the seed comes from (this could of course also derive from a source on Democritus).

Comparison with other Epicurean texts, both his own and those of his followers, will yield further information on the sources of our collection of doxai. At 1.12.6 and 1.23.4, when discussing the motion of bodies, Aëtius twice uses the phrase κατὰ παρέγκλισιν for the atomic swerve. This phrase is not found in Diogenes or in any text in Usener's collection, but already present in Philodemus and the derivative terms *declinatio* and *declinare* are found in Lucretius and Cicero.⁵⁷ It is possible, however, that it goes back to Epicurus.⁵⁸ In the chapter on the substance of the sun the view is attributed to Epicurus (2.20.14) that it is an earthy concentration that is sponge-like and inflamed by the fire in its cavities. This view is absent in Diogenes, where the sun is not treated separately but a fire-like nature is one of the possibilities of the composition of the heavenly bodies in general (§90). In Achilles, however, exactly the same view is found as in Aëtius, through differently phrased.⁵⁹ We might also compare Lucretius, who specifies (5.592–601) that the concentration occurs through all the elements of heat coming together from the entire cosmos, allowing him to explain how so much heat can generated from such a small object (since it is the size that it appears to us, cf. 2.21.5). A very similar view is found in Diogenes of Oenoanda, where it is 'charcoal-like' rather than 'sponge-like'.⁶⁰ What is intriguing, however, that he explicitly states that this is a possible view, using the technical term ἐνδέχεται, and also gives an alternative, which unfortunately is not clear because the text breaks off. In the same way Lucretius gives three alternatives to explain how the sun can illuminate and heat the entire world (5.592–614). Given the state of our evidence it is difficult to determine whether Epicurus gave multiple explanations of the sun's nature,⁶¹ or only multiple answers to the question of how it could illuminate the cosmos so powerfully. In the former case the doxographical tradition as represented by Aëtius and Achilles took just one of the alternatives and presented it as his view, in contrast to Aëtius' adoption of multiple explanations in the case of the heavenly bodies in 2.13.15.

⁵⁷ Philodemus Περὶ σημειώσεων (P Herc. 1065 col. 54.5; Lucr. 2.221; Cic. *Fin.* 1.18, *De fato* 22 (= Usener test. 281).

⁵⁸ L&S (1987) 1.52 argue that the theory had not yet been developed at the time that *Ep.Herod.* was written. This view is criticised by O'Keefe (1996) 310–311.

⁵⁹ §19 27.12–13 Di Maria Ἐπίκουρος δὲ κισηροειδῆ αὐτὸν ἔφη ἐκ πυρὸς διὰ τρημάτων τινῶν τὸ φῶς ἐκπέμποντα.

⁶⁰ Fr.13 III 13–IV 10 Smith, ἐνδέχεται τοιγαροῦν τὸν ἥλιον ἀνθρακῶδη τινὰ κύκλον [εἶναι καὶ] λεπτόν ἄκρως, [ὑπὸ τε τῶν] πνευμάτων αἰω[ρούμενων] πηγῆς τε ἐπέχ[οντα τρό]πον, τοῦ μὲν ἀ[πορέοντος] ἐξ αὐτοῦ πυρὸς, τοῦ δὲ εἰσ[ρέοντος] ἐκ τοῦ [περιέχον]τος κατὰ μείκρ[ομερεῖς] συνκρίσεις διὰ [τὴν τούτου] πολυμιγ[είαν οὕτω δ' ἐ]παρκεῖν αὐ[τομάτως πέφυ]κε τῷ κόσμῳ [ἢ τοῦ περι]χοντος εὐε[μπρήστου] τυγχαν[οντος] (including some conjectures by Bailey 3.1414).

⁶¹ This is the view of Bailey 1947, 3.1414; Gale (2009) 151 appears to opt for the latter.

One of the longer texts in our collection is at 4.3.11 on whether the soul is a body and on the substance of the soul. It is not explicitly stated in Epicurus' doxa that the soul is corporeal, but it is called a mixture (κράμα) of four ingredients, a fiery quality, an aerial quality, a pneumatic quality and a fourth something that is 'nameless' (ἄκατανόμαστος) which makes sense-perception possible. The doxa is formulated quite differently from what we read in *Ep.Hdt.* 63 and the scholion in §66. On the other hand, there is a striking parallel in Plutarch's polemic against the Epicurean Colotes.⁶² Plutarch mentions exactly the same ingredients, substituting 'heat' for 'the fiery' (but note that Aëtius also includes τὸ θερμὸν in the second half of the doxa). He too refers to the 'nameless quality', which he regards as an embarrassing term, but he does not associate it with perception but rather with the reasoning faculty. Aëtius' doxa begins with the key term κράμα, not found in Diogenes or Plutarch (or any other Epicurean text in Greek), but surely authentic. Long and Sedley rightly point to the mention of κράσις in *Ep.Her.* 63 and a discussion on mixture in Alexander of Aphrodisias.⁶³ The same emphasis on mixture in relation to the soul's components is found at Lucretius 3.231–245. This passage is very close in content to the doxa in Aëtius. Not only does it include the same four components (with poetic embellishment), but it also relates the fourth nameless one (242 *omnino nominis expers*) to the faculty of sense-perception (238 *sensum*, 240 *sensiferos motus*). Lucretius emphasises in the lines that follow that the fourth component initiates movement (3.246–251). This differs from the doxa in Aëtius, which schematically identifies the aspects of movement, rest and heat with the three elements. It is precisely the tidy and schematic nature of our doxa that gives it the typical features of a doxographical report. It is not very likely that our doxographer composed it directly on the basis of a reading of the original texts of Epicurus. It is much more likely to have been taken over from an earlier doxographical tradition, which may well have influenced Lucretius and Plutarch in their reports as well.

Among the parallel texts and other witnesses to the Epicurean doxa in Aëtius, there are numerous citations from Lucretius' poem, primarily in relation to Epicurus' doxai, but also to illustrate those of Democritus and more general atomist texts. As we have observed above, in some cases Lucretius stands closer to the doxographical texts than the original Epicurean material that we possess. This could be the result of our defective knowledge of Epicurus' writings, or it may be that Lucretius has benefitted from the compilatory and interpretative work done on the legacy of Epicurean thought in the intervening two centuries that separate him from Epicurus. David Sedley has argued strongly for the viewpoint that Lucretius is a 'fundamentalist', using only the texts of his master with minimal use of other sources.⁶⁴ Others have found this view implausible, pointing for example to the fact that the structure of Lucretius' accounts of cosmology and meteorology are much closer to doxographical sources than what we know of Epicurus' writings.⁶⁵ The

⁶² *Adv.Col.* 118D–E.

⁶³ L&S 2.68; cf. Usener test. 280.

⁶⁴ Sedley (1998) 91–93 and passim. Thus he argues that Lucretius did not read Theophrastus directly but absorbed Theophrastean material via Epicurus himself; see (1998) 182–185.

⁶⁵ Runia (1997); see further section 3(b–c) below. Bakker (2016) 160 now argues that the similarities of Epicurus *Ep.Pyth.*, Lucretius Book 6 and Aëtius Book 3 show that they must go back, *directly or indirectly*, to a single archetype, which may perhaps be identified with Theophrastus *Physical opinions* (my emphasis). This remains vague, but the evidence may not allow further precision.

way forward here is a systematic comparison of all the relevant doxai in the *Placita* with Lucretius' poem.⁶⁶

To conclude, the *Placita* and the tradition on which they depend will have had access to a good range of sources, the contours of only some of which we can still trace via Diogenes Laertius and other texts. This is the reason that there is a good amount of authentic Epicurean terminology present in our collection of doxai,⁶⁷ as well as a number of passages giving valuable insight into Epicurean doctrine. In many cases, however, the information has been schematised and simplified, as is so often the case in the doxographical genre. The evidence of the available comparative material will be set out in full in our edition of Aëtius, and this will enable scholars to make a judgment on the provenance and value of the doxai for themselves.

(h) doxai presenting 'modal' views

It was noted above, when discussing the location of the doxai attributed to Epicurus within individual chapters, that these occur on a disproportionate number of occasions in the final position of a chapter.⁶⁸ Five of the nine relevant texts (2.2.5, 2.4.13, 2.13.15, 2.22.4, 3.15.11) contain statements of multiple possibility and in all but one (2.4.13) the characteristic Epicurean term ἐνδέχασθαι is used. In previous publications we have called these 'modal views' because they emphasise differing *ways* of answering the question or topic posed in the chapter.⁶⁹ The expression in fact goes back to Epicurus himself, who on more than one occasion speaks of the πλεοναχὸς τρόπος (D.L. 10.80, 95) as opposed to an answer given ἀπλῶς (cf. §80). In 2.4.13 Epicurus is said to state that the cosmos could be destroyed 'in very many ways' (πλείστοις τρόποις). In the chapter on earthquakes Aëtius curiously appears to create a diaphonia on this very aspect of possibility. In 3.15.10 Plato is credited with his six different kinds of movement (cf. *Ti.* 34a) and this is applied to the earth (cf. *Phd.* 109a).⁷⁰ It is not possible (ἐνδέχασθαι) for the earth to move in any of these ways, so it remains unmoved itself, but it has places (τόποι) that jump around because of their thinness. The very next doxai is the final one in the chapter attributed to Epicurus, where two possibilities *are* indicated, both times using the same term ἐνδέχασθαι.⁷¹

If we examine our core group of five doxai, it emerges that they represent differing kinds of multiple possibility. In the case of the shapes of the cosmos (2.2.5), it must be interpreted as a theoretical possibility. In the atomist cosmology of infinitely many kosmoi,

⁶⁶ See Bakker (2016) 155, but a systematic analysis remains to be done.

⁶⁷ Examples are: 1.3.16 λόγῳ θεωρητός, ἀπερίληπτα, μέγεθος, σχῆμα, βάρος; 1.7.25 ἀνθρωποειδεῖς, λεπτομέρεια; 1.12.5 ἀποπαλμός; 1.22.6 σύμπτωμα; 1.24.2 συγκρίσεις; 2.1.3 ἄπειροι κόσμοι; 2.2.5 etc. ἐνδέχασθαι; 3.4.5 στρογγυλαίνεσθαι; 4.3.2 ἀκατόνομαστόν τι; 4.8.10 εἶδωλον; 4.9.6 συμμετρία πόρων; 4.19.2 ῥεῦμα; 5.1.2 ἀναιρέω (doctrinal).

⁶⁸ See above section 2(g) at the end.

⁶⁹ E.g. at Mansfeld and Runia (2009) 326, 345, 377 etc. See also Mansfeld (1994) 40–41, who however links the various possibilities to the Aristotelian 'plural way'.

⁷⁰ Restricted to movement in a straight line; circular rotation is not considered.

⁷¹ The terminology of ἐνδέχασθαι is used on one more occasion in the *Placita*, at 5.14.3, a doxa of Diocles on why mules are infertile. The first part of the quote reads as a direct quotation, but then there is a switch to indirect speech with use of the verb ἐνδέχασθαι. It is possible that Diocles used this terminology, but it perhaps more likely that the doxographer applied it to this case, which is not one of multiple causes (the plural αἰτίας applies to the group of associated reasons put forward by Empedocles in the previous doxa). On this text see further Runia (1999) 222, 225–226; Van der Eijk (2000) 2.44.

no reason can be given for there being just one shape, though none of these alternative shapes can be known through sense-perception. The opposition between the view of Leucippus and Democritus that the cosmos is spherical and Epicurus' modal view is surprising and no doubt misguided, but at the least it might tell us that Epicurus placed more emphasis on the aspect of multiple shapes.⁷² Similarly 2.4.13 indicates no more than multiple possibility. The cosmos (whether our own or in general) is destructible and this can happen in a great number of different ways. The next two doxai differ because Epicurus explicitly responds to the views of other philosophers already outlined. In 2.22.4 these are views on the shape of the sun (Anaximenes–Alcmaeon, Heraclitus, Pythagoreans–Stoics). But in the previous chapter (2.21.5) he had been credited with the view that the sun was as it appears, and it can hardly be doubted that it is circular (cf. Lucr. 5.564 *rota*). So perhaps he was on record as having said that the sun could have the various shapes consistent with its being circular, e.g. a flat round disc, a round bowl or a sphere, as in the case of the earlier doxai.⁷³ (But it can also not be excluded that this doxa is simply a extrapolation on the part of the doxographer.) Then there is the doxa on the nature of the heavenly bodies (2.13.15). Here we read that he rejects none of these views, because he holds fast to what is possible. If 'heavenly bodies' includes all the planets and fixed stars, as the chapter heading indicates, then Epicurus' multiple view does not sit easily with his position on the sun at 2.20.14 that it is an earthy inflamed concentration, or with the alternatives given at *Ep.Pyth.* 90 which are all described as being rather light with no explicitly stated earthy components.

We are left with just one further text at 3.15.11 on earthquakes. It is as already noted the final doxa in the chapter and the only one to have more than a single explanation. It is the only one of the doxai placed in final position that resembles the continuous stream of multiple explanations that we find in the *Letter to Pythocles* on both cosmological and meteorological subjects, well listed and analysed by Bakker in his recent monograph.⁷⁴ Both texts (3.5.11 and *Ep.Pyth.* 105–106) give two explanations for the cause of earthquakes, with the *Letter* adding that more kinds of movements of the earth are possible. The two sets of explanations differ and the *Letter* is certainly not the direct source of the doxa, but they do share common elements (note that the notion of wind rushing through cave-like hollows in the *Letter's* first explanation appears in the doxa's second).⁷⁵ Given the plethora of meteorological causes that Epicurus assembled in the *Letter* and no doubt in other writings, it is perhaps surprising that this is the only text in the whole of Book 3 in the *Placita* that contains any record of his multiple explanations. Perhaps one or two may have fallen out, but they cannot have been many in number. The only other doxa in Book 3 at 3.4.5 on clouds, hail and rain only gives single and very brief descriptions.

This brief discussion of Epicurus' doxai on multiple possibilities and explanations reveals the limitations of the doxographical method as practised in our compendium. At no

⁷² In the surviving fragments of the two earlier atomists the emphasis falls on explaining the genesis and structure of our cosmos; cf. 1.4.1 which Diels published as an extract from Leucippus' Μέγας διάκοσμος (67A24), though Usener had included it in his collection of Epicurean fragments (test. 308). Luria (2007) 1127 regards D.L. 10.88 as polemic against the Democritean position.

⁷³ See further Mansfeld and Runia (2009) 550–551.

⁷⁴ See Bakker (2016) 8–75; good overview in the table on 269–271.

⁷⁵ There is a verbal convergence: §105 εἰς ἀντροειδεῖς τόπους τῆς γῆς; 3.15.11 εἰς τὰς ἀντροειδεῖς κοιλότητας. Seneca Nat. 6.20.5–7 cites Epicurus as saying that all the various explanations given by Democritus and others are possible, but that no cause satisfies him more than the role of *spiritus* (i.e. πνεῦμα).

stage does the doxographer indicate the epistemological aspect of the doctrine, namely that no definitive answer can be given because of the lack of secure evidence through sense-perception, let alone that the even wider aspect of the goal of ἀταραξία comes into focus. It is only via the limited method of compiling and structuring his chapters that the doxographer conveys the distinctiveness of the Epicurean position, placing him last because his view differs from those of other philosophers and in a sense advances beyond them.

3. *Epicurus on the Placita*

Our attention now turns to the second subject of this paper, what Epicurus' writings can tell us about the incipient doxographical tradition in his own time.

(a) the question

Epicurus liked to assert the independence of his thinking. In practice this meant that other philosophers, including the atomists, were seldom referred to, except in polemical terms. According to Diogenes Laertius (10.26) there was not a single verbatim quotation in his 300 bookrolls. In the surviving fragments of his massive work Περὶ φύσεως we encounter scarcely any names of the established philosophers that are so prevalent in the doxographical record. In Arrighetti's edition there is only a reference to Empedocles, and perhaps also one to Anaximenes.⁷⁶

Nevertheless, no matter how much the philosopher claimed to be an autodidact, in order to establish a comprehensive doctrine that could defeat the philosophers that he was so scathing about, he needed information that had to be obtained from somewhere. This was particularly the case in the areas of cosmology and meteorology. To be sure, his chief aim in these areas was moral, to ensure that no ideas would be a hindrance to the attainment of the goal of ἀταραξία, as is particularly evident from the final section of the *Letter to Herodotus* (§§78–82). But he wishes to go beyond mere examples and treat the main topics in these areas of the φυσικὸς λόγος in a thorough manner. This is clear from the surviving epitomai on these subjects, and also from some of the fragmentary remains of his longer works. In addition, Epicurus' characteristic method of giving multiple explanations for all those topics where a single explanation was not certain on the basis of clear evidentiary testimony made this need for information all the more acute. Frederik Bakker has very usefully summarised all the topics which are treated in this way in the *Letter to Pythocles* and in total there are 34 of them.⁷⁷

Scholars have long thought that for this necessary information Epicurus turned to doxographical texts. In the Prolegomena of his *Doxographi Graeci* Diels, arguing that Theophrastus was the source of much of the doxographical material used by later authors, stated that the *Letter of Pythocles* was 'quickly cobbled together as if from the doxographers with the names of the philosophers left out', and Usener, following in his pupil's wake, added that it was highly unlikely that Epicurus would have worked his way through the books of the physiologoi when there was a book to hand from which he could take them without any

⁷⁶ Arrighetti (1973), fr. 29 (= Book 14) 28.17 Empedocles; fr. 29 13.2.2 Anaximenes (conjecture of the editor). As Jaap Mansfeld reminds me, there is a book title Ἀναξιμένης at D.L. 10.28 and one wonders what his Ἐπιτομή πρὸς τοὺς φυσικοὺς (10.27) contained.

⁷⁷ Bakker (2016) 269–271; there are six topics where only a single explanation is given.

trouble, namely the Φυσικῶν δόξαι (as they called it) of Theophrastus.⁷⁸ Indeed it may be taken as certain that something like this occurred,⁷⁹ even if it would be rash to reduce his sources to a single work, especially one that we know so little about (its title, for example, was almost certainly Φυσικαὶ δόξαι⁸⁰).

That Epicurus should have been well acquainted with the writings and thought of Theophrastus is certainly plausible from the chronological point of view. Both during his first sojourn in Athens at the age of 18 in 325–323 and later when he settled there permanently in 307, the Lyceum with its leaders Aristotle and Theophrastus was a dominant presence in the intellectual landscape of the city.⁸¹ In the reports of Hellenistic authors recorded by Diogenes Laertius Epicurus is never connected with any Peripatetic teacher. But in an article aptly titled ‘Epicurus Peripateticus’ Jaap Mansfeld has shown that a close analysis of the method of the *Letters* reveal a surprisingly extensive debt to Aristotle’s problem-directed dialectical and scientific method, including the use of question-types and the diaeresis which are so prominent in the doxographical tradition that was built upon that method.⁸² Theophrastus to some extent revised his master’s methods, but much was taken over and further elaborated. An important question that is relevant here is the identity of the author of the *Metarsilogika* preserved in Arabic and published twenty-five years ago by Hans Daiber.⁸³ This document contains numerous examples of multiple explanations of meteorological phenomena, and also extensive use of analogies taken from ordinary life. Both methods are relevant to Epicurus and also to the *Placita*. Reminiscent of Epicurus but utterly different from the *Placita*, however, is the total absence of named references to other thinkers. The document commences with the words ‘we say’ and then the numerous theories about meteorological phenomena are baldly listed without any further attribution. Mansfeld and other scholars have accepted the work as going back to Theophrastus, but recently Bakker has questioned it.⁸⁴ The relationship between this work and Book 3 of Aëtius is not very close and we shall set it aside in this paper.

The question I wish to pose in this second main part of the paper is simply this. Does a systematic comparison between the Aëtian *Placita* and Epicurus’ surviving writings demonstrate his utilisation of an earlier doxographical tradition from which those *Placita* have derived? Is the scholarly intuition of Diels and Usener, followed by later scholars, justified? This work has never been systematically carried out to my knowledge.⁸⁵ More than three centuries separate our compendium from the time of Epicurus’ writing activity and for much of that time the development of the doxographical tradition is quite obscure.⁸⁶ It would be quite remarkable if it could be shown that the beginnings of the tradition do already

⁷⁸ Diels (1879) 225; Usener (1887) xl–xli; both cited by Bakker (2010) 55. See also Reitzenstein (1924) 39–40.

⁷⁹ See further the arguments, with further secondary literature, at Bakker (2010) 54–56.

⁸⁰ As argued by Mansfeld (1992) 63–66, (2002); both reprinted in Mansfeld and Runia (2010).

⁸¹ On the chronology see Goulet (2000) 160–162.

⁸² Mansfeld (1994).

⁸³ Daiber (1992).

⁸⁴ Bakker (2010) 145–153.

⁸⁵ I am now partly fulfilling the promise alluded to by Mansfeld (1994) 30; see also Mansfeld and Runia (2010) 582.

⁸⁶ On the basis of parallels in Varro and Cicero Diels (1879) postulated the *Vetusta placita*, but Mansfeld (1989) demonstrated that there is evidence of *Vetustissima placita* already in surviving fragments of Chrysippus, i.e. only half a century after Epicurus’ death.

appear so early. Our focus will have to be mainly on the *Letter of Pythocles*. The previous letter to Herodotus broaches the subjects of the ‘phenomena on high’ (τὰ μετέωρα, §§76, 78, 80) such as ‘solstices, settings and risings and eclipses and similar such matters (§79).’ Knowledge of them is not required for the achievement of a blessed state, but it should not be supposed that the presentation of multiple explanations for them means that Epicurus’ treatment of them lacks accuracy (§80). The letter only presents a small number of these in the area of general cosmology. Much more detail is given in the following letter, which immediately picks up the theme of τὰ μετέωρα (§§84–87 etc.) and covers it with considerable thoroughness, treating no less than 40 topics.⁸⁷ Epicurus uses the description to cover both cosmology and meteorology. We shall divide them into the two domains corresponding to Books 2 and 3 of Aëtius’ compendium.

But before we present the evidence, it is important to be clear about what we are looking for. This is evidence *not* of Epicurus’ own views, as discussed in the previous part of the paper, but of the material he provides that represents features and content of doxographical texts that he may have used. It will include chapter headings and general organisational aspects, but above all explanations drawn from the doxai attributed to other thinkers, ‘with the names left out,’ as Diels had suggested.⁸⁸ Of course it is possible that some of this material that he took over might ultimately be attributed to himself in a later phase of the tradition. A complication also arises in the fact that a considerable amount of this material reappears in a slightly different form in the poem of Lucretius. In the present context this additional material can only be very partially taken into account.

(b) the evidence on cosmology

The cosmological section of the letter is relatively short, §§88–99. Like Aëtius it begins with a general section on the cosmos, including a definition and the questions of the limits of the cosmos or kosmoi, their number, and their origin in the void (§§88–90). Alternative views are given on the limits of the cosmos or kosmoi and their shape (the latter subject had also been touched on in the previous letter, §74). As we saw earlier in our discussion of Aëtius’ sources, these texts or ones very similar to them may have been used by our doxographer or his anterior tradition to establish the doxai of Epicurus himself. The examples of shape (§74 ball-like, egg-like, §88 round or triangular) that they contain may have originally been taken from early doxographical texts. The parallel in Achilles (conical, ball-like, egg-like) is very suggestive.⁸⁹ Also the extensive use of the diaeresis may have been informed by these texts.⁹⁰ The examples with anonymous name-labels, however, hardly go very deep.

The *Letter to Pythocles* continues with a discussion of the various features of the heavenly bodies taken together (sun, moon and remaining ἄστρα). This runs contrary to the structure of Aëtius’ Book 2, where ἄστρα, sun and moon are dealt with separately, with 7, 5 and 7 chapters devoted to them respectively. The overlap of the specific subjects is also far from perfect, with Epicurus giving explanations of risings and settings, turnings of the moon, and length of nights and days, all of which are missing as chapters in Aëtius. However, the doxa on risings and settings (in the chapter on the stars) which Aëtius attributes to

⁸⁷ See n. 77 above and text thereto.

⁸⁸ See n. 78 above and text thereto.

⁸⁹ See n. 53 above and text thereto. Note that ‘conical’ might be taken as triangular in three dimensions.

⁹⁰ As Mansfeld has shown; see above n. 82 and text thereto.

Xenophanes at 2.13.13 is exactly the same as at the first explanation on the subject in *Ep.Pyth.* 92.⁹¹ The chapters on the substance of the ἄστρα, sun and moon (2.13, 20, 25) are among the longest in the compendium, whereas Epicurus only gives three very briefly stated alternatives (§90 pneumatic, fire-like or both), which fails to include the view that they are earthy or like rocks which is prominent in Aëtius' treatment.

For the turnings of the sun and moon (§93) Epicurus gives four alternative explanations: (1) the tilting of the heaven; (2) the resistance of air; (3) the presence or absence of combustible material; (4) the vortex causing a spiral movement. In Aëtius chapter 2.23 Περὶ τροπῶν ἡλίου (i.e. sun only) all four can be found among his nine doxai: §5 Plato Pythagoras Aristotle through the tilting of the zodiac circle; §2 Anaxagoras through the repulsion of the northern air; §7 the Stoa through the movement of the sun over the ocean; §3 Democritus through the whirling that carries the sun around (and for the spiral see the anonymous doxai §§8–9). For three of the four explanations there are close similarities of terminology: (1) κατὰ λόξωσιν/παρὰ τὴν λόξωσιν⁹²; (2) κατὰ ἄερος ἀντέξωσιν/ἀνταπώσει τοῦ ἄερος; (4) δινή, cf. ἔλιξ.⁹³ The Stoic doxa in Aëtius is likely to have replaced an earlier Presocratic one, very likely attributed to Heraclitus (cf. 2.20.6).

In the case of the eclipses of the sun and moon we also find a significant convergence of views between the two documents. Here too Epicurus discusses the two heavenly bodies together (§96), whereas Aëtius treats them separately (2.24, 29). In the *Letter* Epicurus gives only two alternatives: (1) through quenching, cf. Xenophanes §5, both using the key phrase κατὰ σβέσιν; (2) by interposition of earth or another heavenly body, cf. §1 Thales on the moon running in front of the sun (and note §6, the anonymous view on a concentration of clouds). A scholion in Diogenes' text also indicates that in the (presumably) fuller discussion in his Περὶ φύσεως Epicurus listed the dominant view attributed to Thales in terms closer to what is found in the *Placita*. The three views (quenching, interposition of moon or of another body) are repeated by Lucretius in his poem at 5.753–757. Most interestingly the scholion adds a further explanation 'through withdrawal' (κατ' ἀναχώρησιν). This could possibly be linked to the bizarre view attributed to Xenophanes at the end of the chapter (§9) that the sun's disk falls into an uninhabited part of the earth.⁹⁴ We note finally that the term Epicurus uses for interposition, ἐπιπροσθήσεις (§96, cf. also §§92, 95) is derived from the verb ἐπιπροστίθηναι used for the doxa of Anaxagoras on the moon's eclipse at 2.29.8 ἔσθ' ὅτε σωματῶν ἐπιπροσθούτων which—most unusually—Aëtius indicates was reported by Theophrastus (ὥς φησι Θεόφραστος).⁹⁵

In §94 Epicurus states that it is possible (ἐνδέχεται) that the moon has its own light or that it receives it from the sun. This is the subject of Aëtius 2.28 Περὶ φωτισμῶν σελήνης with

⁹¹ D.L. 10.92 ἀνατολὰς καὶ δύσεις ἡλίου καὶ σελήνης καὶ τῶν λοιπῶν ἄστρον καὶ κατὰ ἀναψιν γενέσθαι δύνασθαι καὶ κατὰ σβέσιν; A 2.13.13 Ξενοφάνης ἐκ νεφῶν μὲν πεπυρωμένων, σβεννυμένους δὲ καθ' ἑκάστην ἡμέραν ἀναζωπυρεῖν νύκτωρ, καθάπερ τοὺς ἀνθρακας· τὰς γὰρ ἀνατολὰς καὶ τὰς δύσεις ἐξάψεις εἶναι καὶ σβέσεις.

⁹² Epicurus' text is the first recorded use of the term λόξωσις.

⁹³ For the texts of the two accounts see Appendix 3.

⁹⁴ Bakker (2013) 704 follows Heath (1913) 56 in thinking this doxa originally described the risings and settings of the sun. But in the form that Aëtius presents it, it explains the solar eclipse.

⁹⁵ It is thus one of the 12 texts with references discussed above at n. 46 and text thereto. The text is noted at Diels (1879) 217 (cf. the table at 138), but the connection with Epicurus is not made. Diels took up the text as fr. 19 in his collection of the Φυσικῶν δόξαι (1879, 493), pointing out the parallel at Hippolytus *Ref.* 1.6.5. It is taken up as fr. 236 in the collection of Theophrastus' fragments (Fortenbaugh et al., 1992, 1.426).

its seven doxai, which are structured along the lines of exactly the same diaphonia in Epicurus' brief statement. Earlier in the same paragraph Epicurus discussed the phases of the moon, giving three explanations and adding that there are others. The comparison with Aëtius here is complicated by the fact that, as Bakker and I have shown, he conflates this topic with that of the moon's eclipse in 2.29 *Περὶ ἐκλείψεως σελήνης*.⁹⁶ Bakker argues persuasively that in Aëtius' *Vorlage* the two subjects were separate, as they are in Epicurus (who in turn, as we saw, conflates the eclipses of the sun and moon). If the two chapters in Aëtius are taken together, we see that there are parallels for each of the *Letter's* explanations: (1) rotation of its body, cf. Alcmaeon Heraclitus Antiphon at 2.29.3; (2) configurations of the air, cf. Heraclitus in 2.28.7; interposition of bodies, cf. Thales, Anaxagoras etc. in 2.29.7–8. Except the first, the parallels are less exact than for chapters 2.23 and 2.24. We note, however, that in the treatment of eclipses and phases Epicurus uses no less than six times the participial phrase *κατὰ* plus accusative, which is also a key feature of the formulations of Aëtius' doxai.⁹⁷

Epicurus' treatment of the face of the moon in §95 is very cursory. The introductory phrase *ἡ ἔμφασις τοῦ προσώπου* is only partly paralleled in Aëtius' chapter heading at 2.30 *Περὶ ἐμφάσεως σελήνης*, the term *πρόσωπον* not being used.⁹⁸ He only gives two rather general explanations (and suggests there may be more), the first of which (the interchange of parts) could be reflected in at least five of the doxai (2.30.3–5, 7–8). The other explanation (interposition again) is not found in Aëtius' chapter, but perhaps recalls Anaxagoras' doxa in 2.29.8.

The last subject that Epicurus mentions before he moves on to what we would call meteorological topics is the signs (of the seasons), *ἐπισημασία* (§99). This is parallel to 2.19 *Περὶ ἐπισημασίας ἀστέρων καὶ πῶς γίνεται χειμῶν καὶ θέρους*, which is placed at the end of the section on the heavenly bodies in general (2.13–19), just as the chapter in the *Letter* comes at the end of the discussion of heavenly phenomena (though it is not indicated as such). The two works use exactly the same term. But Epicurus' explanations, no doubt deliberately, make no reference to the heavenly bodies, as occurs in all three doxai in Aëtius.⁹⁹

(c) the evidence on meteorology

In his compendium Aëtius, unlike Epicurus in the *Letter*, makes a clear distinction between cosmology (Book 2) and meteorology, as indicated in his introductory remarks at the beginning of Book 3, where he says that he now turns to the *μετάρσια*. The book begins with the Milky way (defined as a cloud-like circle in the air) and comets. The former subject is

⁹⁶ Mansfeld and Runia (2009) 616–620; Bakker (2013).

⁹⁷ §94 *κατὰ στροφήν τοῦ σώματος, κατὰ σχηματισμούς ἀέρος, κατὰ προσθετήσεις καὶ κατὰ πάντας τρόπους, καθ' οὓς ...*; §96 *κατὰ σβέσιν, κατ' ἐπιπροσθέτησιν ἄλλων τινῶν*. In §93 on the solstices we also find *κατὰ λόξωσιν οὐρανοῦ* and *κατὰ ἀέρος ἀντέξωσιν*. There are another two in §95 on the face in the moon, *κατὰ παραλλαγήν καὶ κατ' ἐπιπροσλήτησιν*. For such phrases in Aëtius see 2.29.2–3, 5–6, and also 2.24.4–5.

⁹⁸ It is used by Plutarch in his famous treatise *Περὶ τοῦ ἐμφαινομένου προσώπου τῷ κύκλῳ τῆς σελήνης*, which also makes use of the doxographical tradition; see Mansfeld and Runia (2009) 629–630.

⁹⁹ After dealing with the subjects covered by Aëtius in Book 3 in §§99–111 Epicurus returns to some astronomical themes in §§112–114 relating to the motions of the stars and planets, before returning to shooting stars and signs (§§114–116). This may be a sign of hasty composition. The resemblance of these sections to Aëtius 2.16 on the movement of the stars is not great. But given the use of the diaeresis, he may well have used a Peripatetic source; cf. Mansfeld (1994) 41 = M–R 3.248.

missing in Epicurus' *Letter*, the latter is brought up at the end (§111) just before he briefly returns to the heavenly bodies.

In studying the four documents—Aëtius Book 3, the *Syriac Meteorology* attributed to Theophrastus, Lucretius Book V, Epicurus' *Letter to Pythocles*—Frederik Bakker concludes that 'the order of subjects of each ... is so similar that one can hardly escape the impression that they must ultimately derive, as far as this order is concerned, from one and the same work.'¹⁰⁰ I myself used this argument from macro-organisation in positing that the similarities between Lucretius and Aëtius could not be a matter of coincidence.¹⁰¹ I am less confident, however, about the relation between the *Letter* and Aëtius. To be sure, in the latter the chapter on the halo is misplaced and in our edition will become 3.5a, placed after the rainbow, just like in the *Letter*. But in fact other resemblances in terms of thematic order are far from impressive. In the *Letter* clouds and rain are discussed before lightning and thunder, earthquakes and subterranean winds are brought between whirlwinds and hail plus snow. Comets and shooting stars come last, just before he turns to the heavenly bodies again in §116. It is enough to show that both documents share a common background in meteorological studies, but not to demonstrate that there is any kind of direct connection between them. It is possible, *pace* Sedley, that Lucretius made use of doxographical works that had been reworked in the intervening centuries between him and his master.¹⁰² This would explain the greater resemblance of his poem to the Aëtian *Placita*, at least in terms of structure. But of course we know nothing about Epicurus' other writings on these subjects, reflected for example in the material preserved by Seneca.¹⁰³

When we now turn to individual chapters and doxai we again encounter mainly generic resemblances. In §99 on clouds the first explanation is clearly the same as the first doxa in Aëtius 3.4 attributed to Anaximenes, but the terminology differs (πλήσεις ἀέρος, παχυθέντος ἐπὶ πλείον τοῦ ἀέρος), while the second explanation is similar to the one that becomes Epicurus' own on hail and rain at 3.4.5, again with quite different wording. For thunder five explanations are given in §100. The first in terms of the twisting of pneuma in the hollows of clouds is again equivalent to the first doxa in Aëtius' 3.3 attributed to Anaximander, but only the generic terms πνεῦμα and νέφη/νέφος are the same. For lightning in §101 the first explanation in terms of rubbing and clashing of clouds reappears in the Democritean doxa at 3.4.11, with a partial convergence of terms (σύγκρουσις νέφων). Elaborate explanations are given for the thunderbolt in §103, but none that offer a close resemblance to the material in Aëtius. The next topic is πρηστήρες in §104, by which Epicurus means whirlwinds caused by strong winds or currents of air, whereas in Aëtius the term is linked to fire and we translate it as 'firewinds'.

The *Letter* then moves on to the subject of earthquakes, for which only two explanations are given, whereas the *Placita* devote to it an extensive set of 11 doxai. As discussed above,¹⁰⁴ there are resemblances between the explanations in the *Letter* and the two given in the final doxa in Aëtius (including the term ἀντροειδής), but this doxa is precisely the one devoted to Epicurus' views. In §109 the rainbow receives two explanations,

¹⁰⁰ Bakker (2010) 130.

¹⁰¹ Runia (1997) 97.

¹⁰² As I argued in Runia (1997).

¹⁰³ *Nat.* 6.20 = Usener test. 351 on earthquakes.

¹⁰⁴ See above n. 75 and text thereto.

the one based on illumination, the other on a physical combination of light and air. The diaeresis implies the distinction between substance and reflection which is the key to Aëtius' treatment (derived from Aristotle *Mete.* 3.4¹⁰⁵), but the precise formulation καθ' ὑπόστασιν versus καθ' ἔμφασιν (3.5.1) is not found in the *Letter*. The first explanation is only vaguely similar to that of Anaximenes at 3.5.7. Lastly there is the brief section with three explanations on comets in §111, corresponding to the long chapter 3.2 with twelve doxai in the *Placita*. As noted by Algra,¹⁰⁶ the *Letter's* three explanations form a clear diaeresis, distinguishing between local collections of fire, heavenly bodies stuck to the heaven and appearing from time to time, or the same happening to them moving independently of the heaven. This differs from the main diaeresis in Aëtius, which is between substantial and illusory appearance (cf. 3.5 commented on above), but the distinction between heavenly bodies and atmospheric phenomena is present in the chapter (§§1, 3, 9 versus §§4–7). The *Letter's* second explanation resembles the view of the Pythagoreans in 3.2.1, the third that of Diogenes in 3.2.9. The first involving fire is not exactly paralleled, but we can compare the Aristotelian fiery exhalation in 3.2.4 and the doxai of Epigenes (inflamed earth) and Boethus (ignited air) in 3.2.8–9.

(d) the evidence on psychology

Lastly, as an aside we should briefly note that also in the area of psychology it is likely that Epicurus made use of early doxographical texts. The key witness here is a scholion preserved by Diogenes Laertius at 10.66, which we quote, adding references to parallels in the *Placita*:¹⁰⁷

λέγει ἐν ἄλλοις καὶ ἐξ ἀτόμων αὐτὴν συγκεῖσθαι λειοτάτων καὶ στρογγυλωτάτων, πολλῶ τινι διαφερουσῶν τῶν τοῦ πυρός (cf. 4.3.11)· καὶ τὸ μὲν τι ἄλογον αὐτῆς, ὃ τῷ λοιπῷ παρεσπάρθαι σώματι· τὸ δὲ λογικὸν ἐν τῷ θώρακι, ὡς δῆλον ἔκ τε τῶν φόβων καὶ τῆς χαρᾶς (cf. 4.4.7, 4.5.6). ὕπνον τε γίνεσθαι τῶν τῆς ψυχῆς μερῶν τῶν παρ' ὅλην τὴν σύγκρισιν παρεσπαρμένων ἐγκατεχομένων ἢ διαφορουμένων, εἴτα συμπιπτόντων τοῖς πορίμοις (cf. ch. 5.24 Πῶς ὕπνος γίνεται καὶ θάνατος). τὸ τε σπέρμα ἀφ' ὅλων τῶν σωμάτων φέρεσθαι (cf. 5.3.5).

It is apparent that the parallels are quite close, and all the more so if it is noted that the doxa in 5.3.5 is probably a mistake and that the original formulation was close to what is found in the scholion (cf. the doxa attributed to the atomist Democritus at 5.3.6). The order of the doxai corresponds to that of the relevant chapters in the *Placita*, except that the topic of sleep precedes that of semen. Epicurus' view on the cause of sleep is absent in ch. 5.24, but its formulation is very much in the style of the *Placita* and it should be recalled that for Book 5 we only have the evidence of ps.Plutarch. On the basis of the scholion's evidence it must be considered likely that in the organisation of his exposés in psychology, and perhaps in the formulation of his doctrines, Epicurus drew on material available in the early doxographical tradition.¹⁰⁸

¹⁰⁵ See Mansfeld (2005) 45, 49–50.

¹⁰⁶ Algra (1998) 122.

¹⁰⁷ Text at Dorandi (2013) 772, who italicises in order to indicate that it has been added to Diogenes' text.

¹⁰⁸ I thank Jaap Mansfeld for drawing my attention to this text, the importance of which he overlooked in his magisterial survey of the doxographical tradition on psychology in Mansfeld (1990).

(e) some limited conclusions

The question we are trying to answer, it should be recalled, is whether a systematic comparison between the Aëtian *Placita* and Epicurus' *Letter to Pythocles* demonstrates Epicurus' utilisation of an earlier doxographical tradition from which those *Placita* have ultimately been derived. The answer can confidently be yes. The material furnished by the sections on cosmology in the *Letter to Pythocles* provide such proof, even though this evidence is not the philosopher's full treatment of the subject but in fact an epitome.

In the comparison with the cosmological subjects in Book 2 it emerged that the structure of the two accounts differs considerably. Epicurus, who does not accept a hierarchical structure of the cosmos, runs his accounts of questions relating to the stars and sun and moon together as much as possible, whereas Aëtius separates them out. On the other hand, Epicurus introduces separate treatment of certain questions that are missing in the later work. The method of using diaereses and diaphoniae to structure responses to questions is very clearly present in Epicurus' discussions on the cosmos, and to some degree can be seen in his setting out of multiple explanations, though often these are no more than listings of possibilities. In particular the chapters in Aëtius on the turnings of the sun (2.23), the eclipses of the sun and moon (2.24, 2.29) and on the illuminations of the moon (2.28) contain specific doxai and a use of similar terminology (both terms and phraseology) that demonstrate beyond all possible doubt that there must be a connection between the two documents. I would formulate this connection as follows: the evidence shows that Epicurus in drawing up his treatment of cosmology, and in particular his listings of multiple explanations, made use of doxographical material that was taken up into the tradition of the *Placita* and three centuries later had found its way into the distillation of this tradition in Aëtius' compendium. One precious piece of evidence at 2.29.8 connects a doxa of Anaxagoras, which uses the same terminology that is found in the *Letter* (ἐπιπροστίθημι, ἐπιπρόσθεσις), with the name of Theophrastus. We are not told which work contained that information. It is not unlikely that it was a specifically doxographical work such as the Φυσικαὶ δόξαι, but it could also have been for example the third book of his Φυσικά also known as Περὶ οὐρανοῦ.¹⁰⁹

In the comparison with the treatment of meteorological subjects in Book 3, it again emerged that the structure of the two accounts differed at significant points. Here extra evidence shows that Aëtius shows closer similarities with the treatment in Lucretius and the *Syriac Meteorology*. In one or two texts Epicurus reveals a use of the diaeresis which is quite similar to what is found in Aëtius (though in general this technique is used less effectively in Book 3 than in Book 2). In the use of specific examples of explanations of meteorological phenomena we found no doxai which show close resemblances, either in content or in terminology, between the two documents. It is very likely that Epicurus made use of doxographical texts in compiling his lists of multiple explanations and it is no less likely that this material passed into the tradition of the *Placita*, but a direct connection via that tradition with Aëtius cannot be demonstrated.

¹⁰⁹ See Simplicius in *Phys.* 1236.1 = fr. 176 FHS&G. Han Baltussen's commentary on these texts is eagerly awaited.

4. Evaluative remarks

(a) Epicurus and the *Placita*

From our investigations it has emerged that Epicurus has a prominent place in the *Placita*. The prime witnesses to his presence, ps.Plutarch and Stobaeus, both find it worthwhile to record his views as found in Aëtius' compendium. It is likely that the 44 doxai preserved represent by far the majority of the material that was associated with Epicurus' name-label in the original work that we are attempting to reconstruct. He is introduced as part of the atomist tradition and there are many texts in which he included in groups of name-labels indicating that tradition, but there are also texts in which his views are distinguished from other representatives of that tradition. More often than not, however, his views are presented separately and contrasted with those of other philosophers, sometimes precursors in the Presocratic tradition, more frequently the great names from the classical and Hellenistic traditions. If we read between the lines—or more accurately, if we analyse the structures of opposition and listing within individual chapters—we may conclude that for the doxographical tradition Epicurus was a philosopher whose views were distinctive and a little out of the ordinary. This is particularly visible in the fact that he appears last in chapters more often than one would expect on the basis of an even distribution.

Epicurus' philosophy is of course relatively well documented and well known. Unlike in the case of the Presocratic philosophers, and also in some cases Hellenistic philosophers and physicians, we hardly need the doxographical evidence for interpreting his thought. This is shown, for example, by the very modest place that such material has in a sourcebook such as that of Long and Sedley.¹¹⁰ Nevertheless it is worth speculating what it would be like if the evidence of the *Placita* was our sole source of knowledge for his philosophy. It would give us, I submit, quite a decent overview of his main doctrines in the areas of first principles, cosmology and psychology (including some titbits of epistemology), though of course nearly all detail would be lacking. It would not allow us to place his use of the φυσικός λόγος in the larger context of the moral purpose of his philosophy. But of course it was not the purpose of the *Placita* to give either such an overview or such a wider perspective. It cannot be denied that the collection of doxai, particularly if studied in their context, tells us more about doxography and its chosen methods than about Epicurus himself.

As for the second main theme treated in this paper, we have seen that Epicurus through the doxai recorded in the *Placita* is also an important witness to the history of the *Placita* themselves. Because of his doctrine of multiple explanations of phenomena for which the senses do not give clear evidence, Epicurus was on the lookout for plausible theories which he appears to have collected. By comparing his extant writings with the material preserved in Aëtius, we have found a restricted number of texts which demonstrate beyond all reasonable doubt that there is a direct connection between the two corpora, mediated through the tradition of the *Placita*. It must be concluded that Epicurus used some early version of the *Placita*, most likely to be associated with the scholarly activity of Aristotle, his pupil and collaborator Theophrastus and the Peripatetic school they founded.

Epicurus thus represents a particularly fascinating case in the tradition of the *Placita*. Not only is he prominent in the *Placita* himself, but (with a single exception) he is the only philosopher in the *Placita* of whom it can be shown that he also made constructive use of an

¹¹⁰ See above n. 21 and text thereto.

early version of them for the purposes of developing and expounding his own philosophy.¹¹¹ From this viewpoint, of the doxai studied in this paper perhaps the most illuminating is the one at 3.15.11 on earthquakes, because here the two aspects of Epicurus' presence are intertwined. Two explanations on the phenomenon are attributed to him, but when we compare these to the record of his discussion on the topic in the *Letter to Pythocles*, we may surmise (though cannot prove) that these explanations were taken from a doxographical account recording the various views held by earlier philosophers and scientists.

(b) using our edition

Finally I would wish to claim that my paper demonstrates the value of our prospective edition of the *Placita* for the study of individual philosophers, both for their thought and for its *Nachleben* throughout later antiquity. The edition will not only present a unified text which—despite inevitable uncertainties—will provide a solid foundation for study of the contents of the *Placita*, but it will also give access to a large amount of comparative material that will allow scholars to locate the doxai and the thinkers to which they have been attributed within a long and complex tradition. In exploring this material the user will always need to take the method of the doxographer into account. But there is no chance of that not happening, if the commentary that follows the text and the accompanying collection of parallel passages is regularly consulted!

¹¹¹ The exception is Chrysippus, who we know from a report in Galen used various diaphoniae and diaereses in his discussion of the nature, parts and location of the soul, which are significantly paralleled in Aëtius. For all we know, he may have made more use of the *Placita* tradition, but the evidence is lost. See Mansfeld (1989) cited above in n. 86.

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APPENDICES

1. Complete collection of doxai attributed to Epicurus in the *Placita*¹¹²

Book 1

(#1) 1.3 *Περὶ ἀρχῶν τί εἰσιν*

§16 Ἐπίκουρος Νεοκλέους Ἀθηναῖος κατὰ Δημόκριτον
 φιλοσοφήσας ἔφη τὰς ἀρχὰς τῶν ὄντων σώματα, λόγῳ
 θεωρητά, ἀμέτοχα κενού, ἀγέννητα, ἀδιάφθαρτα,
 οὔτε θραυσθῆναι δυνάμενα οὔτε διαπλασμὸν ἐκ τῶν
 μερῶν λαβεῖν οὔτ' ἀλλοιωθῆναι· εἶναι δ' αὐτὰ λόγῳ (5)
 θεωρητά· ταῦτα μέντοι κινεῖσθαι ἐν τῷ κενῷ καὶ διὰ
 τοῦ κενού· εἶναι δὲ καὶ αὐτὸ τὸ κενὸν ἄπειρον καὶ τὰ
 σώματα ἄπειρα. συμβεβηκέναι δὲ τοῖς σώμασι τρία
 ταῦτα, σχῆμα μέγεθος βάρος. Δημόκριτος μὲν γὰρ ἔλεγε
 δύο, μέγεθος τε καὶ σχῆμα, ὁ δ' Ἐπίκουρος τούτοις καὶ (10)
 τρίτον, τὸ βάρος, ἐπέθηκεν· ἀνάγκη γάρ, φησί, 'κινεῖσ-
 θαι τὰ σώματα τῇ τοῦ βάρους πληγῇ· ἐπεὶ οὐ κινήθησε-
 ται'. εἶναι δὲ τὰ σχήματα τῶν ἀτόμων ἀπερίληπτα, οὐκ
 ἄπειρα· μὴ γὰρ εἶναι μῆτ' ἀγκιστροειδεῖς μήτε τριαινο-
 ειδεῖς μήτε κρικοειδεῖς· ταῦτα γὰρ τὰ σχήματα εὖ- (15)
 θραυστά ἐστίν, αἱ δ' ἄτομοι ἀπαθείς ἄθραυστοι· ἴδια
 δ' ἔχειν σχήματα λόγῳ θεωρητά. καὶ εἴρηται ἄτομος,
 οὐχ ὅτι ἐστὶν ἐλαχίστη ἀλλ' ὅτι οὐ δύναται τμηθῆναι,
 ἀπαθὴς οὖσα καὶ ἀμέτοχος κενού· ὥστε, ἐὰν εἴπη
 ἄτομον, ἄθραυστον λέγει καὶ ἀπαθῆ, ἀμέτοχον κενού. (20)
 ὅτι δὲ ἔστιν ἄτομος, σαφές· καὶ γὰρ ἔστι στοιχεῖα αἰ
 ὄντα καὶ ζῶα ἄκενα καὶ ἡ μονάς. (P9,S19)

(see also T 2.11, cf. 4.9)

§16 Epicurus, the son of Neocles, the Athenian, who philosophised in the line of Democritus, said that the principles of the things that exist are bodies that are observable by reason, not containing any void, ungenerated, indestructible, unable to be crushed or have its parts modified or be qualitatively altered. The objects are observable by reason; however, they move with the void and throughout the void. The void itself is unlimited, and the bodies are unlimited (in number). The bodies possess these three (characteristics), shape, size, weight. Democritus stated that there were two, size and shape, but Epicurus added to these a third, weight. For it is necessary, he says, that the bodies are moved by the blow caused by weight, since otherwise they will not be moved. The shapes of the atoms are incomprehensible, but not unlimited in number. They cannot have the form of a hook or a trident or a bracelet, for these shapes are easily crushed, whereas atoms are impassible and unable to be crushed. They have their individual shapes, which are observable by reason. The term 'atom' is used, not because it is a smallest particle, but because it cannot be cut, being as it is

¹¹² Based on the draft edition of Aëtius' compendium in preparation. See above n. 2. Line numbers in the Greek text correspond to those in the forthcoming edition.

impassible and not containing any void. As a result, when he speaks of an atom, he means what is uncrushable and impassible, not containing any void. That there is such a thing as an atom is clear. For there are elements that always exist, that is to say figures without void and the unit.

(#2) 1.7.25 Τίς ὁ θεός

Ἐπίκουρος ἀνθρωποειδείς μὲν τοὺς θεούς, λόγῳ δὲ πάντας θεωρητοὺς διὰ τὴν λεπτομέρειαν τῆς τῶν εἰδῶλων φύσεως. ὁ δ' αὐτὸς ἄλλας τέσσαρας φύσεις κατὰ γένος ἀφθάρτους τάσδε· τὰ ἄτομα, τὸ κενόν, τὸ ἄπειρον, τὰς ὁμοιότητας· αὗται δὲ λέγονται ὁμοιο- (5) μέρειαι καὶ στοιχεῖα. (P9,S24)

§25 Epicurus (says that) the gods are human in form, and are all observable by reason (only) because of the fine particles of which the nature of their images consists. The same (philosopher says there are) four other classes of natures that are indestructible: the indivisibles, the void, the infinite, and the similarities; these (natures) are called *homoioimerê* ('having similar parts') and elements.

(#3) 1.8.3 Περί δαιμόνων καὶ ἡρώων

Ἐπίκουρος δ' οὐδὲν τούτων ἐγκρίνει. (P3)

§3 But Epicurus admits none of these (as demonic).

(#3a) 1.9.3 Περί ὕλης

οἱ ἀπὸ Δημοκρίτου ἀπαθῆ τὰ πρῶτα, τὴν ἄτομον καὶ τὸ κενὸν τὸ ἀσώματον.

(T 4.13 has name of Epicurus here, not included in text of A)

(#4) 1.12.5 Περί σωμάτων

Ἐπίκουρος ἀπερίληπτα εἶναι τὰ σώματα, καὶ τὰ πρῶτα δὲ ἀπλᾶ τὰ δὲ ἐξ ἐκείνων συγκρίματα πάντα βάρους ἔχειν. κινεῖσθαι δὲ τὰ ἄτομα τότε μὲν κατὰ στάθμην, τότε δὲ κατὰ παρέγκλισιν· τὰ δὲ ἄνω κινούμενα κατὰ πληγὴν καὶ ἀποπαλμόν. (P5,S5)

§5 Epicurus (says that) the bodies are indefinitely many, and that the first (bodies), which are simple, as well as all the bodies that are composites of these, possess heaviness. (He also says that) the atoms at one time move perpendicularly, at another time with a swerve. But (the bodies that) move upwards do so through impact or rebounding.

(4#a) 1.14.4 Περί σχημάτων

οἱ ἀπὸ Λευκίππου τὰ ἄτομα πολυσχήμονα. (S4)

§4 Leucippus and his followers (say that) the atoms are of many shapes.

(#5) 1.15.9 Περί χρωμάτων

Ἐπίκουρος καὶ Ἀρίσταρχος τὰ ἐν τῷ σκότῳ σώματα χροῖαν οὐκ ἔχειν. (S8)

§9 Epicurus and Aristarchus (say that) the bodies in the dark do not have colour.

(#6) 1.18.3 Περί κενοῦ

Λεύκιππος Δημόκριτος Δημήτριος Μητρόδωρος Ἐπίκουρος τὰ μὲν ἄτομα ἄπειρα τῷ πλήθει, τὸ δὲ κενὸν ἄπειρον τῷ μεγέθει. (P3,S3,T1)

§3 Leucippus Democritus Demetrius Metrodorus Epicurus (say that) the atoms are infinite in number, and the void infinite in size.

(#7) 1.20.2 *Περὶ χώρας*

Ἐπίκουρος ὀνόμασι πᾶσιν παραλλάττειν κενόν τόπον χώραν. (S2)

§2 Epicurus (says) that all these terms are to be used interchangeably: void, place, space.

(#8) 1.22.6 *Περὶ οὐσίας χρόνου*

Ἐπίκουρος σύμπτωμα, τοῦτο δ' ἐστὶ παρακολούθημα κινήσεων. (S6)

§6 Epicurus (says it is) an accident, that is an accompaniment of motions (or changes).

(#9) 1.23.4 *Περὶ κινήσεως*

Ἐπίκουρος δύο εἶδη κινήσεως, τὸ κατὰ στάθμην καὶ τὸ κατὰ παρέγκλισιν. (P4,S3) ***

Epicurus (says there are) two kinds of motion, that which (occurs) perpendicularly and that which (occurs) through deviation. ***

(#10) 1.24.2 *Περὶ γενέσεως καὶ φθοράς*

Ἐμπεδοκλῆς Ἀναξαγόρας Δημόκριτος Ἐπίκουρος καὶ πάντες, ὅσοι κατὰ συναθροισμὸν τῶν λεπτομερῶν σωμάτων κοσμοποιοῦσι, συγκρίσεις μὲν καὶ διακρίσεις εἰσάγουσι, γενέσεις δὲ καὶ φθοράς οὐ κυρίως· οὐ γὰρ κατὰ τὸ ποιὸν ἐξ ἀλλοιώσεως, κατὰ δὲ τὸ ποσὸν ἐκ (5) συναθροισμοῦ ταύτας γίνεσθαι. (P2,S2)

§2 Empedocles, Anaxagoras, Democritus, Epicurus and all those who make a cosmos through aggregation of bodies composed of fine particles introduce combinations and separations, but not comings to be and perishings in the true sense. For these do not come to be according to quality from alteration, but according to quantity from aggregation.

(#11) 1.29.3 *Περὶ τύχης*

Ἐπίκουρος ἄστατον αἰτίαν προσώποις χρόνοις τόποις· (καὶ πάντα) κατ' ἀνάγκην κατὰ προαίρεσιν κατὰ τύχην (γίνεσθαι). (P3,S4,S5)

§3 Epicurus (says that chance is) a cause that is unstable in relation to persons, times and places, <and all things occur> by necessity, through choice, and by chance.

Book 2

(#12) 2.1.3 *Περὶ κόσμου*

Ἀναξίμανδρος, Ἀναξίμενης, Ἀρχέλαος, Ξενοφάνης, Διογένης, Λεύκιππος, Δημόκριτος, Ἐπίκουρος καὶ ὁ τούτου καθηγητὴς Μητρόδωρος ἀπείρους κόσμους ἐν τῷ ἀπείρῳ κατὰ πᾶσαν περίστασιν. (P3,S7,T2)

§3 Anaximander, Anaximenes, Archelaus, Xenophanes, Diogenes, Leucippus, Democritus, Epicurus and his teacher Metrodorus (say that there are) infinite *kosmoi* in the infinite space throughout the entire surrounding area.

(#13) 2.1.5

§4 Of those that declare there to be infinite *kosmoi*, Anaximander (says that) they are at an equal distance from each other,

Ἐπίκουρος ἄνιστον εἶναι τὸ μεταξὺ τῶν κόσμων διάστημα. (S9)

§5 whereas Epicurus (says that) the distance between the *kosmoi* is unequal.

(#14) 2.2.5 *Περὶ σχήματος κόσμου*

Ἐπίκουρος δ' ἐνδέχεσθαι μὲν εἶναι σφαιροειδεῖς τοὺς κόσμους, ἐνδέχεσθαι δὲ καὶ ἑτέροις σχήμασι κεχρηῆσθαι. (P)

§5 Epicurus, however, (says that) it is possible that the *kosmoi* are ball-like, but that is possible that they make use of other shapes as well.

- (#15) 2.3.2 Εἰ ἔμψυχος ὁ κόσμος καὶ προνοία διοικούμενος
Λεύκιππος δὲ καὶ Δημόκριτος καὶ Ἐπίκουρος καὶ ὅσοι τὰ
ἄτομα εἰσηγοῦνται καὶ τὸ κενὸν οὐτ' ἔμψυχον οὕτε
προνοία διοικεῖσθαι, φύσει δέ τιτι ἀλόγῳ. (P2,S2,T2)

§2 But Leucippus, Democritus, Epicurus and all those who introduce atoms and the void (say that) it is neither ensouled nor administered by providence, but rather by an unreasoning natural force.

- (#16) 2.4.13 Εἰ ἄφθαρτος ὁ κόσμος
Ἐπίκουρος πλείστοις τρόποις τὸν κόσμον φθείρεσθαι· καὶ
γὰρ ὡς ζῶον καὶ ὡς φυτὸν καὶ πολλαχῶς. (P2,S9)

§13 Epicurus (says that) the cosmos is destroyed in a multitude of ways, for example as an animal and as a plant and in numerous other ways.

- (#17) 2.7.3 Περί τάξεως κόσμου
Ἐπίκουρος ἐνίων μὲν κόσμων ἀραιὸν τὸ πέρας ἐνίων δὲ
πυκνόν, καὶ τούτων τὰ μὲν τινα κινούμενα τὰ δ' ἀκίνητα. (P3,S6)

- (#18) 2.13.15 Τίς οὐσία τῶν ἀστέρων πλανητῶν τε καὶ ἀπλανῶν καὶ πῶς συνέστη
Ἐπίκουρος οὐδὲν ἀπογινώσκει τούτων, ἐχόμενος τοῦ ἐνδεχομένου. (P9,S14)

§15 Epicurus does not reject any of these (views), holding fast to what is possible.

- (#19) 2.20.14 Περί οὐσίας ἡλίου καὶ ὅτι δύο καὶ τρεῖς εἰσιν
Ἐπίκουρος γήινον πύκνωμα κισσηροειδὲς καὶ σπογγοειδὲς ταῖς
κατατρήσεσιν ὑπὸ τοῦ πυρὸς ἀνημμένον. (P9,S13)
Epicurus (says that it is) an earthy concentration inflamed by the fire in its cavities in the manner of a pumice-stone or sponge.

- (#20) 2.21.5 Περί μεγέθους ἡλίου
Ἐπίκουρος τηλικούτον ἡλίκος φαίνεται, ἢ μικρῷ τιτι μεῖζω
ἢ ἐλάττω. (P4,S4)
§5 Epicurus (says that it is) the size that it appears, or a just little larger or smaller.

- (#21) 2.22.4 Περί σχήματος ἡλίου
Ἐπίκουρος ἐνδέχεσθαι τὰ προειρημένα πάντα. (P4)
§4 Epicurus (say that) all the above-mentioned (shapes) are possible.

Book 3

- (#22) 3.4.5 Περί νεφῶν, ὑετῶν, χιόνων, χαλαζῶν
Ἐπίκουρος ἀπὸ τῶν ἀτόμων· στρογγυλαίνεισθαι δὲ τὴν
χάλαζαν καὶ τὸν ὑετὸν ἀπὸ τῆς μακρᾶς καταφορᾶς
ὑποπεπλασμένον. (P3,S5)
§5 Epicurus (says that they accumulate) from atoms; and that hail is formed in round figures and rain gradually acquires its form in its lengthy descent.
- (#23) 3.15.11 Περί σεισμῶν γῆς
Ἐπίκουρος ἐνδέχεσθαι μὲν ὑπὸ πάχους ἀέρος τοῦ ὑποκειμένου
ὑδατώδους ὄντος ἀνακρουομένην αὐτὴν καὶ οἶον ὑποτυπτομένην
κινεῖσθαι· ἐνδέχεσθαι δὲ καὶ σφραγγώδη τοῖς κατωτέρω μέρεσι

καθεστῶσαν ὑπὸ τοῦ διασπειρομένου πνεύματος εἰς τὰς ἀντρο-
εἰδείς κοιλότητας ἐμπύπτοντος σαλεύεσθαι. (P11)

§11 Epicurus (says) that it is possible that the earth moves when it is thrown upwards and as it were struck from beneath by thick and humid air that lies beneath it; it is also possible that, as it is full of holes in its nether parts, it is shaken by the wind which is dispersed through its cavernous hollows.

Book 4

(#24) 4.3.11 Εἰ σῶμα ἡ ψυχὴ καὶ τίς ἡ οὐσία αὐτῆς

Ἐπίκουρος κράμα ἐκ τεττάρων, ἐκ ποιοῦ πυρώδους,
ἐκ ποιοῦ ἀερώδους, ἐκ ποιοῦ πνευματικοῦ, ἐκ τετάρτου
τινὸς ἀκατονομάστου, τοῦτο δ' ἦν αὐτῷ τὸ αἰσθητικόν·
ὧν τὸ μὲν πνεῦμα κίνησιν, τὸν δὲ ἀέρα ἡρεμίαν, τὸ δὲ (5)
θερμόν τὴν φαινομένην θερμότητα τοῦ σώματος, τὸ δ'
ἀκατονόμαστον τὴν ἐν ἡμῖν ἐμποιεῖν αἴσθησιν, ἐν οὐδενὶ
γὰρ τῶν ὀνομαζομένων στοιχείων εἶναι αἴσθησιν. (P5, S10, T5)

§11 Epicurus (says) that it is a mixture of four ingredients, (viz.) of a fiery quality, an aerial quality, a pneumatic quality, and of a fourth quality that is nameless; the latter, for him, is the perceptive part. Of these the *pneuma* brings about movement, the air rest, the warm (component) the perceptible warmth of the body, while the anonymous (component) brings about the perception in us humans, for perception is not present in any of the named elements.

(#25) 4.4.7 Περὶ μερῶν ψυχῆς

Δημόκριτος Ἐπίκουρος διμερῆ τὴν ψυχὴν, τὸ μὲν
λογικὸν ἔχουσιν ἐν τῷ θώρακι καθιδρυμένον, τὸ δὲ
ἄλογον καθ' ὅλην τὴν σύγκρισιν τοῦ σώματος διεσπαρ-
μένον. (P3)

§7 Democritus Epicurus (say) that the soul is bipartite, having the rational (part) established in the breast, and the irrational (part) diffused through the whole compound of the body.

(#26) 4.5.6 Τί τὸ τῆς ψυχῆς ἡγεμονικὸν καὶ ἐν τίνι ἐστίν

Παρμενίδης ἐν ὅλῳ τῷ θώρακι καὶ Ἐπίκουρος. (P5, T5)

§6 Parmenides (says it is) in the whole chest; as also does Epicurus.

(#27) 4.7.4 Περὶ ἀφθαρσίας ψυχῆς

Δημόκριτος Ἐπίκουρος Ἀριστοτέλης φθαρτὴν τῷ
σώματι συνδιαφθειρομένην. (P3, T4)

§4 Epicurus Democritus Aristotle (say that) the soul is mortal, perishing together with the body.

(#28) 4.8.2 Περὶ αἰσθήσεως καὶ αἰσθητῶν

Ἐπίκουρος· τὸ μὲν ἐστὶν ἡ αἴσθησις, ἥτις ἐστὶν ἡ
δύναμις, καὶ τὸ ἐπαίσθημα, ὅπερ ἐστὶ τὸ ἐνέργημα· ὥστε
διχῶς παρ' αὐτῷ λέγεσθαι, αἴσθησιν μὲν τὴν δύναμιν,
αἰσθητὸν δὲ τὸ ἐνέργημα. (P2, S1)

§2 Epicurus: 'sense/sensation is the bodily part which is the faculty, and the sensory recognition which is the activity'; so it is spoken of by him in two ways: sense as the faculty, sensory recognition as the activity.

(#29) 4.8.10

Λεύκιππος Δημόκριτος Ἐπίκουρος τὴν αἴσθησιν καὶ
τὴν νόησιν γίνεσθαι εἰδώλων ἔξωθεν προσιόντων· μηδενὶ
γὰρ ἐπιβάλλειν μηδετέραν χωρὶς τοῦ προσπίπτοντος
εἰδώλου. (S12)

§10 Leucippus Democritus Epicurus (say) that sensation and thought arise from images that approach from outside, for neither of these can occur to anyone without the image falling upon him.

(#30) 4.9.5 Εἰ ἀληθεῖς αἱ αἰσθήσεις καὶ φαντασίαι

Ἐπίκουρος πᾶσαν αἴσθησιν καὶ πᾶσαν φαντασίαν ἀληθῆ,
τῶν δὲ δοξῶν τὰς μὲν ἀληθεῖς τὰς δὲ ψευδεῖς. καὶ ἡ μὲν
αἴσθησις μοναχῶς ψευδοποιεῖται τὰ κατὰ τὰ νοητά, ἡ δὲ
φαντασία διχῶς· καὶ γὰρ αἰσθητῶν ἐστὶ φαντασία καὶ νοητῶν. (P2,S5)

§5 Epicurus (says) that every sensation and every impression is true, but of the opinions some are true and some false; and the sensation gives us a false picture in one respect only, namely with regard to objects of thought; but the impression does so in two respects, for there is impression of both sense objects and objects of thought.

(#31) 4.9.6

Παρμενίδης Ἐμπεδοκλῆς Ἀναξαγόρας Δημόκριτος Ἐπίκουρος
Ἡρακλείδης παρὰ τὰς συμμετρίας τῶν πόρων τὰς κατὰ μέρος
αἰσθήσεις γίνεσθαι τοῦ οἰκείου, τῶν αἰσθητῶν ἑκάστου ἑκάστη
ἐναρμόττοντος. (S6) (Epicurus' name not in P)

§6 Parmenides Empedocles Anaxagoras Democritus Epicurus Heraclides (say) that the particular sensations of their particular object occur in accordance with the matching-sizes of the pores, each of the sense objects corresponding to each sense.

(#32) 4.9.12

Ἐπίκουρος τῶν αἰσθητῶν <τὰς> ἡδονὰς ἤδη καὶ τὰς λύπας. (S12)

§12 Epicurus (says) that the pleasures and pains actually belong with the sense objects.

(#33) 4.9.20

Ἐπίκουρος σοφῷ μόνῳ τὸν σοφόν. (S20)

§20 Epicurus that the Wise Man (is knowable only) to (another) Wise Man.

(#34) 4.13.1 Περί ὁράσεως, πῶς ὁρώμεν

Λεύκιππος Δημόκριτος Ἐπίκουρος κατὰ εἰδώλων εἴσκρισιν
οἶονται τὸ ὁρατικὸν συμβαίνειν πάθος.
{καὶ κατὰ τινῶν ἀκτίνων εἴσκρισιν μετὰ τὴν πρὸς τὸ ὑποκείμενον
ἔνστασιν πάλιν ὑποστρεφουσὼν πρὸς τὴν ὄψιν}. (P1,S1)

§1 Leucippus Democritus Epicurus believe that the visual sensation is the result of the penetration of images.

(#35) 4.14.2 Περί κατοπτρικῶν ἐμφάσεων

Λεύκιππος Δημόκριτος Ἐπίκουρος τὰς κατοπτρικὰς
ἐμφάσεις γίνεσθαι κατ' εἰδώλων ἐνστάσεις, ἅτινα φέρεσθαι
μὲν ἀφ' ἡμῶν, συνίστασθαι δὲ ἐπὶ τοῦ κατοπτροῦ, κατ' ἀντι-
περιστροφὴν. (P2,S2)

§2 Leucippus Democritus Epicurus (say) reflections in mirrors come about through the contacts of the images, which move away from us and come to be on the mirror which sends them back.

(#36) 4.19.2 *Περὶ φωνῆς*

Ἐπίκουρος τὴν φωνὴν εἶναι ῥεῦμα ἐκπεμπόμενον ἀπὸ τῶν
φωνούντων ἢ ἡχούντων ἢ ψοφούντων· τοῦτο δὲ τὸ ῥεῦμα
εἰς ὁμοιοσχήμονα θρύπτεσθαι θραύσματα· (ὁμοιοσχήμονα
δὲ λέγεται τὰ στρογγύλα τοῖς στρογγύλοις καὶ σκαληνὰ
καὶ τρίγωνα τοῖς ὁμοιογενέσι)· τούτων δ' ἐμπιπτόντων (5)
ταῖς ἀκοαῖς ἀποτελεῖσθαι τὴν αἴσθησιν τῆς φωνῆς· φανερόν
δὲ τοῦτο γίνεσθαι ἀπὸ τῶν ἀσκῶν ἐκρεόντων καὶ τῶν
ἐμφυσῶντων κναφένων τοῖς ἱματίοις.

§2 Epicurus (says) voice/sound is a stream sent out from things which speak, reverberate, or make noises. This stream is broken up into small particles of the same shape. Globular figures are called 'of the same shape' as globular figures, and irregular and triangular figures as figures of the same kind. The perception of voice is produced when these fall upon the ears. This is clear from (a comparison with) the skins that let out (water) and the fullers who blow air into in garments.

(#37) 4.23.2 *Περὶ παθῶν σωματικῶν καὶ εἰ συναλγεῖ αὐτοῖς ἡ ψυχὴ*

Ἐπίκουρος καὶ τὰ πάθη καὶ τὰς αἰσθήσεις ἐν τοῖς
πεπονθόσι τόποις· τὸ γὰρ ἡγεμονικὸν ἀπαθές. (P2)

§2 Epicurus (says that) both the affections and the sensations are in the places that have been affected, for the ruling part is free from affection.

Book 5

(#38) 5.1.2 *Περὶ μαντικῆς*

Ξενοφάνης καὶ Ἐπίκουρος ἀναιροῦσι τὴν μαντικὴν.

§2 Xenophanes and Epicurus reject divination.

(#39) 5.3.5 *Τίς ἡ οὐσία τοῦ σπέρματος*

Ἐπίκουρος ψυχῆς καὶ σώματος ἀπόσπασμα.

§5 Epicurus (declares that it is) a fragment of soul and body.

(#40) 5.5.1 *Εἰ αἱ θήλειαι προίενται σπέρμα*

Πυθαγόρας Ἐπίκουρος Δημόκριτος καὶ τὸ θῆλυ προῖεσθαι
σπέρμα· ἔχει γὰρ παραστάτας ἀπεστραμμένους· διὰ τοῦτο
καὶ ὄρεξιν ἔχει περὶ τὰς χρήσεις.

§1 Pythagoras, Epicurus and Democritus (declare that) the female releases seed as well (as the male), for she has concealed testicles. For this reason she also has desire for sexual intercourse.

(#41) 5.16.1 *Πῶς τρέφεται τὰ ἔμβρυα*

Δημόκριτος Ἐπίκουρος τὸ ἔμβρυον ἐν τῇ μήτρᾳ διὰ τοῦ
στόματος τρέφεσθαι· ὅθεν εὐθέως γεννηθὲν ἐπὶ τὸν
μαστὸν φέρεσθαι τῷ στόματι· εἶναι γὰρ καὶ ἐν τῇ
μήτρᾳ θηλάς τινας καὶ στόματα, δι' ὧν τρέφεσθαι.

§1 Democritus and Epicurus (declare that) the embryo is nourished in the womb through the mouth. For this reason as soon as it is born it moves with its mouth to the

breast. For (they say) in the womb too there are nipples and mouths through which it is fed.

(#42) 5.19.5

Δημόκριτος καὶ Ἐπίκουρος γεγεννημένα εἶναι τὰ ζῶα
συστάσει εἶδει ἐνδεεστέρων πρῶτον τοῦ ὑγροῦ
ζωογονοῦντος. (P^{GQ})

§5 Democritus and Epicurus (declare that) the living beings have come into being in the first place by a composition of (elements) lacking in form, with the (aid of the) life-generating moisture.

(#43) 5.20.2 Πόσα γένη ζώων καὶ εἰ πάντα αἰσθητικὰ καὶ λογικά

Δημόκριτος Ἐπίκουρος τὰ οὐράνια (οὐκ ἐγκρίνουσι).

§2 Democritus and Epicurus do not include the heavenly beings (as living beings).

(#44) 5.26.3 Πῶς ἡυξήθη τὰ φυτὰ καὶ εἰ ζῶα

οἱ Στωικοὶ δὲ καὶ Ἐπικούρειοι οὐκ ἔμψυχα· τινὰ γὰρ
ψυχῆς ὁρμητικῆς εἶναι καὶ ἐπιθυμητικῆς, τινὰ δὲ καὶ
λογικῆς· τὰ δὲ φυτὰ αὐτομάτως πῶς κεκινήσθαι οὐ διὰ
ψυχῆς. (P3)

§3 The Stoics and Epicureans (declare that) they do not have souls. For (they say that) some creatures participate the impulsive and desiderative soul, and some even to the rational soul. But the plants move spontaneously in some way not involving soul.

οἱ περὶ Ἐπίκουρον

only *varia lectio* in 5.19.1; most likely a gloss and thus not included in text M-R

Mention of Epicurus in relation to other philosophers

1.5.5 Μητροδώρος ὁ καθηγητῆς Ἐπικούρου φησιν ἄτοπον

εἶναι ἐν μεγάλῳ πεδίῳ ἓνα στάχυν γεννηθῆναι καὶ ἓνα

κόσμον ἐν τῷ ἀπείρῳ κτλ

Cf. also (#1) 1.3.16, (#12) 2.1.3 above.

Other more general references to atomists

1.9.7 οἱ δὲ τὰ ἀμερῆ καὶ τὰς ἀτόμους.

1.15.13 οἱ δὲ τὰ ἄτομα

1.16.2 οἱ τὰς ἀτόμους <εἰσάγοντες>

4.9.10 οἱ τὰ ἄτομα καὶ οἱ τὰ ὁμοιομερῆ καὶ οἱ τὰ ἀμερῆ καὶ τὰ ἐλάχιστα πάντ' ἐν πάσι τὰ αἰσθητὰ
ἀναμεμῖχθαι καὶ μηδὲν αὐτῶν εἰλικρινές ὑπάρχειν.

2. Text and translation of 4.9 divided into blocks of lemmata

θ'. Εἰ ἀληθεῖς αἱ αἰσθήσεις καὶ φαντασίαι (PS)

(a) §1 Πυθαγόρας Ἐμπεδοκλῆς Ξενοφάνης Παρμενίδης Ζήνων Μέλισσος Ἀναξαγόρας Δημόκριτος
Μητροδώρος Πρωταγόρας Πλάτων ψευδεῖς εἶναι τὰς αἰσθήσεις. (S1)

§2 οἱ ἀπὸ τῆς Ἀκαδημίας ὑγιεῖς μὲν, ὅτι δι' αὐτῶν οἴονται λαβεῖν ἀληθινὰς φαντασίας, οὐ μὴν
ἀκριβεῖς. (S2)

- §3 Ἀριστοτέλης τὴν αἴσθησιν μὴ πλανᾶσθαι περὶ τὸ ἴδιον, περὶ δὲ τὸ συμβεβηκός. (S3)
- §4 οἱ Στωικοὶ τὰς μὲν αἰσθήσεις ἀληθεῖς, τῶν δὲ φαντασιῶν τὰς μὲν ἀληθεῖς τὰς δὲ ψευδεῖς. (P1,S4)
- §5 Ἐπίκουρος πᾶσαν αἴσθησιν καὶ πᾶσαν φαντασίαν ἀληθῆ, τῶν δὲ δοξῶν τὰς μὲν ἀληθεῖς τὰς δὲ ψευδεῖς. καὶ ἢ μὲν αἴσθησις μοναχῶς ψευδοποιεῖται τὰ κατὰ τὰ νοητά, ἢ δὲ φαντασία διχῶς· καὶ γὰρ αἰσθητῶν ἐστὶ φαντασία καὶ νοητῶν. (P2,S5)
- (b) §6 Παρμενίδης Ἐμπεδοκλῆς Ἀναξαγόρας Δημόκριτος Ἐπίκουρος Ἡρακλείδης παρὰ τὰς συμμετρίας τῶν πόρων τὰς κατὰ μέρος αἰσθήσεις γίνεσθαι τοῦ οἰκείου, τῶν αἰσθητῶν ἐκάστου ἐκάστη ἐναρμόττοντος. (P3,S6)
- §7 οἱ Περιπατητικοὶ παρὰ τὰς δυνάμεις τῶν αἰσθητηρίων. (S7)
- (c) §8 οἱ μὲν ἄλλοι φύσει τὰ αἰσθητά, (S8a)
- §9 Λεύκιππος δὲ Δημόκριτος Διογένης νόμῳ, τοῦτο δ' ἐστὶ δόξη καὶ πάθει τοῖς ἡμετέροις· μηδὲν δ' εἶναι ἀληθὲς μηδὲ καταληπτὸν ἐκτὸς τῶν πρώτων στοιχείων, ἀτόμων καὶ κενοῦ· ταῦτα γὰρ εἶναι μόνον φύσει, τὰ δ' ἐκ τούτων, θέσει καὶ τάξει καὶ σχήματι διαφέροντα ἀλλήλων, συμβεβηκότα. (S8β)
- (d) §10 οἱ τὰ ἄτομα καὶ οἱ τὰ ὁμοιομερῆ καὶ οἱ τὰ ἀμερῆ καὶ τὰ ἐλάχιστα πάντ' ἐν πᾶσι τὰ αἰσθητὰ ἀναμεμῖχθαι καὶ μηδὲν αὐτῶν εἰλικρινὲς ὑπάρχειν, παρὰ δὲ τὰς ἐπικρατείας ὀνομάζεσθαι τοῖον ἢ τοῖον καὶ παρὰ τὴν πολυαύγειαν. (S10)
- §11 Πυθαγόρας Πλάτων καθαρὸν ἕκαστον εἶναι τῶν αἰσθητῶν ἐξ ἐκάστου στοιχείου προσερχόμενον. πρὸς μὲν οὖν τὴν ὄρασιν τὸ αἰθερώδες πεφυκέναι, πρὸς δὲ τὴν ἀκοὴν τὸ πνευματικόν, πρὸς δὲ τὴν ὄσφρησιν τὸ πυρώδες, πρὸς δὲ τὴν γεῦσιν τὸ ὑγρόν, πρὸς δὲ τὴν ἀφήν τὸ γεώδες. (S11)
- (e) §12 Ἐπίκουρος τῶν αἰσθητῶν <τὰς> ἡδονὰς ἤδη καὶ τὰς λύπας. (S12)
- §13 οἱ Περιπατητικοὶ τῶν νοητῶν· οὐ γὰρ πᾶσι φαίνεται τὰ αὐτὰ ἡδέα τε καὶ λυπηρὰ καθάπερ λευκά τε καὶ μέλανα. (S13)
- §14 Χρύσιππος τὸ μὲν γενικὸν ἡδὺ νοητόν, τὸ δὲ εἰδικὸν καὶ προσπίπτον ἤδη αἰσθητόν. (S14)
- §15 Ἐμπεδοκλῆς τὰς ἡδονὰς γίνεσθαι τοῖς μὲν ὁμοίοις ἐκ τῶν ὁμοίων κατὰ δὲ τὸ ἐλλείπον πρὸς τὴν ἀναπλήρωσιν, ὥστε τῷ ἐλλείποντι ἢ ὀρεξι τοῦ ὁμοίου· τὰς δ' ἀλγηδόνας τοῖς ἐναντίοις, ἡλλοτριῶσθαι γὰρ πρὸς ἄλληλα ὅσα διαφέρει κατὰ τε τὴν σύγκρισιν καὶ τὴν τῶν στοιχείων κράσιν. (S15)
- §16 Ἀναξαγόρας πᾶσαν αἴσθησιν μετὰ πόνου. (S16)
- §17 <οἱ> ἄλλοι ἐπιγίγνεσθαι ἥτοι ἡδονὴν ἢ πόνον οὐδὲ συμπεφυκέναι. (S17)
- (f) §18 οἱ Στωικοὶ τὸν σοφὸν αἰσθήσει καταληπτὸν ἀπὸ τοῦ εἴδους τεκμηριωδῶς· (S18)
- §19 οἱ Ἀκαδημαικοὶ λόγῳ γνῶριμον· (S19)
- §20 Ἐπίκουρος σοφῶ μόνῳ τὸν σοφόν. (S20)

4.9 *Whether sensations and impressions are true*

- (a) §1 Pythagoras Empedocles Xenophanes Parmenides Zeno Melissus Anaxagoras Democritus Metrodorus Protagoras Plato (say that) the sensations are false.
- §2 The followers of the Academy (say) that (the sensations) are sound, because they believe that by means of them they grasp true impres-sions, though these are not precise.
- §3 Aristotle (says) that sensation does not err with regard to its proper object, but (it does err) with regard to what is incidental.
- §4 The Stoics (say) that the sensations are true, but that of the impressions some are true and some false.
- §5 Epicurus (says) that every sensation and every impression is true, but of the opinions some are true and some false; and the sensation gives us a false picture in one respect only, namely with regard to objects of thought; but the impression does so in

two respects, for there is impression of both sense objects and objects of thought.

(b) §6 Parmenides Empedocles Anaxagoras Democritus Epicurus Heraclides (say) that the particular sensations of their particular object occur in accordance with the matching-sizes of the pores, each of the sense objects corresponding to each sense.

§7 The Peripatetics (say that the particular sensations of their own objects come about) in relation to the faculties of the sense organs.

(c) §8 The others say that sense objects exist by nature.

§9 But Leucippus Democritus Diogenes (say that they exist) by convention, that is because of our opinion and conditions; that nothing is real/true or cognitive apart from the primary elements, i.e., the atoms and the void; for only these exist by nature, and those things which derive from them, differing from each other in position and order and shape, are incidental.

(d) §10 Those (who posit) the atoms and those (who posit) the similitudinal and those (who posit) the partless and those (who posit) the infinitesimals (say) that all sense objects are mixed in all (others), and that none of these (objects) exists in a pure state, and that they are called such or such in relation to what predominates and to the varieties of glittering.

§11 Pythagoras Plato (say) that each of the sense objects proceeding (to us) from each element is pure (i.e., unmixed). The aetherial is attached to sight, and the pneumatic to hearing, and the fiery to smell, and the wet to taste, and the earthy to touch.

(e) §12 Epicurus (says) that the pleasures and pains actually belong with the sense objects.

§13 The Peripatetics (say) that they belong with the objects of thought; for the same things do not appear pleasant or painful to all people in the way of white and black things.

§14 Chrysippus (says) that the generic pleasant is an object of thought, but the individual and experienced is in fact a sense object.

§15 Empedocles (says) that the pleasures come about through the similars, in accordance with what is lacking for the fulfilment, so that the desire for the similar comes about through what is lacking; the pains come about through the dissimilars, for foreign to each other is what is different as to composition and the blend of the elements.

§16 Anaxagoras (says) that each sensation occurs accompanied by stress.

§17 The others (say) that pleasure, or stress, are supervenient and do not come about together (with the sensation).

(f) §18 The Stoics (say) the Wise Man can be grasped by sensation from his individual appearance by way of inference from a sign,

§19 the Academics (that he) is knowable by reason,

§20 Epicurus that the Wise Man (is knowable only) to (another) Wise Man.

3. *Texts on the τροπαί of the heavenly bodies and the eclipses of the sun and moon*

Ep.Pyth. 93 τροπὰς ἡλίου καὶ σελήνης ἐνδέχεται μὲν γίνεσθαι κατὰ λόξωσιν οὐρανοῦ οὕτω τοῖς χρόνοις κατηναγκασμένου· ὁμοίως δὲ καὶ κατὰ ἀέρος ἀντέξωσιν ἢ καὶ ὕλης αἰεὶ ἐπιτηδείας ἐχομένως ἐμπιπραμένης τῆς δ' ἐκλειπούσης· ἢ καὶ ἐξ ἀρχῆς τοιαύτην δίνην κατειληθῆναι τοῖς ἀστροῖς τούτοις, ὥσθ' οἶόν τιν' ἔλικα κινεῖσθαι. πάντα γὰρ τὰ τοιαῦτα καὶ τὰ τούτοις συγγενῇ οὐθενὶ τῶν

ἐναργημάτων διαφωνεῖ, ἐάν τις αἰεὶ ἐπὶ τῶν τοιούτων μερῶν, ἐχόμενος τοῦ δυνατοῦ, εἰς τὸ σύμφωνον τοῖς φαινομένοις ἕκαστον τούτων δύνηται ἐπάγειν, μὴ φοβούμενος τὰς ἀνδραποδώδεις ἀστρολόγων τεχνιτείας.

Ep.Pyth. 96 ἔκλειψις ἡλίου καὶ σελήνης δύναται μὲν γίνεσθαι καὶ κατὰ σβέσιν, καθάπερ καὶ παρ' ἡμῖν τοῦτο θεωρεῖται γινόμενον· καὶ ἤδη κατ' ἐπιπροσθέτησιν ἄλλων τινῶν, ἢ γῆς ἢ οὐρανοῦ {ἢ} τινος ἑτέρου τοιούτου. καὶ ὧδε τοὺς οἰκείους ἀλλήλοις τρόπους συνθεωρητέον, καὶ τὰς ἅμα συγκυρήσεις τινῶν ὅτι οὐκ ἀδύνατον γίνεσθαι. (ἐν δὲ τῇ ιβ' *Περὶ φύσεως ταῦτά λέγει καὶ πρὸς ἡλίον ἐκλείπειν σελήνης ἐπισκοτούσης, σελήνην δὲ τοῦ τῆς γῆς σκιάσματος, ἀλλὰ καὶ κατ' ἀναχώρησιν* (scholion).)

κγ'. Περὶ τροπῶν ἡλίου

§1 Ἀναξιμένης ὑπὸ πεπυκνωμένου ἀέρος καὶ ἀντιτύπου ἐξωθεῖσθαι τὰ ἄστρα. (P1,S1)

§2 Ἀναξαγόρας ἀνταπώσει τοῦ πρὸς ταῖς ἄρκτοις ἀέρος, ὃν αὐτὸς συνωθῶν ἐκ τῆς πυκνώσεως ἰσχυροποιεῖ. (P2,S2)

§3 Δημόκριτος ἐκ τῆς περιφερούσης αὐτὸν διήσεως. (S5)

§4 Ἐμπεδοκλῆς ὑπὸ τῆς περιεχούσης αὐτὸν σφαίρας κωλυόμενον ἄχρι παντὸς εὐθυπορεῖν καὶ ὑπὸ τῶν τροπικῶν κύκλων. (P3,S4)

§5 Πλάτων Πυθαγόρας Ἀριστοτέλης παρὰ τὴν λόξωσιν τοῦ ζῳδιακοῦ κύκλου, δι' οὗ φέρεται λοξοπορῶν ὁ ἥλιος, καὶ κατὰ δορυφορίαν τῶν τροπικῶν κύκλων· ταῦτα δὲ πάντα καὶ ἡ σφαῖρα δείκνυσιν. (P6)

§6 Διογένης ὑπὸ τοῦ ἀντιπίπτοντος τῇ θερμότητι ψυχους σβέννυσθαι τὸν ἥλιον. (P4,S3)

§7 οἱ Στωικοὶ κατὰ τὸ διάστημα τῆς ὑποκειμένης τροφῆς διέρχεσθαι τὸν ἥλιον· ὡκεανὸς δ' ἐστὶν ἡ γῆ, ἥς τὴν ἀναθυμίασιν ἐπινέμεται· (P5,S6)

§8 συγκαταφέρεσθαι δὲ τὸν ἥλιον κινούμενον ἔλικα ἐν τῇ σφαίρᾳ, ἀπὸ τοῦ ἰσημερινοῦ ἐπὶ τε ἄρκτου καὶ νότου, ἅπερ ἐστὶ πέρατα τῆς ἔλικος· (S7)

§9 ἄλλοι δὲ ἐπ' εὐθείας αὐτὸν κινεῖσθαι τὴν ἔλικα οὐ περὶ σφαῖραν ποιοῦντα, περὶ δὲ κύλινδρον. (S8)

κδ'. Περὶ ἐκλείψεως ἡλίου

§1 Θαλῆς πρῶτος ἔφη ἐκλείπειν τὸν ἥλιον τῆς σελήνης αὐτὸν ὑποτρεχούσης κατὰ κάθετον, οὔσης φύσει γεώδους· βλέπεσθαι δὲ τοῦτο κατοπτρικῶς ὑποτιθεμένῳ τῷ δίσκῳ. (P1, S5)

§2 οἱ Πυθαγόρειοι Ἐμπεδοκλῆς <ὁμοίως>. (P1, S4,6)

§3 Ἀναξίμανδρος τοῦ στομίου τῆς τοῦ πυρὸς διεκπνοῆς ἀποκλειομένου. (P2, S2)

§4 Ἡράκλειτος κατὰ τὴν τοῦ σκαφοειδοῦς στροφὴν, ὥστε τὸ μὲν κοῖλον ἄνω γίνεσθαι τὸ δὲ κυρτὸν κάτω πρὸς τὴν ἡμετέραν ὄψιν. (P3, S3)

§5 Ξενοφάνης κατὰ σβέσιν· ἕτερον δὲ πάλιν πρὸς ταῖς ἀνατολαῖς γίνεσθαι· παριστόρηκε δὲ καὶ ἔκλειψιν ἡλίου ἐφ' ὅλον μῆνα καὶ πάλιν ἔκλειψιν ἐντελῇ, ὥστε τὴν ἡμέραν νύκτα φανῆναι. (P4, S1)

§6 Ἐνιοὶ πύκνωμα τῶν ἀοράτως ἐπερχομένων τῷ δίσκῳ νεφῶν. (P5)

§7 Ἀρίσταρχος τὸν ἥλιον ἴστησι μετὰ τῶν ἀπλανῶν, τὴν δὲ γῆν κινεῖ περὶ τὸν ἡλιακὸν κύκλον καὶ κατὰ τὰς ταύτης ἐγκλίσεις σκιάζεσθαι. (P6, S7)

§8 Ξενοφάνης πολλοὺς εἶναι ἡλίους καὶ σελήνας κατὰ τὰ κλίματα τῆς γῆς καὶ ἀποτομὰς καὶ ζώνας· κατὰ τινα δὲ καιρὸν ἐμπίπτειν τὸν δίσκον εἰς τινα ἀποτομήν τῆς γῆς οὐκ οἰκουμένην ὑφ' ἡμῶν, καὶ οὕτως ὥσπερ κενεμβατοῦντα ἔκλειψιν ὑποφαίνειν. ὁ δ' αὐτὸς τὸν ἥλιον εἰς ἄπειρον μὲν προιέναι, δοκεῖν δὲ κυκλεῖσθαι διὰ τὴν ἀπόστασιν. (P7, S8)

Aëtius, Stoic Physics, and Zeno

A. A. Long

Abstract: The purpose of this paper is a comparative assessment of Aëtius's treatment of Stoic physics, focusing on a selection of his lemmata concerning central doctrines of the school. After outlining the general scope of his Stoic doxography and comparing it with material in Diogenes Laertius and Arius Didymus, I turn to Aëtius's accounts of Stoic cosmology and theology. The accuracy of his detailed report on the attributes of Stoic god is confirmed by its replication in all our main sources, including Cicero, who is the earliest of such authors. I propose that the congruity of testimony may be explained by the hypothesis that Zeno's work *On the Universe* underlay the doxographical tradition on Stoic theology. I conclude with a brief study of Aëtius's reports on Zeno's doctrines of soul and seed.

Key words: Aëtius, Diogenes Laertius, Arius Didymus, Stoics, Zeno, doxography, physics, god, cosmos, fire, *pneuma*, soul, seed, *logos*

1. Situating Aëtius in the context of Stoic doxography

Anyone who works seriously on Stoic physics must make use of Aëtius, by which I simply mean the proximate source of the testimonies incorporated and methodically organized by ps.Plutarch in his *Placita philosophorum* and often included by Stobaeus in his *Eclogae physicae*. In Aëtius's introductory book on nature and its constituents the entries for Stoic doctrines are exceptionally full concerning the origin of ideas of gods (1.6) and on the substance of fate (1.28). Aëtius book four includes valuable, and sometimes unique, information concerning Stoic psychology, sense perception, and concept formation; it also elaborates on how Chrysippus's notion of $\phi\alpha\nu\tau\alpha\sigma\iota\alpha$ differs from other sensory modalities.¹ In book five (9–17) we learn details concerning Stoic embryology and genetics that are attested nowhere else. Aëtius's reports of Stoicism, where they can be compared with other testimonies, are terminologically and doctrinally consistent. What chiefly distinguishes them, in the aggregate of doxography for Stoicism, is their brevity and selectivity, on the one hand, and, on the other hand, their inclusion of some scientific material not treated elsewhere.

Along with Aristotle, as Jaap Mansfeld and David Runia have shown, Stoicism occupies a privileged place in the way Aëtius presents his material.² His preface to book 1 starts with Stoic definitions of wisdom and philosophy, and with the division of philosophy into three parts; it then proceeds to the Peripatetics. Echoes of the lingua franca deriving from both schools are evident throughout the doxography. We might have expected that this background would be reflected in the space allotted to the presentation of Aristotelian and Stoic physical doctrine, but that is not the case unlike the passages derived from Arius

¹ Aët. 4.4, 4.11, 4.12, 4.21.

² Mansfeld and Runia (2009) 2.1, ch. 8.

Didymus in Eusebius and Stobaeus, which do privilege Aristotle and Stoics. To be sure, on the evidence of the testimonies of ps.Plutarch not included by Stobaeus, Aëtius draws exclusively on Aristotle for his initial account of φύσις (1.1), and on Stoics for his entry concerning the origin of ideas of gods. Yet, for the seemingly central topic of cosmogony (1.4, where again we have to rely exclusively on ps.Plutarch), without naming any individual philosophers or schools, all that Aëtius offers is an unacknowledged, albeit detailed, synopsis of atomism. He has nothing to say about Aristotle under the classic Aristotelian topic of ‘coming to be or passing away’ (1.24). Of the thirty entries that make up the generic topics of book 1, Stoics collectively or as individuals are absent from about one third. These omissions include such big subjects as the difference between principles and elements (1.2) and mixture (1.17), both of which are included by Diogenes Laertius in his doxography of Stoic physics. Aëtius is very brief in his statement of Stoic ‘principles’, and he reserves his mention of the remarkable doctrine of ἐκπύρωσις to a few scattered mentions (2.4.7 only in Stobaeus; and 4.7.8).

By contrast with this surprising reticence concerning Stoic doctrines on the foundations of physics, Aëtius is one of our most detailed surviving sources for Presocratic cosmology. He likes to group Thales with Pythagoras and/or Plato, sometimes including Stoics to make a trio or quartet (1.7; 1.8; 2.20). Reading the details of book 1 as a whole, three general points strike me. First, Aëtius (especially in ps.Plutarch’s version) privileges chronology, so that the earliest names in a group are given first. Secondly, he privileges the great names of Thales, Pythagoras, and Plato, and also has a particular liking for Empedocles and Democritus. My third point concerns the ultimate authority for the doctrines Aëtius attributes to Plato and to Aristotle. In both cases, rather clearly, the basis for his reports can be traced to a single text, the *Timaeus* in the case of Plato, and the *Physics* in the case of Aristotle. Did the doxographical tradition, from which Aëtius drew his material on the primary concepts of Stoic physics, look back to a single authoritative text or compendium?

In due course I will propose that most summary accounts of Stoic cosmology ultimately derived from, or harked back to, what I take to have been Zeno’s most famous book after his notorious *Politeia*, the book entitled *On the Universe* (Περὶ τοῦ ὅλου). Diogenes Laertius cites this work multiple times (7.136, 142, 142, 145, 153). I will not suggest that Zeno’s work of this name survived intact at the time of Aëtius. Most likely, it had been annotated and supplemented over the years by Chrysippus and Posidonius, making it a Stoic handbook that was nonetheless Zenonian in substance and furnished with authentic phrases from the master. Aëtius, so I will argue, offers surprising support for this proposal.

But before we come to that, let me return to the issue of Aëtius’s reports on Stoics and Stoicism. Is there a rationale to explain why some of them are detailed, while others are extremely lacunose or omitted altogether? In asking this question, I assume that Mansfeld and Runia (1997 II.1) are broadly correct in identifying *division* and *disagreement* as tropes that explain much of Aëtius’s methodology in presenting his array of material.³ However, these tropes do not account for the inconsistencies I have mentioned, especially the doxographer’s fullness on some topics and his reticence on others. Why is he so expansive on the topic of Stoic fate or so careful to register terminological distinctions concerning perception, and so spare in describing the processes of Stoic cosmogony and cosmology?

³ Mansfeld and Runia (2009) 2.1, ch. 1 and 2.2 passim.

There may be no coherent or rational explanation for such selectivity, but Aëtius seems to know what he is doing, so my suggestion is that we take his project to include the ancient equivalent of *Wikipedia*. His learned readers must have had many preoccupations and interests, but they will have found such typically Hellenistic and controversial topics as theology and fate more engaging presumably than the sterility of mules or eclipses of the moon, topics on which theory had changed little in the course of the period the doxography covers. As to reticence on Stoic cosmology, at a summary level, if you are writing a compendium rather than a history of philosophy, the Stoics, with their four elements and their active and passive principles, look rather like Platonists and Aristotelians. For us, as historians, the interest is all in the difference and the detail, but apparently not for Aëtius and his like.

To get a rough estimate of his work's significance for cataloguing the so-called Old Stoa's doctrines as a whole I compared the numbers of source citations in Adler's *Index to SVF*. By that count the first prize for number of von Arnim citations (not counting their length) is shared by Cicero and Plutarch (six and a half columns each), who are followed by Galen, some passages from Stobaeus, Philo, Diogenes Laertius, Sextus Empiricus and Alexander of Aphrodisias. These are very crude statistics because they include material on logic and ethics, which falls outside the Aëtian doxography with its focus on physics. Still, when you also factor in the brevity of most of his lemmata, the material for Stoicism does not bulk large in absolute terms. In length and detail, Aëtius comes far below the weighty doctrinal sections on physics attributed to individual Stoics in Eusebius and Stobaeus and generally assigned to Arius Didymus. This material occupies some 15 closely printed pages (457–472) of Diels's *Doxographi Graeci*.

I must not trespass far into Keimpe Algra's treatment of Arius in this volume, but I need to make a few points of contrast between Arius and Aëtius. The most salient differences between them, apart from Arius's amplitude, are twofold. First, Aëtius, in ps.Plutarch's transmission, tends to attribute doctrines to Stoics in general rather than assign them, as Arius mostly does, to individual leaders of the school. This characteristic of Arius gives his 'epitomes,' as Eusebius calls them, a much closer air of familiarity with the Stoa than we glean from Aëtius. That familiarity is heightened by Arius's occasional interlinear comments, such as his describing Cleanthes' practice of comparing Zeno's doctrines with those of other φυσικοί (fr. 39 Diels). Secondly, Aëtius ranges over the entire field of Stoic physics from principles (ἀρχαί) to embryology, whereas Arius focuses chiefly on cosmogony and cosmology, topics where Aëtius is especially terse in treating Stoics. In that respect Arius's doxography can be compared with the φυσικὸς λόγος that Diogenes Laertius appended to his *Life of Zeno*, which also treats cosmology in greatest detail. Arius and Diogenes Laertius are also akin in making reference to the treatment of Stoic physics by Apollodorus of Seleucia, whose approximate floruit is 100 BCE. Apollodorus, cited five times by Diogenes Laertius (7.135, 140, 143 (bis), 150) and twice by Arius (frs. 24, 26) for his φυσικὴ τέχνη, is a shadowy figure. But he contributed importantly to all three parts of Stoic philosophy, especially basic physics on which Diogenes Laertius likes to couple his name with Zeno and Chrysippus. Aëtius, however, makes no mention of him. That reticence fits his practice of concentrating on the more important figures and rarely citing others except when their views are remarkable or bizarre.

Arius's epitomes are a very different kind of doxography from that of Aëtius. Diogenes Laertius's account of Stoic physics, which I just mentioned, is our most

comprehensive treatment of the subject, especially notable and distinctive in its numerous author and book citations.⁴ However, on the order and systematic organization of topics (as distinct from the allocated space) there is a fair measure of common ground between Aëtius and Diogenes Laertius.⁵ As the following tabular presentation shows, Diogenes Laertius's so-called 'specific' division into seven topics (consisting of what we might call primary theoretical concepts) is accommodated in Aëtius book 1 on Nature, while Diogenes Laertius's 'generic' division into the parts of the empirical universe fits Aëtius books 2–5.

Aëtius 1 Nature: Diogenes Laertius 7.134–137; 150–151: principles, bodies, elements, god, limits, place, void.

Aëtius 2a: D.L. 7.137–143: universe in general.

Aëtius 2b: D.L. 7.144–146: astronomy.

[D.L. 7.147–149 god(s), nature, fate (Aët. 1.27) divination (Aët. 5.1)]

Aëtius 3: D.L. 7.151–156: meteorology and geology.

Aëtius 4: D.L. 7.156–158: psychology.

Aëtius 5: D.L. 7.158–159: embryology and physiology.

With the exception of Diogenes Laertius 7.150–151, which backtracks to the notions of matter and substance already treated at his sections 134–137, and the considerable disorder in the presentation at sections 147–149 (hence the bracketing of this material in the table printed above), the similarity between Aëtius and Diogenes Laertius is too close to be accidental. The principal difference between them is in terms of comparative space allocation and topic selection. Diogenes Laertius's brevity in treating the 'scientific' topics of Aëtius books 4–5 (where, as I have indicated, the doxography is especially valuable to us as a source), and, correspondingly, Aëtius's brevity in his treatment of Stoic φύσις (Diogenes Laertius's seven 'specific' topics) in book 1. So much for situating Aëtius in the general context of Stoic doxography.

2. Aëtius, Diogenes Laertius, and Zeno on Stoic cosmology

In what follows, I want to focus on the outline of Stoic physics in Aëtius 1 and its connections with the comparable material in Diogenes Laertius. I also want to consider how these doxographies stand in relation to our other sources on the same issues, especially Cicero. I am particularly interested in what we can learn from all three of them, explicitly or implicitly, about Zeno's specific contribution to the central and distinctive doctrines of Stoic physics.

To start the comparison, I juxtapose Aëtius's account of Stoic principles (1.3) with that of Diogenes Laertius 7.134. Ps.Plutarch's version runs thus:

Zeno of Citium, son of Mnaseas, [posited] as principles god and matter, the former of which is cause of action, and the latter cause of being acted upon, and [also] four elements.

⁴ Although it runs to 25 sections, Mansfeld-Runia (2009) 102 call it 'detailed though woefully brief.'

⁵ Cf. Mansfeld and Runia (2009) 99.

Stobaeus's report omits the explanatory clauses concerning the principles, but is otherwise identical. Here is Diogenes Laertius's corresponding passage, highlighting his amplifications of Aëtius's material:

They [the Stoics] hold that there are **two principles of the universe**, that which acts and that which is acted upon. **That which is acted upon is unqualified substance** — matter; that which acts is **the reason (*logos*) within in it** — god; **for being everlasting, he crafts everything throughout the entire matter.**

Aëtius and Diogenes Laertius cohere in their ascription to Zeno of god and matter as the world's active and passive principles. But Aëtius completely lacks Diogenes Laertius's polar amplifications of the passivity of matter and the activity of god. Both versions of Aëtius tag on to their account of the two principles 'four elements'. That addition is authorized by Diogenes Laertius in his ensuing context, but he states it only after he has elaborated on the two principles, explained their difference from elements, and expounded the active principle's cosmogonical activity.

Aëtius gets full marks for brevity and for extraction of the most essential points. That is presumably why his lemma occurs more or less word for word in Achilles, Philo, and Theodoret (all cited in *SVF* 1.85), thus giving the 'two principles' doctrine star billing. All of these sources attribute the doctrine to Zeno explicitly. Can we trust that assignment?

According to Diogenes Laertius, an apostolic succession of five Stoics starting with Zeno and concluding with Posidonius 'posited this doctrine' (τὸ δόγμα τοῦτο). That statement looks reassuring. There is a question, however, about the antecedent of τοῦτο. Are we to read it as referring to everything that Diogenes Laertius has just said about the doctrine of 'two principles', or does τὸ δόγμα τοῦτο refer more restrictively to the immediately preceding sentence about the divinity's everlasting craftsmanship throughout matter?

I raise this question because, while we can be absolutely confident that Zeno himself specified god as cosmic demiurge, we may want to ask whether the Stoic initiated his cosmology by explicitly specifying these two polar principles. Maybe he did. But I also wonder whether this postulate was a formulation that later Stoics adopted rather than a fundamental axiom from the outset, as Aëtius and others maintain.⁶ After all, Zeno's cosmology, as presented by Cicero at *Acad.* 1.39, reads like a monistic theory in which everything is derived from the activity of divine fire.⁷

For further light on this question about Zeno's starting point – one or two principles? – let us turn to Aëtius's elaborate entry on Stoic doctrine concerning god.⁸ I start with a translation of the passage, and then comment on its salient details.

⁶ See Lapidge (1973) 240, who rightly calls the 'two *archai*' statement 'deceptively simple'.

⁷ Cicero's words are *statuebat* [sc. Zeno] *ignem esse ipsam naturam quae quidque gigneret*.

⁸ Stobaeus unlike ps.Plutarch earlier in his chapter on theology includes four lemmata on individual Stoics' definitions, presented in the curious order Cleanthes (coupled with Diogenes and Oinopides), Posidonius, Zeno, and Boethus, but gives nothing on Chrysippus. Although these doxai also go back to Aëtius, I set them aside for now. [On the place of Zeno in Aëtius' treatment of first principles in 1.3 see the article of J. Mansfeld above ch. 8. Editors]

Aët. 1.7.33 Diels *On god* (SVF 2.1027)

(The text occurs right at the end of the chapter, immediately following entries on Plato and Aristotle and preceding only the entry on Epicurus)

The Stoics declare god to be (1) *intelligent* (νοερόν), (2) *a designing fire* (πῦρ τεχνικόν) *proceeding systematically* (ὁδῶ βαδίζον) *to the generation of the world*, (3) *embracing all the seminal principles* (σπερματικούς λόγους) *according to which* (4) *everything happens according to fate, and to be* (5) *breath permeating the entire world* (πνεῦμα διήκον [ἐνδιήκον S] δι' ὅλου τοῦ κόσμου) *changing what it is called according to the alterations of the matter through which it passes;*⁹ and they declare that the world, and the stars, and the earth are gods, and that the aetherial intellect above everything is a god (ἀνωτάτω δὲ πάντων νοῦν ἐναίθεριον εἶναι θεόν.¹⁰

The Christian apologists Athenagoras and Cyril knew the passage verbatim. Cyril cites its beginning down to the words ‘proceeding systematically to the generation of the world’, while Athenagoras reports the text in full up to the mention of *pneuma*, though he changes the word order of the point concerning divine names. Von Arnim, printing the passage in small type, tucks it away on p. 306 of the second volume of *SVF*, under the heading *Qualis sit deus*.¹¹ This positioning is defensible by reference to Aëtius’s chapter headings, but for users of *SVF* it was a most unfortunate decision. While the passage is indeed about god, it is also a brilliantly clear and succinct statement of cardinal Stoic cosmological concepts (which, of course, by Stoic lights are theological), in impeccably accurate Stoic terminology. Hence, in writing the chapter of Long and Sedley, entitled ‘God, fire, cosmic cycle’, we placed this text first at 46A (omitting the final sentences on the world and stars etc).¹²

It is certain, or so I will now argue, that Aëtius expresses his most salient points in language that goes back to the early Stoa. Four phrases strongly bolster this claim.

First, in designating god as νοερός, Aëtius used a word that Stoics regularly applied to *kosmos* (so Diogenes Laertius 7.142, referencing Chrysippus, Apollodorus and Posidonius,

⁹ The text of this last phrase, as transmitted in ps.Plutarch and Stobaeus, requires emendation; see Diels *DG* 5 and 51. By translating ‘according to the alterations of the matter’, I follow ps.Galen, in which κατὰ τὰς is found in place of δι' ὅλης in P and S. A preposition κατὰ or διὰ (the latter being Bekker’s suggestion in Diels *DG ad loc.*) is required to govern παραλλάξεις.

¹⁰ I translate the reading of S, which is to be preferred to that of P. Cf. Arius fr. 33 (Stobaeus) where Zeno is credited with stating that the sun, moon and each of the other stars (?planets) is νοερός and φρόνιμος and πυρινός, from ‘designing fire’, and id. fr. 34 where he is said to have given the same account of the moon.

¹¹ Ps.Galen 35, omitted by Von Arnim, repeats Aëtius almost verbatim, but replaces νοερόν, πῦρ τεχνικόν with πῦρ ἔντεχνον ἢ πνεῦμα, and makes a few other purely syntactical changes. Parts of Aëtius’s definition, referencing φύσις not θεός, are repeated in Galen, *Def.Med.* 95 (*SVF* 2.1133) and Clement. *Strom.* 5.14 (*SVF* 2.1134). See A.S. Pease, ed. Cicero *ND* 2.57 *ad loc.*

¹² Long and Sedley (1987) 274

and Sextus (*M* 9.98=*SVF* 2.1015); and they had the authority of Zeno himself.¹³ The evidence comes from Sextus (*M*. 9.104 (*SVF* 1.111) in his report of one of Zeno's theological proofs:

That which is νοερός and animate is superior to that which is not νοερός and animate.
But nothing is superior to the world. Therefore the world is νοερός and animate.¹⁴

Further support for νοερός being a Zenonian trademark comes from Arius, who not only attributes the word to Zeno explicitly (frs. 33–4) but also states (fr. 39) that Zeno followed Heraclitus in calling the soul αἰσθητικὴ ἀναθυμίασις ‘because when souls are exhaled they constantly become νοεραί’.¹⁵

Next, πῦρ τεχνικόν ‘proceeding systematically to the generation of the world’. Heraclitus probably did not call his divine fire τεχνικός, but the early Stoics likely thought that they had their hallowed precursor's authority for so stating.¹⁶ Aëtius couples πῦρ τεχνικόν to the adverbial phrase ὁδῶ βαδίζον ἐπὶ γενέσει κόσμου. Here too we undoubtedly have authentic language of the early Stoa. The virtually same expression (minus κόσμου) recurs in Diogenes Laertius 7.156, where Diogenes applies it to φύσις, which he glosses with the words πυροειδὲς καὶ τεχνοειδὲς πνεῦμα. Cicero offers an exact Latin version of ὁδῶ βαδίζον ἐπὶ γενέσει κόσμου with the words *ignem artificiosum ad gignendum progredientem via* (*ND* 2.57), and calls it Zeno's definition of nature.¹⁷ At *ND* 3.27, again with reference to Zeno, Cicero writes of *naturae artificiose ambulantis*.¹⁸ Like Aëtius's word νοερός, we can be confident that the phrase πῦρ τεχνικόν takes us right back to Zeno's terminology.

The third of Aëtius's salient expressions in his lemma on Stoic god is σπερματικοὶ λόγοι. Unlike νοερός, σπερματικός was a favorite Peripatetic adjective, but to the best of our knowledge no-one before the Stoics had applied it metaphorically or analogically to λόγοι,

¹³ According to Aët. 2.20.16 (DK 22 A12) Heraclitus called the sun an ἄνναμα νοερόν (Heeren's correction of MSS ἄναλμα) from sea, ‘an intelligent kindling’. This phrase in full is Stoic terminology, cf. *SVF* 1.501 (Cleanthes), 2.652 (Chrysippus), and Mansfeld (2015) 69 f., but I take νοερός, which is found only once in Aristotle and nowhere certainly in Plato, to be a Heraclitean word; see below, p. 00.

¹⁴ Cf. Cic. *ND* 2.21, citing Zeno on the superiority of what is rational and animate. Plutarch writing of god as Stoic principle, describes god as σῶμα νοερόν (*Comm. Not.* 1085B = *SVF* 2.313). Aëtius himself starts his earlier lemma on the origin of ideas of gods (1.6) by reporting the Stoics' definition of god's substance as πνεῦμα νοερόν καὶ πυρωδές, which Stobaeus's version of the lemma ascribes to Posidonius (1.7.19).

¹⁵ There is no reason to emend νοεραί to νεαραί as proposed by Meewaldt; cf. Kahn (1979), 355 n. 374.

¹⁶ Cf. Heraclitus B30 DK that begins κόσμον τόνδε and continues with the phrases ‘ever-living fire, kindled in measures and quenched in measures’.

¹⁷ Cf. the Stoic definition of τέχνη, e.g. *SVF* 1.71, reading ὁδῶ ποιητική.

¹⁸ Likewise Galen (*SVF* 2.1133) and Clement (*SVF* 3.1134). Philo (*SVF* 2.422), according to the Armenian original of his fragmentary work *De deo* in reference to what the standard Latin translation calls *non corruptabilis*. . . *sed salutaris ignis per quem omnia artificiose facta sunt*, said: ‘That is why, I think, some philosophers maintained that a designing fire proceeds systematically with a view to the production of generative seeds’. Cf. the retranslation into Greek by Siegert (1988), 27–28.

meaning formulae, rational principles, or ratios. Diogenes Laertius 7.135 echoes Aëtius's context and language in the following expanded form:

God, *nous*, fate, and Zeus are all one, and they are called by many other names [repeated at 7.147]. In the beginning, being by himself, god turned the entire substance through air into water. And in the same way that seed is contained in seminal fluid, so god, who is the *σπερματικὸς λόγος* of the world, remains as such in the moisture, making matter serviceable to himself for the successive stages of creation.

Although Aëtius pays rather little attention to Stoicism in his official entries on cosmology, his lemma on god and the text just cited from Diogenes Laertius (who repeats it at 7.147 in reference to nature) match completely in essence.¹⁹ By juxtaposing Aëtius and Diogenes Laertius, as I have done, we can see that the early Stoics' doctrine of fate did not pertain to an abstract theory of determinism but to the power of divine agency and its implementation by means of the so-called seminal principles.²⁰

No testimony links Zeno by name to this latter concept, but the seeds/*λόγοι* analogy is so fully elaborated by Cleanthes (*SVF* 1.497) that David Hahm²¹ was surely right in assigning the impetus of Stoic cosmobiology to the school founder himself.²² And once the analogy had been made, it was there to stay, as we can see from mentions of *σπερματικοὶ λόγοι* by Stoics as late as Marcus Aurelius (4.14, 60.1).²³ There is no evidence that Heraclitus prepared the ground for the seed analogy as such, but in god's creative role, divine transformations, and the focus on *logos* both Aëtius and Diogenes Laertius recall Heraclitus very strongly - still more strongly when we factor in Aëtius's 'designing fire'. On the basis of these two testimonies Stoic cosmobiology looks very different from the Platonist interpretation of the *Timaeus*, which it has become fashionable to invoke as the most formative text for Zenonian cosmology.²⁴ Can we be sure, to repeat my earlier question, that Zeno followed the Hellenistic exegesis of Plato (cf. Diogenes Laertius 3.69) in positing the two principles god and matter, rather than starting simply from god?

The fourth phrase I wish to highlight from Aët. 1.7.33 is *πνεῦμα διήκον* [P, ἐνδιήκον S] δι' ὅλου τοῦ κόσμου. Stoic sources vary over whether they make *pneuma* the pervading entity, or call that entity god or *nous*; and they vary again over whether they make matter or substance or *κόσμος* or *πάντα* the term for what is pervaded.²⁵ Common to a very wide range of authors and periods, however, is the verb *διήκω* or its Latin equivalent. Diogenes Laertius exemplifies this variety in four passages, writing that 'god crafts each set of things (*ἕκαστα* is Aëtius's word) throughout all matter' (7.134), that *nous* 'pervades every part of the world'

¹⁹ Cf. also Aët. 1.28.3 (*SVF* 2.913), referring only to Chrysippus.

²⁰ The connexion between seeds, fate, and *λόγοι* is elaborated in Aristocles' testimony, cited by Eusebius (*SVF* 1.98).

²¹ Hahm (1977), 78.

²² Whether or not Zeno anticipated Chrysippus's allusion to the Samian painting of Zeus felling Hera in the role of matter, as attested by Origen (*SVF* 2.1074).

²³ Cf. *σπερματικαὶ δυνάμεις* in Galen (*SVF* 2.113).

²⁴ Cf. Gourinat (2009) and Reydam-Schils (2013).

²⁵ Cf. *SVF* 1. 155–61, and 2. 416, 473, 1033, 1035, 1037.

(7.138), that ‘god as it were passes through (κεχωρημέναι) all creatures’ (7.139); and at the beginning of his doxography of ethics, that ‘the common law, which is ὁρθὸς λόγος and god himself, goes through all things’ (7.88). Unlike Aëtius, Galen, Sextus, and Alexander, Diogenes Laertius does not use *pneuma* in reference to god and the pervading agent. With that exception, however, his doxography of god as all-pervasive agent is a clear and informative amplification of what Aëtius states so succinctly. And there is complete doxographical consensus on the Stoic formulation of god’s relation to the world, in Aëtius’s words, as ‘permeating it through and through’.

Stobaeus, quite a bit earlier in his redaction of what we take to be Aëtius’s chapter includes four specific definitions of god advanced by individual Stoics — by Cleanthes ‘the world’s soul’, by Zeno ‘the world’s fiery *nous*’, by Boethus ‘the aether’, and fourth and most elaborately, by Posidonius as πνεῦμα νοερὸν καὶ πυρωδές ‘having no form but turning into whatever it wishes and assimilating to everything’.²⁶ Ps.Plutarch, who omits all these individual Stoics from his lemma on god, cites the Posidonian definition verbatim (but without name-label) at the beginning of 1.6 on the Stoics’ account of the origin of ideas of gods, all of which is omitted by Stobaeus.²⁷ I don’t propose to speculate on these doxographical vagaries, except to say that the *placita* tradition, as represented by Aëtius’s generic lemma at 1.7.33 (identically expressed in both ps.Plutarch and Stobaeus), has left its mark on practically all our main sources for Stoic physics.

No Stoic philosopher, we can surmise, defined god in a single context by means of Aëtius’s nine sentences. The passage contains an *aggregate* of entirely consistent and well-arranged formulations. Moreover, as I have tried to show, all the phrases Aëtius uses have strong Stoic authority, ranging from Zeno’s fire down to Posidonius’s *pneuma*. In sum, Aëtius at 1.7.33 provides an excellent and authoritative omnium gatherum version of Stoic god by aggregating the notions of world intellect, designing fire, seminal principle, pervading breath, and aether.

Leaving these textual details for now, let me step back to say where my argument is going. As we have already seen, and will see further shortly, phrases in Aëtius’s generic account of Stoic god, are replicated either verbatim or nearly enough verbatim in a large range of sources ranging in date from Cicero to late antiquity. So what, you may say? That is precisely what we take Aëtius to be, our principal witness to a conspectus of the physical *doxai* selected (for the most part) from material credited to the most famous philosophers and schools. Hence community of phraseology between Aëtius, Diogenes Laertius and elsewhere is just what we should expect in the *Placita* tradition. Absolutely so, I respond, up to a point. But I am not flogging a dead horse by drawing attention to the commonalities because, as I have just indicated, the *Placita* tradition, as represented by Aëtius, also recorded different definitions of god made by individual Stoics. Those differences might attest to Aëtius’s interests in *diaphonia*, but I will not pursue that thought because all the individual definitions were probably taken by actual Stoics to be consistent — world soul, aether, fiery mind etc. What interests me is the common ground between Aëtius and Diogenes Laertius on Stoic god, notwithstanding their differences of scale. It is as if Aëtius has read Diogenes

²⁶ Aët. 1.7.17, 1.7.23, 1.7.25, 1.7.19 Diels.

²⁷ See Aët. 1.7.19 for explicit attribution to Posidonius.

Laertius and then boiled his account down to its most salient features, or as if Diogenes Laertius has read Aëtius and expanded him by supplementing his account with a plethora of references.

Diogenes Laertius stands out from all other sources for Stoic physics in his references to individual Stoic philosophers and their works. Like Aëtius and many other sources Diogenes Laertius often prefaces a statement with a generic ‘they say’, but he also alludes to Zeno 11 times, to Chrysippus 18 times, and most of all, to Posidonius, with 19 mentions. In one context, but only one, Diogenes Laertius mentions a slight disagreement between Stoic authorities (7.139). Otherwise the purpose of his multiple references is to indicate a community of doctrine among individual Stoic luminaries, or to tell readers where they can find further treatment of the points he has made in works composed by these authors. The particular books that he cites most frequently are Zeno, *On the Universe*; Chrysippus, *On Physics*; and Posidonius, *Account of Physics*. Altogether Diogenes Laertius cites 12 Stoic philosophers, ranging in date from Zeno down to Panaetius, Apollodorus, Boethus, and Posidonius. Except for his curious omission of *pneuma* Diogenes Laertius’s account of Stoic god replicates such salient terms from Aët. 1.7.33 as πῦρ τεχνικόν, σπερματικός λόγος, pervading agent, fate, and aether.²⁸ We should also recall that Arius’s testimony for Zeno (frs. 33–4) attributes the words τεχνικός and νοερός to Zeno specifically.

3. Cicero’s reports on Zeno’s cosmology

Cicero has already figured in my commentary on Aëtius 1.7.33, but at this point I turn to make him centre stage as it were. In his treatment of the sources for Chrysippus (*SVF* vol. 1), von Arnim largely acted on his belief that Cicero’s reliability for access to early Stoic doctrine has been compromised by his reliance on Posidonius. For readers of *SVF* in consequence, Cicero is presented as very much a secondary source. A. C. Pearson, by contrast, in his unjustly forgotten edition of the fragments of Zeno and Cleanthes, gave prominence to Cicero in his presentation of Zeno’s basic physical doctrines.²⁹

Von Arnim was quite right, of course, to warn his readers that Cicero is a very tricky source. We always have to ask where the Roman orator is coming from. In the pro-Epicurean first part of *ND* 1, possibly drawing on Philodemus’s work *De pietate*, Cicero has his character Velleius criticize the Stoics by alleging that they are theologically inconsistent both between one another and at different contexts within the same philosopher’s work.³⁰ Thus, in the case of Zeno, Cicero writes *hic idem alio loco, aliis libris*, in the case of Cleanthes *tum, tum, tum*, and in writing of Chrysippus *idem, idem, and idem* (1.36–41). In Book two, by contrast, the pro-Stoic Balbus presents the views of Cleanthes, Chrysippus, and Zeno, in that order, without the slightest hint that they are inconsistent with one another. Stobaeus’s lemma

²⁸ See Von Arnim, *SVF* vol. 1, xlv–xlv, who seems to think that Aëtius’s generic statements are primarily derived from Posidonius, who ‘reintegrated’ Zeno’s views, and should not be relied on for Chrysippus.

²⁹ Pearson (1892): nos. 34 (Pearson’s first passage for Zeno’s Physics), *Acad.* 1.39; 37 *ND* 1.36; 39 *ND* 1.36; 41 *ND* 36 and *Acad.* 2.126; 46 *ND* 2.57, 3.27, and 1.39; 48 *ND* 2.58. Von Arnim drew heavily from Pearson’s work for the first volume of *SVF*.

³⁰ Cicero’s direct dependence on Philodemus is more conjectural than Obbink (1996) maintains, but more likely than not; see Montaresi (2012) 33–34.

citing different definitions of god by individual Stoics (n. 7 above) provides the kind of material that Epicurean critics of Stoicism exploited. There is, however, no reason to think that the mainstream Stoics from Zeno down to Posidonius differed in substance on any fundamental details of Stoic theology, though their emphases did differ somewhat. Thus Cleanthes stressed the role of the sun, while Posidonius in his accounts of god may have focused more strongly on *pneuma* than on fire, as Zeno had done. What chiefly interests me at this point of the argument is to show how closely Cicero's evidence for Zeno in particular matches Aëtius's generic account of god at 1.7.33.

Cicero makes the following reports concerning Zeno's theology:

- (1) Fire as generative principle of everything in nature and as mind (*Acad.* 1.39: cf. πῦρ τεχνικόν and σπερματικὸς λόγος): *ignem ipsam naturam quae quidque gigneret et mentem.*
- (2) World Soul = Fire as source of reason and intelligence (*Fin.* 4.12).
- (3) Natural and animate law (*ND* 1.36).
- (4) Aether (*ibid.*).
- (5) Divine reason permeating nature (*ibid.*): *rationem quandam per omnium naturam rerum pertinentem vi divina adfectam.*
- (6) Nature as designing fire systematically proceeding to create (*ND* 2.57): *ignem artificiosum ad gignendum progredientem via.*

This last passage, as we have seen, is repeated virtually verbatim in such sources as Aëtius, Diogenes Laertius, Galen, and Philo. Cicero comments on it at length *ad loc.*, drawing attention to the craftsman analogy, and reporting that Zeno called nature an *artifex* because of its role in planning and in executing its plans optimally. On this evidence we are entitled to ascribe the 'craftsman' terminology (τεχνίτης, τεχνικός etc) to Zeno himself. That ascription is supported by Diogenes Laertius 7.86, where *logos* is described as τεχνίτης ὁρμῆς, and by the activity of δημιουργεῖν, which Diogenes Laertius explicitly attributes to Zeno's book entitled *On Substance* (7.134), which was probably an alternative name for Zeno's much cited-work *On the Universe*. Cicero, then, confirms Zenonian authority and authorship of the first two phrases of Aëtius's generic lemma on god: (1) **intelligent, designing fire** (νοερόν, πῦρ τεχνικόν), (2) **proceeding systematically to the generation of the world.**

The third phrase in Aët. 1.7.33 specifies god in terms of σπερματικοὶ λόγοι and also by means of the universal scope of fate. Diogenes Laertius attributes the latter to Zeno along with Chrysippus, Posidonius and Boethus (7.149). Cicero's testimony on Stoic god as 'generative principle of everything' clearly alludes to σπερματικὸς λόγος. At *ND* 2.58, after his lengthy account of Zeno's craftsman model of nature, Cicero draws a parallel between the psychological activities of *natura mundi* and the manner in which individual natures are each sustained by 'their own seeds'. Both Aristocles in Eusebius (*SVF* 1.98) and Arius (fr. 20 = *SVF* 1.87) attribute the *semina* analogy to Zeno specifically. The phrase 'like seed in the seminal fluid' (Arius fr. 20, Diogenes Laertius 7.150, Calcidius *SVF* 1.87–88) has a similar ring to the expression 'like honey through the honey comb' (*SVF* 1.155). The sources for these expressions attribute them to Zeno specifically. Hence I infer that here too we probably have Zeno's actual words.

According to Cicero, 'permeating reason' and 'aether' are terms that Zeno applied to divinity, which he also attributed to the stars and seasons, just as we find Aëtius at 1.7.3 nominating world, stars, and earth as Stoic gods. Cicero also, like Aëtius, says that Zeno authorized the application of traditional divine names to natural phenomena (*ND* 1.36). In

sum Cicero's testimony for Zeno's theology, scattered and discursive though it is, matches the explicit attributions made by Diogenes Laertius (many of which are attested to Zeno's work *On the Universe*) and by the generic account in Aët. 1.7.33. The only significant divergence between that lemma and Cicero's account of Zeno's theology, if divergence it is, concerns *pneuma*. Like Diogenes Laertius Cicero does not tell us that Zeno called divinity breath as well as fire.

Cicero is our oldest source for mainstream Stoic doctrine, setting aside Cleanthes' poems and Plutarch's many citations from Chrysippus. Those citations, unlike the material I have been discussing, largely deal with technical details that Plutarch exploits in his projects of showing up the Stoics' inconsistencies and their departures from common notions. By the time of Plutarch and Galen, you attack the Stoics either generically or by singling out Chrysippus rather than Zeno. Cicero, however, as Ian Kidd wrote,³¹ took 'Zeno to have established the whole general system. . . at least in outline. . . and regarded him as an active and initial determinant force still in play for Stoicism'. It is true, as Kidd went on to write, that 'Cicero's actual sources remain extraordinarily hazy . . . and that he never names them'. But that haziness, or whatever we call it, pertains to Cicero's general tendency to give no specific references to his sources or to works of the philosophers that he purports to quote. The affinities I have drawn between Cicero's accounts of Zenonian physics and the later doxographical tradition are not in the least hazy. Doctrines, of course, were commonly attributed to founders of schools on the basis of their sheer authority rather than because of historical exactness. I make due allowance for that tendency, but I also think that Cicero gives us first-hand evidence of Zeno's own terminology and thought concerning Stoic theology. To the best of my knowledge, no one has previously supported this claim by adducing all the evidence I have just assembled.³²

I do not intend to speculate on the books and authorities that supported Cicero's allusions to Zeno. Quite probably, as Mansfeld has proposed,³³ there was a Stoic *placita* tradition that went back in origin to Chrysippus, and then, as I myself conjecture, was supplemented and updated by the likes of Apollodorus and Posidonius. What I hope to have substantiated beyond reasonable doubt is that both Cicero and Aëtius had access to a summary of Stoic cosmotheology that included salient phrases authorized by Zeno in his work *On the Universe*. Kidd entitled his paper 'Zeno's oral teaching', but orality can hardly have been the only medium through which Zeno conveyed the cosmotheology of which such secure traces survive. Algra has indicated the fragility of some of the evidence purporting to give us details of Zeno's physics, including the long fragment attributed to Zeno by Stobaeus (Arius fr. 23) concerning the positions of the elements.³⁴ I agree with his cautionary arguments concerning that particular text. Where I part company with him is on his suggestion that physics was subordinate to ethics in Zeno's philosophy. If we acknowledge, as I know Algra does, that physics embraces theology, we should say that physics was as central to Zeno as Cicero explicitly (and Aëtius implicitly) indicate.

The credence I am attaching to Cicero's testimony and terminology for Zeno is not grounded on Cicero's early date as our source. He could in principle have been misled by an

³¹ Kidd (2002) 359.

³² Some of it is cited by Bees (2004) 133–136.

³³ Mansfeld (1989).

³⁴ Algra (2002).

author close to his own time — someone who used Zeno's name, as we know sources often did, as an unhistorical stand-in for Stoics in general. What persuades me to trust Cicero on his reports concerning Zeno are, first the coherence, more or less verbatim, of his testimony with multiple other sources that name Zeno on such points as divine and artisanal fire, seminal principles, and the like; second, Diogenes Laertius's frequent recourse to Zeno's *On the Universe* concerning the very same points; and third, the principle of sufficient reason. In the absence of counter evidence, we are entitled to assume that the cosmotheology attributed to the Stoics generically by Aëtius incorporates Zeno's original wording, more or less exactly.

If that is right, we can conclude that Aëtius as a source for Stoic physics is a two-edged resource. When he attributes a doctrine to Zeno explicitly, such as that of the two principles, we cannot be completely confident that the attribution is historical. But equally, the doctrines Aëtius attributes to the Stoics generically may, when corroborated in the way I have tried to show, provide excellent testimony concerning Zeno himself.

4. Aëtius on Stoic/Zenonian doctrines of soul and seed

I conclude this paper with a few remarks concerning what Aëtius tells us about Stoic doctrines on soul and seed, with a view once again to testing his reliability as testimony for Zeno in particular.

The topic of the lemma at 4.3.3 is 'whether soul is a body and what its substance is'. Ps.Plutarch reports: 'The Stoics [say that soul is] **hot breath**'. Stobaeus runs: 'The Stoics [say that soul is] **intelligent** [νοερόν] **breath** [and] **hot**'. What are we to make of the additional attribute νοερός? No other testimony replicates the amplified Stobaeus report. Prima facie, the addition of νοερός looks questionable in a definition of soul that would cover the vital principle of all animals, both rational and non-rational. However, Aëtius himself (in both P and S versions), in the lemma on 'perception and perceptibles' (4.8.1), states that Stoics call 'the sensory faculties πνεύματα νοερά stretching from the ἡγεμονικόν to the organs'. This statement is repeated by Nemesius (p. 57.1–2 Morani, not in *SVF*), who states that the Stoics 'define perception as πνεῦμα νοερόν stretching from the ἡγεμονικόν to the organs'. In discussing Aëtius's account of Stoic cosmotheology, I proposed that νοερός starts its Stoic life as a Zenonian word with strong Heraclitean connotations. That claim gets corroboration from Arius's report (fr. 39) that Zeno endorsed Heraclitus's theory that the soul is an αἰσθητικὴ ἀναθυμίασις.³⁵ Since soul, any soul, is derived from the world's vital principle, which is quintessentially νοερός we can probably accept the fuller testimony of Stobaeus as authentically Stoic, taking the term νοερός to imply cognitive capacity in general as distinct from rationality (λογικός) in the sense of a specifically human and divine attribute.

Turning now to heat, Aëtius's other attribute for soul, we can be sure that this was Zenonian doctrine, just as Diogenes Laertius 7.156 states explicitly; but we should add the proviso that Zeno's word for hot was probably not simply θερμός, as stated by Aëtius, but the rarer term ἐνθερμος, which had a medical background.³⁶ This prefixed form is found in other

³⁵ On the basis of this testimony, I propose that the missing word at DL 7.156 after αἰσθητικὴν is ἀναθυμίασιν.

³⁶ The term was applied to φύσις by Hippocrates, *Epid.* 6.4.13 and to blood by ps.Aristotle, *Pr.* 898a6.

sources for Stoic psychology besides D.L., including Stobaeus (*SVF* 3.305) and also Nemesis (p. 16.16 Morani = *SVF* 2.773), who characterizes Stoic soul as πνεῦμα ἔνθερμον καὶ διάπυρον. Diogenes Laertius, in his aggregating manner (7.156), credits Stoics in general with calling soul συμφυῆς πνεῦμα. The Latin tradition (Tertullian, Macrobius, and Calcidius at *SVF* 1.157–158) gives this definition to Zeno himself, but there is no mention of it in Aëtius. However, in addition to the Zenonian clue furnished by νοερός in Stobaeus, Zeno has left an intriguing trace in Aëtius's splendidly full lemma on the ἡγεμονικόν (4.20 = *SVF* 2.836), which is understandably confined to Stoic doctrine.

The passage starts with 'the Stoics say' and continues with verbs in the third person plural. It discourses first on the function of the ἡγεμονικόν, then explains its seven subordinate parts, likening them to the tentacles of an octopus (as previously stated at 4.8.2), next describes the processes of the five sensory faculties, and finally deals with the non-sensory parts of reproduction and voice. Before voice no individual Stoic is named, but out of the blue, as it were, the text goes: 'What is called vocality (φωναέν) by Zeno, which they also call φωνητικόν, is πνεῦμα'.³⁷ The testimony is unique, and remarkable, not only because it names Zeno so unexpectedly but also tells us that he used this Doric form of the rare adjective φωναεῖς, to name the vocal faculty. What are we to make of this?

Making voice a special faculty or part of the soul was a Stoic innovation. Aëtius's text underlines this point by drawing attention to Zeno's odd locution. Thereby he assures us, wittingly or not, that Zeno was the author of the eight-part doctrine of the soul. Other sources state that explicitly (Nemesis and Iamblichus, *SVF* 1.142–143); but without this evidence from Aëtius, we could not be certain that Zeno himself was the actual originator of the doctrine. Did Zeno also authorize the octopus comparison for the eight parts of the soul? Aëtius mentions it as generic Stoic doctrine, but Nemesis credits it to Zeno. Like the honey in the honey-comb and the seed in the seminal fluid, the psychic octopus no doubt was his analogy.

My final example of Aëtius's Stoic testimonies is V.4 on 'whether the seed is a body'. Aëtius in his sparest manner tells us that Leucippus and Zeno answered affirmatively, because they took the seed to be a detachment (ἀπόσπασμα) of soul. What Zeno, let alone Leucippus, took that phrase to mean, would be quite obscure, were it not for several other texts that explain Aëtius's telegraphic expression. For the sake of brevity, I simply cite one of these passages, the beginning of the elaborate account of seed that Arius (fr. 39 according to Eusebius), attributes to Zeno himself: 'the breath together with moisture that a man emits, a portion and ἀπόσπασμα of soul'.³⁸ Here again, as with his account of soul, Aëtius gives us an accurate but minimally informative statement of Stoic doctrine.

Aëtius tends to be extremely terse, as he is here, in his treatment of Stoic doctrines, but also, as I have illustrated, he can occasionally be one of our fullest and most informative sources. Perhaps there is a rational explanation for this patchy and inconsistent approach, but if so I have no suggestions to explain it beyond what I said at the beginning of this paper concerning the different levels of interest readers of doxographies must have brought to bear

³⁷ Reading φωνητικόν for the clearly corrupt φωνήν, as in ps.Galen here and everywhere else (Chrys. ap. Gal. *PHP* 3.1.11 p. 170.15 De Lacy, Porph. *de An.* ap. Stob. 1.49.25a, p. 350.15 W., Nem. *NH* c. 15, p. 72.9 Morani) including Aët. 4.4.4.

³⁸ The parallel passages, collected at *SVF* 1.128, are from Theodoret, Plutarch, Galen, and Diogenes Laertius.

on the material. What is consistent throughout is the reliability of Aëtius's generic testimony for the Stoics. I have found no clear mistakes or misidentifications. He or his sources knew what they were up to, and wittingly or not, they have preserved Zeno's original presence in some of the material.

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Galen and Doxography

Teun Tieleman

Abstract. In a good number of cases Galen can be shown to be drawing on the *Placita* tradition in what appears to have been a fuller version than that represented by the reconstructed text of Aëtius. Galen does so for differing but related purposes, the most salient ones of which are the following. First, he uses the *Placita* to distinguish between issues that are insoluble and useless and those that may lead to true or at least plausible conclusions. Secondly, in regard to the latter kind of issues, Galen derives from the *Placita* diaeretic schemas of options that form the starting point of correct methodical inquiry in natural philosophy and medicine. In addition, he develops his own schemas modelled on those of the *Placita*. Galen integrates these doxographical schemas with a conceptual toolkit that derives from the exegetical tradition concerned with the Platonic *Timaeus* including Academic input, most notably the notion of the plausible. I conclude with an overall evaluation of the epistemology-cum-methodology thus developed by Galen.

Key words: Aëtius, Galen, doxography, dialectic, diaeresis, methodology, epistemology, logic, plausibility, Scepticism, Plato, *Timaeus*.

1. Introduction

The surviving works of Galen of Pergamum (129–c.216 CE) constitute the most extensive corpus we possess of any ancient author. Most of them deal with medical subjects but in these, too, we often find Galen employing philosophical concepts and participating in philosophical debates. Some evidence for Galen's acquaintance with the *Placita* tradition is discussed by Mansfeld (1990b) and Tieleman (1996a) and (2003), with reference to the debate on the bodily seat and structure of the soul, by Mansfeld (1992) with reference to the cosmos, and by Mansfeld and Runia (2009) with reference to vision.¹ In this paper I will assemble and study this material, adding some further passages from Galen that may be called doxographical and invite comparison with the *Placita* of Aëtius, including Galen's recently recovered treatise *De propriis placitis*.² It is my aim not only to point out parallels, but to consider how and why Galen uses doxographical schemas. This will result in an overall characterization of Galen's relation to

¹ Mansfeld (1990) 3141–3143 (on Gal. *Loc. Aff.* VIII, 5, pp. 157–158 K. on which see *infra*, n. 45 and p. 00), Tieleman (1996a) xxiv–xxv, 8–9, 11–12, 82, 89, 159 (on *PHP* I–III), Tieleman (2003) 61–88 (= ch. 2 'Doxography', on *PHP* IV–V), Mansfeld (1992) 88–92, Mansfeld and Runia (2009) 185–189 (*CP* 148.5–24 Hankinson, *PHP* 7.5).

² After the Melbourne colloquium Jaap Mansfeld kindly sent me a list of all the passages from Galen included by him and David Runia in the apparatus of parallels and testimonies (involving the wider category of what they call the 'proximate tradition') to their forthcoming edition of the reconstructed Aëtius. This material enabled me to make the picture of Galen's relation to the *Placita* tradition more complete, for which I thank the authors of the *Aëtiana*.

doxography and of the methodology or dialectic in which the doxographical schemas fulfil a particular function.

2. Evidence from PHP book IX: useless issues

The method of distinguishing between similars, alongside the method of division (διαίρεσις), is the central theme of the ninth book of Galen's great work *On the Doctrines of Hippocrates and Plato* (henceforth *PHP* after its Latin title *De Placitis Hippocratis et Platonis*).³ It takes a trained eye and mind, he claims, to draw the necessary distinctions between often closely similar things, in medicine and other arts as well as in philosophy. Indeed, the ability to distinguish between similar things is essential to the construction and practice of any art. This method was instigated by Hippocrates in medicine and Plato in philosophy, or so Galen argues on the basis of passages from their works.⁴ In the sixth chapter he links the lack of training in this method to the emergence of the lamentable phenomenon of sects (or 'schools', αἱρέσεις), both in philosophy and in medicine.⁵ Galen charges 'those who proclaim themselves followers of a sect (αἵρεσις)' with defending all its tenets, including those that are not necessarily consistent with its fundamentals (*PHP* 9.7.6, p. 586.30–34 De Lacy).⁶ An example is the location of the rational faculty in the body (cf. *Aët.* 4.5): knowing this is of no use for discovering the difference between the virtues or for putting them into practice. The moral philosopher, then, can dispense with such knowledge, whereas the doctor must know this with a view to treating certain disorders. What follows at *PHP* 9.7.9–15 (p. 588.7–29 De Lacy) bristles with reflections from the *Placita* tradition as represented by the reconstructed Aëtius.⁷ Though it is rather long, it is worth quoting in full:⁸

To inquire [...] into matters that are not useful for ethics and political action is appropriate only for those philosophers who have taken up speculative philosophy; thus they also raise the question whether there is anything beyond (μετά) this world, and if there is, what it is like,⁹ and whether this universe is self-contained,¹⁰ whether there is

³ See *PHP* 9.1.1.

⁴ See e.g. *PHP* 9.6.56–59.

⁵ Galen therefore avoids association with any of the schools, selecting what is best from each of them: *Lib. prop.* 1, p. 138.6–21 Boudon.

⁶ Galen uses here the noun ἀκολουθία, 'consistency'. His comment reflects the definition of what constitutes a sect preserved by Diog. Laert. 1.20, among others: αἵρεσιν ... πρόσκλισιν δόγμασιν ἀκολουθίαν ἔχουσιν. Cf. *Loc. Aff.* VIII, 5, pp. 158.17–159.9 K. with Mansfeld (1990) 3141.

⁷ On this passage and its relation to the *Placita* see also Mansfeld (1992) 88–92.

⁸ For the Greek text see the Appendix, no. 1.

⁹ Cf. *Aët.* 1.18, 2.9 and *Gal. Propr. Plac.* 2, p. 172.31–173.2 Boudon-Millot – Pietrobelli: εἴτε τι μετ' αὐτὸν ἔξωθεν, εἴτε μηδέν (quoted *infra*, p. 00). [?ps.] *Gal. Gloss.* XIX, p. 73 K. ἄκριτον πάγος: τὸ οἷον ἀδιάκριτον· εἴρηται δὲ ἐν τῷ Περὶ ἐβδομάδος ἐπὶ τοῦ μετὰ τὸν κόσμον ἥτοι ἀπείρου ἢ οἷον ἀδιατυπωτοῦ κενοῦ. Similarly, *Gal. Pecc. Dig.* V, 101.10–102.4 K. (*SVF* 2.542). Throughout this article I use the reconstruction of Aëtius in Diels (1879). For Aëtius book II I have additionally used that of Mansfeld and Runia (2009).

¹⁰ Cf. *Aët.* 2.9 ('About what is outside the cosmos, whether it is void'). Galen refers here to the option associated with the names of Plato and Aristotle in particular: see *Aët.* 2.9.4; cf. Tieleman (2014) 77.

more than one world, whether the number of worlds is very great,¹¹ and likewise whether the world is generated or ungenerated,¹² and if it had beginning, whether some god was its craftsman (δημιουργός) or no god but some irrational and artless cause by chance made it as beautiful as if a god supreme in wisdom and power had supervised its construction.¹³ (10) But inquiries such as these contribute nothing to managing one's household well or taking appropriate care for the affairs of one's city or behaving in a just and helpful manner towards relatives, fellow-citizens and foreigners. (11) But some who hold that the end [scil. of philosophy] is practical have gradually arrived at the investigation of these things as of similar kind to the useful inquiries. (12) The truth is that while it is useless to ask whether the universe has a beginning or not,¹⁴ this is not the case with an inquiry about divine providence. (13) It is better for all of us to examine whether there is something in the cosmos superior to humankind in power and wisdom;¹⁵ but it is not necessary to consider the question what sort of substance the gods have, whether they are entirely bodiless or whether they too have bodies as we do.¹⁶ (14) These matters and many others are completely useless for those virtues and actions that we call ethical and political, and no less for the cures of the soul's affections. (15) Xenophon wrote about these things in the best way: not only did he condemn them as useless himself but he said that Socrates also held this view (transl. De Lacy, modified).¹⁷

Clearly, this passage brings together a number of questions concerned with the cosmos that are familiar from the relevant chapters of the reconstructed Aëtius. Here we have exactly the same alternative options, even if Galen, chooses his own phrasing, relying, it appears, on his memory.¹⁸ He also reflects the diaeretic arrangement characteristic of Aëtius: on two occasions an option is subdivided into two further ones. Indeed, this is a feature that fits in with Galen's view on how to proceed in addressing a philosophical or scientific question—a point I will discuss in the light of further material in due course. For the moment let it suffice to note that Galen presses the

¹¹ Aët. 2.1. Cf. also Gal. *Loc. Aff.* VIII, p. 159.7 K., *In Hp. de victu acut.* 1.12 p. 125.12 Helmreich.

¹² Aët. 2.4. The same issue is also mentioned by Gal. *Aff. Dig.* V, p. 67.11–13 K. adding the question whether the universe is bounded or infinite (cf. Aët. 1.15); these issues, Galen says, are just as impossible to solve as it is to count the number of the waves.

¹³ Aët. 2.4 refers to the cause of the world's destruction and generation, which according to some authorities is god, e.g. the world is everlasting thanks to God's providence according to Plato: see *ibid.* 2.4.2.

¹⁴ Aët. 2.4.

¹⁵ Aët. 2.3. Note that just like the *Placita* Galen separates the question of the world's government (Aët. 2.3) from that of its generation and destruction (Aët. 2.4).

¹⁶ Aët. 1.7.

¹⁷ This appears to refer to X. *Mem.* 1.1.11–16. Cf. the references to the same passage in Eus. *PE* 15.62.1, Theodoret. *GAC* 4.26–30.

¹⁸ Cf. the list of different kinds of proposition containing predicates from each of the ten Aristotelian categories given by Galen at *Inst. Log.* 2.1. Here some of his examples also reflect issues familiar from the *Placita* tradition and in particular some of the chapters concerned with the sun and the moon: Aët. 2.20, 21, 31; cf. for individual categories *ibid.* 10.7 (with Aët. 3.11, on the position of the earth within the cosmos: place), 13.8–9 (with Aët. 3.10, on the shape of the earth: quality). These passages too suggest that Galen had the issues of the *Placita* ready to hand. There are more examples e.g. Galen *UP* III, p. 465.4–11 K. (on different kinds of causes); cf. Aët. 1.11; *QAM* IV, p. 785.4–7 K., *HNH* XV, p. 60.7–12 K., *Temp.* I, p. 587.10–13 K. on kinds of mixture; cf. Aët. 1.16. On Gal. *Inst. Log.* and the proem of Aëtius see Mansfeld and Runia (forthcoming).

issues from the *Placita* tradition into the service of distinguishing between useful questions on the one hand and the many useless, and indeed potentially harmful, issues of natural philosophy, on the other. In so doing he invokes the authority of Socrates as presented by Xenophon. The latter's portrayal of Socrates as rejecting cosmological speculation as of little use recalls Socrates' disillusionment with cosmogony in the materialist mode as recounted by Plato, *Phaedo* 97b–d. But actually the reason Socrates gives in this passage is different to what we have in Galen, viz. the lack of a satisfactory causal account on the part of the Presocratic Anaxagoras. In particular, Socrates finds the final cause (explaining why things are best as they are) lacking from it. Plato himself made up for this lack in his *Timaeus*. In fact, Galen's own *PHP* is designed to prove Plato correct on many issues of natural philosophy as found in the *Timaeus*. But Plato, Galen also argues, had agreed with Socrates on the limited practical value of natural philosophy: this is why in reintroducing it into the philosophical agenda he gives its exposition to the somewhat shadowy Timaeus instead of Socrates, just as in the *Parmenides* he gives the more extended dialectic to Parmenides and his pupil Zeno (*PHP* 9.7.16).¹⁹ Indeed Timaeus addresses one of the issues listed by Galen as useless, viz. whether or not the world has been generated (τοῦ παντός ... εἰ γέγονεν ἢ καὶ ἀγενές ἐστιν, 27c5).²⁰ A little further on, Timaeus answers this question in the affirmative (γέγονεν, 28b7). From the start, however, some readers chose to take this in a non-literal sense, viz. as pertaining to *creatio continua*, thus initiating one of the most disputed issues of Platonic exegesis.²¹ Galen was of course familiar with this endless debate, which he may have seen as a typical case of how insoluble disagreements arise, even among members of the same school. At the same time, however, the Platonic *Timaeus* gives centre stage to another issue, viz. whether or not the world displays divine providence, which Galen does consider useful for 'all of us,' that is to say, for doctors and philosophers alike. On the other hand, the question of the seat of the soul's ruling part addressed by Plato in the same dialogue (69c5–71e2), as we have just seen, may according to Galen count as a case of something useful to know for doctors only. In the above passage from *PHP* book IX, as we have also noticed, he explains the emergence of speculative natural philosophy by reference to a failure on the part of philosophers to distinguish what is useful for attaining the *telos* (i.e. virtue, happiness) from what is not: it was through a gradual process that they ended up with useless issues and disputes they could no longer recognize as such (*PHP* 9.7.11). Clinging to useless and unprovable dogmas is the hallmark of sectarian behaviour and the cause of the division of philosophers into schools.²²

¹⁹ Cf. Gal. *Compendium Tim.* p. 34.11 Kraus-Walzer.

²⁰ As already attested by Philoponus, part of the textual tradition prefers ἥ ('how') to εἰ ('whether', 'if'), which may in itself reflect the exegetical controversy mentioned in the text; see Whittaker (1973) and Dillon (1989). Either way, the two alternative options are in place. Cf. also Aristotle, *Top.* A 11, 104b8; A 14, 105b24 (who gives the issue as an example of a φυσικὸν πρόβλημα).

²¹ See Baltes (1976–1978), Dörrie and Baltes (1993). On this controversy and the debate among Plato's heirs see also Baltes (1996), who himself comes out in favour of the view that γέγονεν (28b7) should *not* be understood in the sense of a temporal or single act of creation (94), while at the same suggesting that Plato's unclarity is intentional and meant to stimulate reflection on the part of his readers.

²² Those who accept undemonstrated truths do so on the basis of the authority of their leaders. For more material and discussion concerning Galen's critique of the authority principle see Walzer (1949), Tieleman (2005); cf. also below, p. 60.

Galen links usefulness to knowability: what is useful to know, or what we need to know, we *can* know—another sign of divine providence. Philosophers and doctors are bound to remain divided into sects as long as they cling to unknowables, which coincide with useless dogmas.²³ Here, however, he introduces a refinement. Even if certain things must remain unknown, e.g. because of the lack of sound empirical evidence, some views about them may be classed as more plausible than others. This is also true of issues that cannot be decided with certainty as yet, but may be resolved in due course, when empirical evidence will be available. Here too Plato set an example by presenting his account in the *Timaeus* as a likely or plausible one (29b–d and elsewhere). Hence the need to be able to distinguish between plausibility, truth and falsehood, as stressed in a key passage from the seventh chapter of the same book. Noting that similarity is also at issue when it comes to distinguishing between theories (or arguments, λόγοι, *PHP* 9.7.1) Galen states:

It is not surprising, then, that some consider the precise knowledge of similars and dissimilars sufficient for the systematic construction of every art, if indeed it is also an adequate guide to the resolution of disputed points. For as some arguments that are plausible but false have much similarity with those that are genuinely true, the person trained to distinguish between them will know clearly which opinions he is to trust as true and which to reject as false; and in the case of the plausible (τὸ πιθανόν) that resembles the implausible, the relation to truth being obscure, as also of opinions that are on an equal footing, whether they extend to two or three or more, he will know that none is to be considered more trustworthy than the rest (*PHP* 9.7.1–2).

Clearly, the ability to distinguish between propositions in terms of truth, falsehood and plausibility is crucial for philosophy and medical science alike. The trained mind will not allow itself to be taken in by plausible but false theories. In many cases, however, one is faced with a plurality of options whose relation to the truth is unclear. This may lead to further scrutiny and testing.²⁴ In such cases, as we shall see, dialectical procedure prescribes starting from a correct and complete division of plausible options.

3. Galen, On His Own Opinions 2: Religious Issues.

Galen uses some of the same issues from the *Placita* tradition in the second chapter of *On His Own Opinions*, a treatise of his old age, the full Greek text of which was first published in 2005.²⁵ In this chapter he explains his position in theological matters:²⁶

²³ *PHP* 9.6.9–19 (division among doctors; cf. § 19: διαφωνία), 21 (διαφωνία among philosophers is only to be expected because the issues about which they quarrel admit of no empirical testing, πείρα).

²⁴ Galen looks to Academic Scepticism as having provided some of the conceptual tools to be utilized in such cases: see Tieleman, *forthcoming*.

²⁵ Boudon and Pietrobelli (2005).

²⁶ For the original Greek see Appendix, no. 2.

I declare that I do not know whether the world is uncreated or created²⁷ and whether there is anything outside it or nothing.²⁸ And since I say that I have no knowledge about things of this kind, it is also obvious that I have no knowledge of what the Maker (δημιουργός) of everything in the cosmos is like, whether he is corporeal or incorporeal, and of the place where he resides.²⁹ So I also declare that I am in doubt about the gods, as Protagoras said,³⁰ and that I do not know what their substance is like. But I do know that they exist from their acts since the anatomy of all living beings is their work, as is everything they foretell through significant utterances³¹ or signs or dreams.³² The god who is revered in my hometown Pergamum [scil. Asclepius] revealed his power and providence in many ways but in particular by once curing me of a disease. At sea I experienced not only the power but also the providence of the Dioscuri. But I believe that it is by no means harmful for humans if they are ignorant of the substance of the gods. I have decided to honour them in accordance with old custom and with Socrates' advice to follow the orders of Apollo.³³ So much for my attitude in religious matters.

It is unnecessary now to enter into the question what this passage contributes to our understanding of Galen's religion and in particular his relation to Asclepius.³⁴ Suffice it to note that the position adopted by Galen is similar to what we have at *PHP* 9.9.1–7: Galen presents cosmological and theological issues known from the *Placita* as belonging to the realm of what is unknowable but unnecessary to know anyway, as is implied by his comment that it does not harm people to be ignorant of the substance (i.e. what in the Greek is called the οὐσία) of the gods. The inspiration of the Platonic *Timaeus* is again palpable: Galen disclaims knowledge of what the *Demiurge* is like, which recalls passages such as *Tim.* 28c2–3 stating that it is hard to find the maker and father of the universe and even if he were to be found he is impossible to explain to others.³⁵ Likewise, the disclaimer at *Tim.* 29c4–d4 concerns the gods as well as the origin of the universe: Timaeus' account will not go beyond the reasonable and plausible (similarly on the soul, *ibid.* 72d4–8). But as in *PHP* IX Galen also invokes Socrates as portrayed by Xenophon: Socrates lived in accordance with the injunction of the priestess of Delphi to follow the custom (νόμος) of the state, i.e. by propitiating the gods with sacrifices (*Mem.* 1.3.1; cf. 4.3.16). In addition, Galen refers to Protagoras, who in Fr. B 4 Diels-Kranz says that he does not know what gods look like, but also that he does not know whether or not they exist. But in fact Galen, unlike Protagoras, does lay claim to knowledge of two things about the gods: (1) that they exist; (2) that they are provident. One may know their power from their actions and their actions are evident from the intelligent design of our bodies or from their life-saving interventions at sea or

²⁷ Cf. Aët. 2.4.

²⁸ Cf. Aët. 2.9.

²⁹ Cf. Aët. 1.7. For the issue of the substance of the soul cf. Aët. 4.3.

³⁰ Cf. Protagoras Fr. B 4 Diels-Kranz (= Eus. *PE* 14.3.7).

³¹ I.e. an omen or sign contained in a chance utterance.

³² Cf. Aët. 1.6.

³³ Cf. Xenophon, *Mem.* 1.3.1; cf. 4.3.16.

³⁴ On this see Tieleman (2015), with further references; cf. also Van Nuffelen (2014).

³⁵ Galen may also reflect more negative interpretations and adaptations of this passage attested for the second century CE; see Runia (1986) III.

in illness. Powers and actions presuppose being in the sense of existence. But knowledge of powers and actions does not presuppose, or yield, knowledge of being in the sense of essence. Here too, then, Galen insists upon us making the correct distinctions.

The transition made by Galen from Plato's divine Creator to the plurality of traditional gods is very smooth and typical of the 'henotheistic' outlook of a second century CE intellectual. But in fact, this too is perfectly reconcilable with the Platonic *Timaeus*. Here the Homeric gods appear as the Demiurge's children, who are entrusted with the creation of mortal creatures (40d–41d), a point that may be reflected by Galen's reference to our physique as being the handiwork of the gods (in the plural). Note further that *Timaeus*, instead of kicking Homer out of the ideal city, calls on his interlocutors to follow custom and traditional tales even if these are unsupported by proof (40e1–3). Galen in appealing to the Xenophontic Socrates for a traditionalist form of piety did not have to worry about distancing himself too much from Plato, or at least from his culturally conservative *Timaeus*.

That philosophical scepticism about the theological claims made by dogmatic philosophers could lead to a conservative attitude towards traditional religion is illustrated, among others, by Cotta, the Academic spokesman from Cicero's *On the Nature of the Gods* (e.g. 3.9, 43). Galen was no Sceptic, but he was averse to dogmatist speculation and inclined to stress the limits of knowledge. He therefore was interested in the potential of Academic concepts such as the plausible or convincing (πιθανόν) in theoretical contexts.³⁶ The above chapter from *On His Own Opinions* is preceded by a preface in which Galen divides his published opinions into two categories: (1) those about things that can be accepted as securely known (βεβαίως ἐπιστάμενος); (2) those that are only plausible (πιθανόν). Category (3) are those that 'cannot be known at all and admit of no scientific knowledge' (ch. 1, p.172.25–29 Boudon-Pietrobelli). These are exemplified by some of the tenets referred to in the ensuing theological chapter quoted above. The intermediate category of plausible views is admissible and useful in scientific discourse since they are based on logical assumptions and observable features. Thus, Galen in chapter 11 of the same work looks back at his own initial espousal of the idea that the heart must be the first organ to be formed in the embryo, an assumption that was plausible but later on proved untrue in the light of further research and reflection of his own. As we shall see presently, the opposite may also happen: that a plausible assumption is later on vindicated as true. But for Galen this only underscored the need to distinguish between assumptions in terms of their epistemic status.

4. *Distinguishing the options: PHP 3.1.12–15 (SVF 2.885).*

As we have observed, the question of the seat of the soul's ruling part (ἡγεμονικόν), i.e. the intellect, is among those that Galen does consider resolvable and useful to address, at least for physicians. It also offers an illustration for a more constructive use of doxographical schemas, viz. that of organizing one's argument in terms of available options. For this we have to turn to the beginning of *PHP* book III, part of an extensive treatment of the question of the soul's faculties and their location in particular organs in books I–VI. Of these books IV–V deal with the issue of the soul's structure as such: whether it has different parts or powers and if so which are

³⁶ For more on this see Tieleman, forthcoming.

these, regardless of their bodily seat. To this, then, the moral and political philosopher can (and should) limit himself, being interested in the soul's parts because of the excellences or virtues. Galen takes Plato to have done just that in the fourth book of the *Republic*, establishing the tripartition of the soul without the trilocution. Plato tackled the trilocution in his *Timaeus*, qualifying his argument as plausible or likely rather than leading to certain knowledge (29b–d and elsewhere; see above, p. 00). In fact, definitive proof of the trilocution had to wait until Galen: Plato had been right, if somewhat imprecise, all along but Galen was able to provide the anatomical and experiential data to *prove* him correct: reason resides in the brain, anger in the heart and appetite in the liver (a distortion of Plato's account but necessary in light of the post-Platonic insight into the liver's function in digestion, which is already attested for Aristotle).³⁷ In fact, Galen himself draws on the discoveries made by the early Hellenistic medical scientists Herophilus of Chalcedon and Erasistratus of Keos, who were both active in Alexandria in the first half of the 3rd century BCE. It is a witness to the strength of the cardiocentric position shared by Aristotle and most of the Stoics, among others, that four hundred years later Galen takes great pains to prove them wrong.³⁸ It may seem no less surprising that Galen too, in following Plato, attributes psychic functions to the heart, albeit not the ones — volition and perception — belonging to the intellect or ruling part of the soul as he defines it. But Galen considers these functions and the motions corresponding to them to be clearly different from those of the heart, most notably pulsation: it cannot be taken for granted that they belong to one psychic power and to one bodily organ.³⁹ His anatomical experiments convinced him that they indeed belonged to different organs and hence also powers.⁴⁰

The options that in his eyes were available had in fact been anticipated by the *Placita* tradition. This is clear from a verbatim quotation from the main Stoic authority whom he refutes in *PHP* books II and III, Chrysippus of Soloi (c. 280–204 BCE). The passage in question, Galen informs us, constituted the beginning of Chrysippus' treatment of the question of the seat of the soul's governing part, or intellect, occupying the second half of the second book of Chrysippus' *On the Soul* (*PHP* 3.1.10). Having summarized the Stoic doctrine of the pneumatic soul with its eight parts, of which the governing part resides in the heart, Chrysippus continues:⁴¹

There is agreement (συμφωνεῖται) about all other parts, but about the governing part (ἡγεμονικοῦ μέρους) there is disagreement (διαφωνοῦσιν), some placing it in one region, others in another. For some say it is located in the chest, others in the head. And they disagree (διαφωνοῦσι) even with respect to these locations, as they do not agree among themselves (οὐ συμφωνοῦντες) where in the head and the chest it is located. Plato, who

³⁷ See Tieleman (1996a) xxx–xxxi, with further references.

³⁸ See Tieleman (1996a) xxii–xxviii. Gill (2010) 18–42. In fact, the debate continued even after Galen's efforts: see his own remarks at *PHP* 7.1.4, looking back at his arguments and experiments described in *PHP* book II (book VII was written at least three years after books I–VI; cf. De Lacy [1978] 46): no Peripatetic or Stoic philosopher and no physician is as bold as they were before and at least some have publicly changed over to the true account. But this self-confident claim suggests that his impact was in fact limited. Thus, we find Alexander of Aphrodisias and Plotinus continuing the debate in the light of Galen's contribution to it: see Tieleman (1996b), (1998).

³⁹ Cf. *PHP* 2.8.23–24 with Tieleman (1996a) 46–47.

⁴⁰ See esp. the experiment described at *PHP* 2.6, with Tieleman (2002) 265–266

⁴¹ For the original Greek of this passage see Appendix, no. 3.

said that the soul has three parts, placed the rational part in the head, the spirited in the region of the heart and the appetitive in the region of the navel.⁴² Thus the place seems to elude us, since we have neither a clear perception of it, as we had with the others, nor sure signs from which this matter might be inferred; otherwise disagreement among physicians and philosophers would not have grown so great (*PHP* 3.1.12–15 = *SVF* 2.885, part; transl. De Lacy, modified).

Mansfeld (1990) has shown that this Chrysippean fragment reflects an early stage of the *Placita* tradition, which he—using a Dielsian intonation—called the ‘Vetustissima Placita’, in particular the chapter on the soul’s ruling part (τὸ ἡγεμονικόν): the crucial parallel here is Aëtius chapter 4.5 (περὶ τοῦ ἡγεμονικοῦ). Mansfeld added a discussion on the use made by Chrysippus of the diaeretic schema: particularly notable is Chrysippus’ emphasis upon the disagreement (διαφωνία) prevalent among philosophers and doctors alike. From this he of course does not arrive at suspension of judgement but goes on to deploy an argument designed to tip the scales in favour of the Stoic cardiocentric position as stated the beginning of this fragment (*ibid.* 3.1.10–12). I have studied Chrysippus’ method throughout his demonstration (insofar as it is preserved by Galen) in Tieleman (1996a), Part II. This paper however is about Galen’s use of doxography. So let us have a closer look at how Galen responds to the doxographical schema used by Chrysippus.

Galen clearly sees this division of available options in the discussion on the seat of governing part as a useful and indeed indispensable starting point:

Now the beginning of his [scil. Chrysippus] discourse deserves to be admired, for Chrysippus spoke both with clarity and precision, as a man should when he begins a doctrine of such magnitude (*PHP* 3.1.18).

As illustration Galen comments favourably on how carefully Chrysippus has described Plato’s position (*ibid.* 19). It does not matter that it is Chrysippus who had used this schema of options: Galen quotes Chrysippus not only to tear him to pieces but — something often overlooked — also to isolate useful elements that are then pressed into the service of Galen’s own argument. Moreover, Galen in dealing with the soul’s regent part also takes the opportunity to teach his readers a lesson on correct scientific procedure, as can be illustrated by further passages from *PHP* books II and III (but see esp. 2.3).

Of course, Chrysippus went astray, and very badly so. If he had followed up this promising start, he ‘should have stated the plausible arguments (τῶν πιθανῶν) by which Plato had been persuaded to adopt his view (*ibid.* 20).’ Not so: Chrysippus subsequently ignored Plato’s position, turning to ideas and expressions found among the general public and in the poets and associating emotions with the heart. Chrysippus thereby committed a double mistake: first, he used the wrong kind of evidence, viz. what Galen calls rhetorical arguments, convincing or plausible ones of the wrong sort, which rely on authority, whether the *opinio communis* or

⁴² A reference to *Tim.* 69d–70a, 70d–e.

famous poets and other false experts (*PHP* 2.3,11; cf. 2.2).⁴³ Secondly, he failed to see that his references to emotion as residing in the heart miss the point: they effectively lend support to Plato, who had said the same (*PHP* 3.1.26–2.20). If it is implied that where the emotions are, there also reason is, this inference is unwarranted. Galen here relies on the debate with its different options as expounded in the doxographical schema he has just cited as if this provided the common ground between him and Chrysippus. But here a distortion creeps in: Galen defines the governing part of the soul in such a way that it becomes equivalent to the Platonic rational part, viz. by linking it to the functions of sensation and volition (e.g. *PHP* 2.3.4: ‘as they too would have it.’). Chrysippus, by contrast, takes the governing part to combine functions of all three Platonic parts; or put differently, he takes Plato to have cut up the governing part and assigned different functions to parts in three different locations. Indeed, the doxographical schema he used clearly does not present the Platonic position on the encephalocentric as opposed to the cardiocentric side, but rather represents a compromise position between the two of them. From our point of view this does seem to be the correct reading of the schema.

Galen advocates a dialectical discussion on the basis of perceptible attributes of the main organs in question: it is from these attributes that the ‘plausible arguments’ used by Plato but ignored by Chrysippus have been derived, e.g. arguments from the heart’s position (*PHP* 2.4.5–6): thus, following Plato one might argue that the head occupies the top position because of its importance or point to the proximity of the brain to sense-organs (2.4.17–18).⁴⁴ This discussion on the basis of these attributes results in a selection of significant indications that may be confirmed through empirical inquiry, including experimental testing.⁴⁵ As for Plato, Galen is once again in a position to avail himself of Plato’s qualification of his argument as likely (*Tim.* 29c-d). But it is important to recognize that his examination of arguments and the real features on which they are based starts from a division of options derived from the *Placita* tradition.

This first stage is further illustrated by the beginning of Galen’s treatment of the question of the structure of the soul, that is to say, of the number of psychic faculties, in *PHP* books IV and V. This issue is different from, but obviously related to, that of their seat in the body. As we have seen, Galen takes the question *how many* psychic powers there are to be relevant to practical philosophy; *where* these powers are located in the body the moral and political philosopher need not know. Galen takes Plato to have been fully aware of this distinction and to have addressed the two questions separately, viz. in *Republic* IV and the *Timaeus* respectively. But it is also worth noting that the distinction corresponds to that between Aëtius chapters 4.5 (‘On the governing part’, which is about its location) and 4.4 (‘On

⁴³ On Galen’s rejection of the principle of authority, see *supra*, n. 22.

⁴⁴ *Tim.* 44d, 45a, 69d-e. Cf. also De Lacy *ad loc.* (p. 120.1, 3–4, 4–7).

⁴⁵ Thus at *Loc. Aff.* VIII, 5, p.157.17–18 K. Galen speaks of dialectical debates on the seat of the governing part which indicate that one should apply remedies of mental disease to the heart against the Pneumatist physician Archigenes who locates the governing part in the heart yet inconsistently applies remedies to the head. In theoretical contexts indication (ἐνδειξις) as resulting from a preliminary dialectical examination of relevant data guides experimental testing, just as it leads to a particular intervention in therapy (the original context of the term): see Tieleman (1996a) 60–65. Note that a little further on (pp.158.17–159.19 K.) Galen links the issue of the seat of the intellect to another list of issues from the *Placita* tradition, suggesting that these too are the material of dialectical discussions: see Mansfeld (1990) 3141–3143; Tieleman (2003) 61–63. See further *infra*, p. 00.

the parts of the soul', dealing with their number). In Tieleman (2003) I have devoted an entire chapter to studying the views concerning the soul's structure ascribed by Galen to authorities such as Chrysippus, Zeno, Posidonius, Aristotle, Epicurus. This study involved schemas found in a wide range of sources, not only doxographic ones (ps.Plutarch, ps.Galen) but also authors employing the schemas concerning soul-division in ways similar to what is found in Galen (Theodoret, Tertullian, Nemesius, Plutarch, Porphyry). One result was that Galen in *PHP* IV–V reflects a tradition that offered much fuller and more complicated schemas than what we have in Aëtius 4.4.⁴⁶ In this paper I would now like to focus upon the first chapters of *PHP* IV because they illustrate his use of the division of options in a debate in a way that invites comparison with how he starts the discussion on the seat of the governing part in book III.

Galen in *PHP* 4.1–2 approaches the issue of the number of soul-parts rather indirectly by raising the question: what is an emotion or passion (πάθος)?⁴⁷ He applies a 'division of the problem' (διαρέσει τοῦ προβλήματος, 1.15, p. 238, l.13 De Lacy) according to which there are three main options in the debate: (1) emotion is a function of some non-rational power in the soul — the Platonic answer; (2) emotion is a judgment — the option defended by Galen's adversary Chrysippus; (3) emotion supervenes on or follows judgment — the view ascribed by Galen to both Epicurus and Zeno, the founder of Stoicism (1.15–17; cf. 2.4–5).⁴⁸ Emotion was a topic traditionally subsumed under the moral part of philosophy (and we have seen that Galen too conforms to this distinction), whereas, of course, the *Placita* present physical issues only. It appears to have been Galen who made this division on the basis of what he found in Chrysippus' *On the Emotions* (see below).

Obviously, one's preference for one of these options entails a particular position on the number of the soul's parts needed to explain human behaviour. In what follows Galen argues that only the Platonic tripartition can do this and refutes Chrysippus with the help of arguments drawn from *Republic* IV and from Chrysippus' fellow-Stoic Posidonius of Apamea (whom Galen casts as a full-blooded dissident from the Stoic ranks). But at the beginning of his argument we find him finding fault with Chrysippus' method in a way that invites comparison with the beginning of the discussion on the seat of the governing part (3.1). As it turns out, Chrysippus in his work *On the Emotions* is even more unmethodical than in his *On the Soul*: in discussing the emotions Chrysippus instead of consistently defending option (2) sometimes appears simultaneously to accept (1): he writes as if he were 'on both sides' (ἐπαμφοτερίζων, 4.1.14, p.238.7). Galen adds that Chrysippus does operate with a division but one that in fact recognizes only options (2) and (3). In consequence, he fails to mention let alone consider Plato's view. So, Galen writes, 'this is the first charge one might bring against him, that he was misled by the incompleteness of his division' (4.1.15, p. 238, ll.14–15 De Lacy). The message is clear: one can only ignore the ancients at one's peril.

⁴⁶ See Tieleman (2003) ch. 2 and 80–88 for the conclusion.

⁴⁷ On this Galenic passage see also the observations by Mansfeld (1992) 100–101.

⁴⁸ For a threefold schema concerned with the faculties themselves and apparently drawn up by Galen himself see *PHP* 6.2.5: (I) One being with one power: Chrysippus; (II) One being with three powers: Aristotle and Posidonius; (III) Three beings with three powers: Plato. Here too (II) represents the middle or compromise position: see Tieleman (2003) 34. For a fuller treatment of the schemata involved see Tieleman (2003) ch. 2 and Tieleman (2015).

Clearly, then, the division of all available options is the first step to take in the dialectical debate or investigation when properly conducted. This conclusion can be further corroborated by a passage from *On the Affected Parts* (VIII 5, pp. 157–159 K.). Here Galen refers to *dialectical debates* (διαλεκτικῶς ἐρωτηθέντες) concerned with the seat of the governing part (p. 157.17–18 K.). A little further on (*ibid.* 158.17–159.9) he links this issue to a list of issues drawn from the *Placita* tradition.⁴⁹ This list is concerned with the cosmos and soul again and is similar (though fuller) than that found at *PHP* 9.7, which we discussed above (p. 00). Some of these issues appear as separate in Galen and combined in Aetius 2.1 – a fact which, as Mansfeld (1990) has pointed out,⁵⁰ provides another indication that Galen's information derives not from Aëtius or ps.Plutarch, but from a fuller version of the *Placita*, where these points will have been treated in separate chapters.

Unfortunately, we do not get more information on the dialectical debates Galen refers to. In the context, he criticizes sectarian behaviour as marked by clinging to doctrines that are in fact neither consistent or inconsistent with other doctrines of one's sect, in this case that on the seat of the intellect. However, it does not matter whether one regards the heart or the head as the seat of the intellect for it remains possible to choose whatever cosmological tenet one likes (*ibid.*). Here, then, Galen puts to good use the issues from the *Placita* tradition. This, then, is the same point that he makes at *PHP* 9.7.6 (see above, p. 00).⁵¹

5. Conclusion.

In the preceding pages I have been reviewing the passages in Galen's work where he draws or reflects on what appears to have been a somewhat fuller version of the *Placita* tradition than the one represented by our reconstructed Aëtius. In so doing I have focused not so much upon tracing parallels but on the question how the great physician-cum-philosopher actually uses the doxographical schemas concerned.

First, there is the stage of selecting which issues are to be addressed and studied at all. The *Placita* tradition offers many issues of the unknowable and useless kind, which Galen takes to be characteristic of sectarian divisions in philosophy and medicine alike. These are the questions that do not admit of empirical testing but are not necessary for moral or scientific progress either. Those issues that are also found in, or indeed are actually retraceable to, the Platonic *Timaeus*, can however be accepted as representing a plausible kind. In addition to Plato's own repeated qualifications of his natural philosophy as a likely account we have noted Galen's interest in the potential of the Academic concept of the plausible. Plausible assumptions may be provisionally plausible in the sense that they may be vindicated as true in the light of

⁴⁹ Mansfeld (1990) 3142.

⁵⁰ See previous note.

⁵¹ For another example of a division of available options—arranged according to a tripartite schema, with one of the options in an intermediate, or compromise, position—, on the void see Galen *Pecc.Dig.* V, p.101.10–102.4 K. (*SVF* 2.542) καὶ πρῶτόν γε τοῦτο λέγω μάλιστα· ἐπειδὴ «τῶνδε» τῶν Περιπατητικῶν τις ἀφίεται {τῶν} φιλοσόφων, ἓνα τε τὸν κόσμον τοῦτον εἶναι πεπεισμένων (cf. Aët. 1.5, 2.1), ἕξωθεν τ' αὐτοῦ μηδὲν εἶναι κενόν, ὥσπερ οὐδ' ἔνδον (cf. Aët. 1.18, 2.9). διαφέρει γε μὴν, ἔφην, τῶνδε τῶν φιλοσόφων διττὴν διαφορὰν ἑκάτερος τούτων (ἐδείκνυν δὲ τὸν τε Στωϊκὸν καὶ τὸν Ἐπικούρειον), ὁ μὲν γὰρ Στωϊκὸς (cf. Aët. 1.18.5) οὐκ ἔνδον εἶναι τι κενόν «λέγων», ἕξωθεν δὲ τοῦ κόσμου ὑπάρχειν αὐτό. ταῦτα δ' ἄμφω συγχωρῶν ὁ Ἐπικούρειος (cf. Aët. 1.18.3) ἐν ἄλλῃ τινὶ διαφέρεται πρὸς αὐτούς. For the same division see Gal. *In Epid.* vi, XVIIIB, p. 162.7–11 K.

advances in scientific knowledge, as in the case of the seat of the governing part, or they may remain just plausible.

Secondly, when an issue is accepted for debate, the correct and complete division of options is indispensable as a first step of correct dialectical procedure. As we have seen, Galen finds the divisions available from the *Placita* useful, but if needed he may also produce his own divisions. Especially when he adopts an available schema, as in the case of the seat of the intellect, the question arises as to how far Galen remains caught within a schema that is taken as axiomatic, so to speak. Does he select empirical data just to prove one of the pre-existing options correct (in this case the Platonic one)? Here a tension arises, or so it seems, between the use of these schemas and the pursuit of science as an open-ended quest for truth. But in fact, Galen conceived of scientific progress more as a matter of implementing what the ancients, notably Hippocrates and Plato, had adumbrated (even if this involved unwarranted selections and distortions from the point of view of present-day historians) than as an open-ended quest, at this point parting ways with the Academics. It is a moot question whether a particular development can be detected in Galen's position in these matters. Further research may lead to relevant passages that have so far escaped attention. Not only do Galen's voluminous writings constitute the largest collection by any single ancient author, but it is also one of very few corpora that actually keeps on expanding by new finds that occur from time to time. To end on a Hippocratic note, *ars longa* ...

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APPENDIX

1. Galen, *PHP* 9.7.9–15, p. 588.7–29 De Lacy:

(9) μόνοις οὖν ἐκεῖνοις τοῖς φιλοσόφοις καὶ τὸ μηδὲν εἰς ἡθὸς τε καὶ τὰς πολιτικὰς πράξεις χρησίμον ζητεῖν ἀκόλουθόν ἐστιν, ὅσοι τὴν θεωρητικὴν φιλοσοφίαν εἴλοντο, καθάπερ γε καὶ εἰ μετὰ <τὸν> κόσμον τοῦτον ἐστὶ τι, καὶ εἰ ἔστιν, ὁποῖόν τι τοῦτο, καὶ εἰ ὁ κόσμος οὗτος ἐν ἑαυτῷ περιέχεται καὶ εἰ πλείους ἑνὸς καὶ εἰ πάμπολύ τι πλῆθος, ὁμοίως δὲ καὶ εἰ γεννητὸς ἢ ἀγέννητος ὁδε ὁ κόσμος ἐστίν, ὥσπερ γε καὶ εἰ γεγονότος αὐτοῦ θεὸς τις ἐγένετο δημιουργὸς ἢ θεὸς μὲν οὐδεὶς, αἰτία δὲ τις ἄλογός τε καὶ ἄτεχνος εἰργάσατο κατὰ τύχην οὕτως καλὸν αὐτὸν ὥς εἰ καὶ θεὸς ἐπεστάτει τῇ κατασκευῇ σοφώτατος ἅμα καὶ δυνατώτατος. (10) ἀλλὰ τὰ γε τοιαῦτα ζητήματα πρὸς τὸ καλῶς οἰκεῖν τὸν ἴδιον οἶκον ἢ τῶν τῆς πόλεως πραγμάτων προνοεῖσθαι προσηκόντως ἢ συγγενέσι καὶ πολίταις καὶ ξένοις προσφέρεσθαι δικαίως τε καὶ κοινωνικῶς οὐδὲν συντελεῖ. (11) παρεγένοντο δ' ἐπὶ τὴν ζήτησιν αὐτῶν ἔνιοι τῶν πρακτικῶν ὑποτιθεμένων τὸ τέλος

ἐκ τῶν χρησίμως ζητουμένων κατὰ βραχὺ προελθόντες ὥς ἐφ' ὅμοια. (12) οὐ γὰρ δὴ, ὥσπερ γεγονέναι τὸν κόσμον ἢ μὴ γεγονέναι ζητεῖν ἄχρηστον, οὕτω καὶ περὶ προνοίας καὶ θεῶν. (13) ὅτι γὰρ ἐστὶ τι κρεῖττον ἀνθρώπου δυνάμει τε καὶ σοφίᾳ κατὰ τὸν κόσμον, ἅπασιν ἡμῖν ζητεῖσθαι βέλτιον, οὐ μὴν, ὁποῖοί τινες εἰσι τὴν οὐσίαν οἱ θεοί, πότερον ἀσώματοι παντάπασιν ἢ καθάπερ ἡμεῖς, οὕτω καὶ αὐτοὶ μετὰ σωμάτων, ἀναγκάσιον σκοπεῖσθαι. (14) καὶ γὰρ καὶ ταῦτα καὶ ἄλλα πολλὰ τελέως ἄχρηστ' ἐστὶν εἰς τὰς ἠθικὰς τε καὶ πολιτικὰς ὀνομαζομένας ἀρετάς τε καὶ πράξεις, ὥσπερ γε καὶ εἰς τὰς τῶν ψυχικῶν παθῶν ἰάσεις. (15) καὶ γέγραπται περὶ αὐτῶν ὑπὸ Ξενοφώντος ἄριστα, μὴ μόνον αὐτοῦ τῆς ἀχρηστίας κατεγνωκότος, ἀλλὰ καὶ Σωκράτην φάσκοντος οὕτω φρονεῖν.

2. Galen, *Prop. Plac.* ch. 2, pp. 172.31–173.11 Boudon-Pietrobelli:

Πότερον ἀγέννητος ἐστὶν ὁ κόσμος ἢ γεννητὸς εἴτε τι μετ' αὐτὸν ἔξωθεν, εἴτε μηδέν, <ἀγνοεῖν φημι>, ὅτι δὲ τὰ τοιαῦτα ἀγνοεῖν φημι, δηλονότι καὶ τὸν δημιουργὸν ἀπάντων τῶν κατὰ τὸν κόσμον ὁποῖος τίς <ς> ἐστίν, εἴτ' ἀσώματος, εἴτε καὶ σωματοειδῆς καὶ πολὺ μάλλον ἐν τίνι τόπῳ διατρίβων· ἄρ' οὖν καὶ περὶ θεῶν ἀπορεῖν φημι καθάπερ Πρωταγόρας ἔλεγεν ἢ καὶ περὶ τούτων ὁποῖοι μὲν εἰσι τὴν οὐσίαν ἀγνοεῖν, ὅτι δ' εἰσιν ἐκ τῶν ἔργων γινώσκειν· ἐκεῖνων γὰρ εἶναι τὴν τε τῶν ζώων κατασκευὴν ἔργον, ὅσα τε διὰ κληδόνων ἢ συμβόλων ἢ ὀνειράτων προσημαίνουσιν. Ὁ δὲ παρ' ἐμοὶ τιμώμενος ἐν Περγᾶμω θεὸς ἐπ' ἄλλων τε πολλῶν τὴν ἑαυτοῦ δύναμιν καὶ πρόνοιαν ἐνεδείξατο ἔμε τε θεραπεύσας ποτέ· κατὰ θάλατταν δὲ Διοσκούρων ἔχω πείραν οὐ μόνον τῆς προνοίας ἀλλὰ καὶ τῆς δυνάμεως· οὐ μὴν οὐδὲ βλάπτεσθαι τι νομίζω τοὺς ἀνθρώπους ἀγνοοῦντας τὴν οὐσίαν τῶν θεῶν, τιμᾶν δ' αὐτοὺς ἔγνωκα νόμῳ πάλαι ἐπόμενος, Σωκράτους πείθεσθαι συμβουλευόντος τοῖς τοῦ Πυθ(ίου) προστάγμασιν· οὕτως μὲν ἔχω περὶ τῶν κατὰ τοὺς θεοὺς.

3. Galen, *PHP* 3.1.12–15, p. 170.16–27 De Lacy = *SVF* 2.885, part (from Chrysippus, Περὶ ψυχῆς):

(12) οὕτω δὲ ἐχόντων αὐτῶν τὰ μὲν λοιπὰ συμφωνεῖται, περὶ δὲ τοῦ ἡγεμονικοῦ μέρους τῆς ψυχῆς διαφωνοῦσιν ἄλλοι ἐν ἄλλοις λέγοντες αὐτὸ εἶναι τόποις. οἱ μὲν γὰρ περὶ τὸν θώρακά φασι εἶναι αὐτό, οἱ δὲ περὶ τὴν κεφαλὴν. (13) κατὰ τὰ αὐτὰ δὲ ταῦτα διαφωνοῦσι, ποῦ τῆς κεφαλῆς καὶ τοῦ θώρακός ἐστιν, οὐ συμφωνοῦντες αὐτοῖς. (14) Πλάτων δὲ καὶ τριμερῆ τὴν ψυχὴν φήσας εἶναι τὸ μὲν λογιστικὸν ἔλεγεν ἐν τῇ κεφαλῇ εἶναι, τὸ δὲ θυμοειδὲς περὶ τὸν θώρακα, τὸ δὲ ἐπιθυμητικὸν περὶ τὸν ὀμφαλόν. (15) οὕτω φαίνεται διαφεύγειν ὁ τόπος ἡμᾶς οὗτ' αἰσθήσεως ἐκφανοὺς γενομένης, ὅπερ ἐπὶ τῶν λοιπῶν

συντετύχηκεν, οὔτε [τῷ] τῶν τεκμηρίων δι' ὧν ἂν τις συλλογίσαιτο τοῦτο· οὐδὲ γὰρ ἂν ἀντιλογία ἐπὶ τοσοῦτον προήλθεν καὶ ἐν ἰατροῖς καὶ ἐν φιλοσόφοις.

The Downside of Doxography

Richard McKirahan

Appendices perhaps in smaller font

Abstract. The immense importance of doxographical materials for our knowledge of the Presocratic philosophers (and some later philosophers also) is unquestioned, but the nature and content of these materials, in cases where they are the only information we possess, impose severe limitations on our ability to pursue the history of philosophy in a satisfactory manner. Thales is the best example of this. We have none of Thales's original words and neither did the authors of the testimonia we possess. From this point of view they were in the same position as we are with regard to determining Thales' own original views, making our task as historians doubly difficult.

Key words. doxography, Aëtius, history of philosophy, testimonia, Presocratics, Thales, Aristotle

1. Introduction

The great majority of Greek (and Roman) philosophical writings have been irretrievably lost. But this loss is made good to some extent not only by quotations from lost works recorded by later writers, but also by the varieties of ancient reportage that are extant. The modern name for these forms of reportage is 'doxography'.

These two sentences by our colleague Jaap Mansfeld which begin his article on Doxography in the *Stanford Encyclopedia of Philosophy*¹ reflect a common use to which doxographical reports are put (perhaps the principal use), namely, supplementing the direct tradition of an ancient philosophical author's texts with missing information. I say this thinking of the words 'But this loss is made good'. I do not mean to suggest that Mansfeld thinks that doxography's value consists only in this kind of supplementary work. As Mansfeld well knows, it also contributes importantly to our knowledge of the reception and interpretation of earlier philosophers over a period of many centuries, which has implications for a variety of much broader questions.

Mansfeld immediately restricts his claim 'this loss is made good' by adding 'to some extent'. This is an important restriction—first, because doxographical reports of a thinker never supply everything that is not preserved in the direct tradition, but also, secondly, because they tend to be reports of tenets in isolation from their theoretical and argumentative context and, third, because

¹ Mansfeld (2013).

they may be misleading in a way that the direct tradition can hardly be: they can be simply wrong in attributing a view to an author. For example, Philoponus twice (Th 448 and Th 450)² attributes to Thales the view that the principle of all things is air.

We are in a position to say with confidence that Philoponus is wrong on this point, not only because we have other doxographical reports that Thales held that water is the principle—reports that are more numerous and older and have better authority—but because Philoponus himself frequently attests to the common view, and in one of the errant testimonia (Th 448) he reports the common view just before making the surprising claim that Thales' principle is not water but air. The context makes it clear that he made a slip and wrote 'Thales' when he meant 'Anaximenes'—a slip he repeats shortly afterwards (Th 450) and that is implied by what he says in Th 449 and Th 451. (All four passages occur not far from one another in Philoponus' commentary on Aristotle, *Physics* 1.4–5.) It is unsurprising if honest mistakes of this kind occur in a tradition that lasts over a millennium and a half, extends over numerous cultures and is recorded in several languages.

2. Types of Doxography

I will come back to Thales later on, but before doing so I want to say some more things about the types of doxography and their uses. Mansfeld distinguishes between 'doxography in the narrower sense' and 'doxography in the broad sense.' Doxography in the narrower sense is what Diels had in mind when he invented the term 'doxography'. Mansfeld defines this kind of doxography as 'the normally very brief presentation according to theme, or subject, of contrasting (or even bizarre, or compromise) tenets (*doxai*) in natural philosophy.' This is contrasted with doxography in the broad sense, in which *doxai* are put to work, as it were. Later in his article, Mansfeld refers to the way ancient authors used doxographic information, and says that 'the main objective of these authors [the practitioners of doxography in the broad sense] ... is to ascertain whether a given *doxa* may eventually prove to be useful, and which *doxai* should be rejected'. I suppose that a *doxa* that proves useful is one that the author in question finds true or related to the truth in a way useful for his philosophical or scientific purposes and a *doxa* is to be rejected if it does not satisfy these criteria. In some cases the *doxai* used in this way are drawn from works of doxography in the narrower sense.

Mansfeld's doxography in the broad sense corresponds to what Michael Frede (in an unpublished manuscript *The Historiography of Philosophy*³) called philosophical doxography. In Frede's terminology those who engage in philosophical doxography study earlier views without consideration of their historical context, in particular without consideration of the significance of those views in the works of their authors or in the philosophical theory of which they form a part,

² For these references, see Appendix 2.

³ This manuscript is currently being edited for publication by K. Ierodiakonou.

and without consideration of the arguments their author made in their favor. Such a person does not simply study the views of earlier thinkers but engages with them as part of pursuing her own philosophical project: treating them in the same way she treats contemporary views, seeing how they can be used for her own purposes, whether they present useful insights or problems that need refutation. For these purposes their original context is immaterial and although anachronism is virtually inevitable it is of no concern. Presenting the original author's thought accurately and fairly is of secondary importance at best; what counts is what it suggests to the individual philosophical doxographer at that moment. In this case we have philosophers and scientists who use doxographical works such as Aëtius and also complete works of earlier philosophers principally as quarries in which they search selectively for ideas that are useful for their own projects. A late antique or medieval thinker who subscribes to atomism will pay close attention to information about Democritus, for example, but will probably not give much time, if any, to doxographical reports about the Milesians, unless he engages in polemic or other forms of critical discussion of rival views.⁴

In addition to philosophical doxography Frede identifies two other types of doxography: philosophical history of philosophy and historical history of philosophy. Practitioners of philosophical history of philosophy, which include Plato, Aristotle and Hegel, selectively survey the views of earlier figures, presenting them as engaged in the same enterprise as the later thinkers themselves and contributing to the later thinkers' theories or as collectively progressing towards them. Like philosophical doxography, this practice has also been and continues to be applied in the histories of philosophy and science.

Frede's historical history of philosophy is what I imagine that most of the readers of this paper engage in as historians of philosophy. Historical history of philosophy or science is not concerned with whether a philosophical or scientific tenet of the past is worth considering by contemporary philosophers or scientists, and it is not particularly interested in how a philosophical or scientific tenet of the past is, from the perspective of a contemporary philosopher or scientist, an advance towards a contemporary view. (This interest is typical of those who engage in Frede's philosophical history of philosophy.) By contrast, a practitioner of Frede's historical history of philosophy is interested in ascertaining, to the extent possible, what the views of earlier philosophers actually were, what they meant in their own time, what role they played in their original philosophical context, and what arguments were used to justify them. In working as historical historians of philosophy they make use of primary and secondary sources—works of earlier thinkers and quotations in other authors' writings, and, of course, doxographical material, where it exists.

3. Uses of Doxography

⁴ This is one of the ways in which Aristotle made use of his predecessors.

Doxography of Mansfeld's narrower kind has serious limitations. As David Runia points out in his chapter in *the Oxford Handbook of Presocratic Philosophy*, since⁵

a *doxa* is very often devoid of argument... this would seem to make it a most unsatisfactory vehicle for the presentation of a philosopher's viewpoint. After all, philosophers very often regard the arguments supporting a particular viewpoint as more important than the viewpoint itself. Consequently, if we are lucky enough to have plenty of writings or sources for a particular philosopher, as in the case of Plato and Aristotle, the views recorded in collections of *doxai* are almost laughably inadequate and in most cases hardly worth detailed examination. But this is emphatically not the situation we encounter for the philosophy of the Presocratics. There is so little information available that the doxographic tradition simply cannot be ignored.

The question, then, is how best to make use of this information.

What I want to do in the rest of this paper is first to explore some of the implications that the nature of doxographical texts (here I refer to Mansfeld's doxography in the narrower sense) has for Frede's three kinds of intellectual enterprise, next to examine some of the testimonia on Thales, and finally, with the case of Thales in mind, to consider how we go about our work as historical historians of philosophy and science and to compare it with other uses. But before I do, I want to think about a student, as opposed to someone who is already a working philosopher or scientist.

Consider what it would be like to learn ancient Greek philosophy if Aëtius, or one of our sources for Aëtius, were our only source. For that matter, consider what it would be like to teach using such a text as your only source. There is a collection of tenets ascribed to individual thinkers or groups of thinkers. The tenets are organized according to certain principles. They can be memorized and examination questions can be set, but the learning will be mainly a matter of memorizing the tenets and correlating them. It will be natural for the student to assume that the thinkers whose views are collected were thinking along the lines the doxographer uses to present the material: how many material principles are there? what are they? is the cosmos eternal or not? is there one cosmos or more? The student will also reasonably suppose that the tenets as reported pretty closely resemble the original wording of the author in question, and that the author held all the tenets ascribed to him, and held them equally strongly. Further the student will probably think that the author's purpose, or one of his principal purposes was to state the views recorded in the doxographical source. Once these assumptions have been identified it is not difficult to see how shaky they are. In addition the doxographical source will not invite the student to wonder why the thinkers asked these particular questions or how the different answers given are related to one another—whether one person's view is intended as an improvement on the view of another, or even which views were earlier and which were later. Also, since the views are for the most part simply listed, albeit systematically and frequently in a highly structured order, they all appear to

⁵ Runia (2008) 35.

have the same authority. And since as a rule there is no account given as to why a particular view was adopted, there seems no particular reason to prefer one view to another. Further there is little sense of how the views ascribed to a given thinker fit together or that there is any importance in whether or not they do. And of course there is no sense of any philosophical or scientific method. It appears that in the absence of other information it would be hopeless to attempt to understand the history of philosophy or science on the basis of this kind of material, since such understanding requires more information than merely the views of the philosophers or scientists in question. And equally hopeless to use it and it alone in order to find the truth about the history of philosophy, at least as historical historians of philosophy pursue it.

For Frede's philosophical doxographers, on the other hand, a doxographical text as a repository of ideas can be useful indeed—perhaps even more useful than the complete original texts if only because doxographical works are more compact. For example, I can imagine someone noticing the presence of fire alongside earth, water and air in some ancient systems, reflecting on the difference between fire and the other three (fire does not seem to be material), and deciding that the activity (or energy, if you like) apparently contained by fire and by none of the others needs to be given its own place in the economy of the cosmos. And this irrespective of whatever reasons Empedocles, Plato or Aristotle might have had for introducing it into their own systems. For this kind of work it makes no difference what the earlier proponents of the idea had in mind, what place fire had in their systems, what evidence or arguments they used to justify it, or what posterity had to say about it. As Mansfeld says, 'Doxography ... is the normally very brief presentation according to theme, or subject, of contrasting ... tenets in natural philosophy or science..., which in itself fails to provide a decisive answer to the issue involved although it may assist you to find a way out.'⁶ On the other hand, if the view was originally supported by faulty evidence or reasoning, or if it has been decisively refuted, it might save time, trouble, embarrassment, and perhaps posthumous discrediting if one were aware of these circumstances—something on which doxographical works typically do not provide assistance.

Aristotle's report that Thales believed the magnet to possess soul because it moves iron (Th 31) can stand as likely instance of this kind of use of an earlier doxographical text, since Diogenes Laertius 1.24 (Th 237) mentions Hippias along with Aristotle as sources for this tenet. In this case, since Hippias' work is lost, a work of philosophical doxography becomes the earliest witness to a tenet and thus a crucial part of the Thales doxography. Further, according to Diels' hypothesis Aristotle stands at the origins of doxography in Mansfeld's narrow sense since it was he and his associates, most importantly Theophrastus, who collected the tenets that formed the core of the *placita* tradition.

This absence of supporting information is in my view the most important shortcoming of doxographical works as sources of information (even though it is inherent in the genre). In practice it may not make much difference for philosophers and scientists engaged in Frede's

⁶ Mansfeld (2013).

philosophical doxography, but it does create serious problems for those of us who engage with the historical history of philosophy or science.

Philosophical history of philosophy as it has typically been practiced does not, I think, make much use of doxographical material. If it does use such material and insofar as it does, it will treat it similarly to philosophical doxography, *mutatis mutandis*, since it will select the testimonia that help it make its case and ignore the rest.

More interesting is the situation as regards historical history of philosophy (and science). I quote Frede:

To do philosophy is not just to consider problems which are considered philosophical, but to consider these problems as they have been formulated by one's predecessors and as they arise out of the way one's predecessors have dealt with problems ... The history of philosophy, then is, as it were, an armory full of such views and positions along with the arguments for them ... These views and positions are related to each other in a certain way, that later views grow out of a consideration of earlier ones, that there is some development of which the different views and positions form part and in terms of which it becomes intelligible why a view would arise at this particular time, in this particular context. We learn from the philosophical historian that the fact that a certain view arises and is in use at a certain time does not become fully intelligible just by looking at this particular view, but only if we consider it in its relation to earlier and later views, if we consider it against the background of the context in which it arises and comes to be used.

This shows why by their very nature doxographical texts are unhistorical even though they give us information about the past. Without information as to why the earlier thinkers adopted the views attributed to them (the arguments and evidence they used) and without information as to what earlier views, if any, they were responding to, and without information as to what critical and constructive methods they employed, unless we have further information we may seem to be reduced to silence, guesswork, or total scepticism.

It is a different matter when there exist original texts which doxographical information can supplement, and also when there is further evidence from other (non-doxographic) kinds of testimonia. In those situations we can employ normal kinds of criticism to examine the available material (fragments, doxographical and non-doxographical testimonia) for consistency, coherence, historical plausibility and so forth, and to construct a richer and possibly more full and accurate picture of the philosopher or scientist in question.

4. The Case of Thales

The focus of the rest of this paper is well known to us all—the fragility of doxography and the dangers we run in relying on it with more confidence than it deserves. I will consider the extreme case of Thales, whom we all consider an important figure in the history of philosophy but of whose works (if in fact he wrote anything) not one word survives. For Thales (and more recently for Anaximander and Anaximenes) we now have the good fortune to possess Georg Wöhrlé's collections of testimonia that aim to be complete and are certainly far fuller than any previous collections.⁷ Wöhrlé's chronologically arranged collection of over 600 testimonia on Thales allows us for the first time to track the history of interpretation from Herodotus through the fifteenth century, through Greek, Latin and Arabic sources and even one passage from the Persian version of the Alexander romance.

All agree that it is difficult if not impossible to say anything for certain about Thales' views, but in discussing Thales, works on Greek philosophy typically treat the following interests and views:

The natural world

Water is in some way basic (earliest source: Aristotle, *Metaphysics* and *De Caelo*)

The earth floats on water (earliest source: Aristotle, *Metaphysics*; Aristotle explicitly attributes this tenet to Thales)

Soul

The soul causes motion (earliest source: Aristotle, *De Anima*)

The magnet has a soul because it moves iron (earliest source: Aristotle, *De Anima*: Aristotle explicitly attributes this tenet to Thales)

Soul is present everywhere (earliest source: Aristotle, *De Anima*: Aristotle explicitly attributes this tenet to Thales)

God

All things are full of gods (earliest source: Aristotle, *De Anima*: Aristotle explicitly attributes this tenet to Thales)

Mathematics

Some interest in geometry (mainly Proclus, derived from Eudemus)

Astronomy

The prediction of a solar eclipse (earliest source: Herodotus).

Tracking the history of these reputed areas of Thales' thought is instructive in some interesting ways. For instance, it led me to realize that if we did not possess the text of Herodotus, we would probably associate Thales with the prediction of lunar eclipses as much as solar eclipses and with an interest in understanding the cause of eclipses as much as in predicting them. For now I will confine myself to the doxography of Thales' views on soul and god, where the tradition is interestingly complicated.

⁷ Wöhrlé (2009), (2014). For a description of the methodology of the De Gruyter *Traditio Praesocratica* series in which Wöhrlé's work appears, see Appendix 1.

The complications begin with our earliest source, Aristotle's *De Anima*. There he makes four claims:

De Anima 1.2 405a19–21 (Th 31): Thales too, to judge by what is reported, seems to have held that (a) the soul causes motion, since in fact he said that (b) the magnet has a soul because it moves iron.

De Anima 1.5 411a7–8 (Th 32): Some say that (c) it [soul] is intermingled in the universe, and it is perhaps for that reason that (d) Thales believed that all things are full of gods.

Note first that Aristotle attributes only (b) and (d) to Thales. (a) and (c) are conjecture or interpretation. Also, whereas (d) speaks of gods, (c) speaks of soul. Now it seems to me that it is not unreasonable to attribute (a) to Thales on the grounds that he said (b). After all, animate things (animals, for example) move: they engage in self-motion. But there is a difference: the magnet is not said to move itself but to cause iron to move. Thales does not focus on the self-motion that is characteristic of living things. So when Aristotle moves from (b) to (a) it is legitimate to question how faithful he is to Thales' thought, which is to say, it is legitimate to question whether Thales inferred (a) (assuming that he held this view) from (b).

In moving from (c) to (d) Aristotle without argument presupposes a connection between soul and gods that I find surprising and rather improbable to attribute to anyone who lived in the early sixth century. This presupposition goes unchallenged throughout the long history of Thales interpretations covered by Wöhrle's collection. But, but since (c) is not attributed specifically to Thales but only to 'some', and since the link between (c) and (d) is conjectural, it is a real possibility that Thales did not believe (c).

The four Aristotelian claims are developed in the subsequent centuries. Thus, (b) the example of the magnet as something that possesses soul is joined by amber (Diogenes Laertius 1.24 [Th 237], Sophonias [Th 558], and a scholion on Plato's *Republic* [Th 578]) and plants (Stobaeus [Th 359] and ps.Galen [Th 405]).⁸ The view that 'all things are full of gods' in (d) (repeated by Themistius, in *De An.*, ad 411a7–8 [Th 302], Simplicius, in *De An.* ad 411a8 [Th 425], Philoponus, in *De An.* ad 411a7–8 [Th 443], and Sophonias, *De An. Paraphr.* [Th 559] —as we would expect in paraphrases of and commentaries on the very passage in question, which is also paraphrased by Cicero [Th 76⁹]) perhaps becomes 'the cosmos is god' (Eusebius [Th 272]¹⁰), 'the cosmos is full of *daimons*' (Diogenes Laertius 1.27 [Th 237], Stobaeus [Th 340]¹¹ and the abovementioned scholion on Plato [Th 578]) and 'providence pervades the extremities [of the cosmos]' (Philoponus [Th

⁸ The following treatment of the testimonia (or their authors) as largely independent sources of information about Thales is invited by the chronological arrangement of the material prescribed by the *Traditio Praesocratica* series. It largely overlooks matters of doctrinal affiliation and genre and context, focusing narrowly on the content of each testimonium. I recognize that this is not the only way to use this body of evidence, but it can be a useful way to survey the field before deciding on questions to ask and interpretive strategies to adopt.

⁹ Cicero has 'people should believe that everything they see is full of gods' (*homines existimare oportere, omnia <quae> cernerent deorum esse plena*).

¹⁰ I am grateful to David Runia for pointing out that this testimonium may be a misquotation of Th 149.

¹¹ Stobaeus has 'the universe' (τὸ πᾶν) instead of 'the cosmos'.

442]). The view that (a) ‘The soul causes motion’ (repeated by Themistius [Th 301], Simplicius [Th 422] and Philoponus [Th 442]) receives rougher treatment. It is declared to be always-moving and/or self-moving (in the sense of always being in motion, not always causing other things to move) (ps.Plutarch [Th 165], Nemesius [Th 323] and Stobaeus [Th 360]), a claim that Theodoret [Th 336] denies, surprisingly declaring it to be ‘unmoved by nature’ (doubtless a result of misreading the ἀεικίνητον of ps.Plutarch, Nemesius and Stobaeus as ἀκίνητον). The view that (c) ‘Soul is intermingled in the universe’ (repeated by Sophonias [Th 559] and paraphrased by Themistius [Th 302] and Simplicius [Th 424]) becomes ‘soul is intermingled in every body’ (Philoponus [Th 443] and Michael Psellus [Th 517]), ‘everything is an animate body’ (Philoponus [Th 443]), ‘soul is in all the principal and most important parts of the cosmos’ (Plutarch [Th 126]), ‘the cosmos is animate’ (Stobaeus [Th 340]), ‘every part of the cosmos is animate’ (Themistius [Th 302]) and perhaps ‘providence pervades the extremities of the cosmos’ (Philoponus [Th 442]), which could be based on Aristotle’s linkage of soul with god in Th 32; similarly in the case of ‘gods are intermingled in all things’ (Simplicius [Th 424]) and possibly also ‘the cosmos is god’ (Eusebius [Th 272]).

Such reductive tactics can be employed in these cases, but is it correct to do so? Might it not be the case that some of the testimonia I have said to be deformations of Aristotle’s information are based on independent but no longer existent evidence? How sure can we be? What does any uncertainty we may have imply for our understanding of Thales?

Other testimonia are harder to square with the early evidence. Some have to do with the nature of the soul and several have to do with the nature of god. Regarding the soul, we are told that Thales was the first to say that it is immortal (Diogenes Laertius 1.24 [Th 237],¹² citing Choerilus [5th c. BCE] as a source; Suda [Th 495], and Georgius Cedrenus [Th 525]). Also that it is water¹³ (Tertullian [Th 221], Philoponus [Th 440], and Michael Psellus [Th 516]). Elsewhere Philoponus goes to some length to explain why Aristotle does not mention this view (Th 442). Simplicius is more cautious, saying first (*ad* 405a19 [Th 422]) that ‘Aristotle did not attribute to Thales the view that soul is water, although he posited water as the element, since he said that water is the element of bodies; but it is likely that he [Thales] supposed it [the soul] to be incorporeal’, but later in the same work (*ad* 405b1–2 [Th 423]) he says that ‘Thales ... did not think that the soul was in any way body’. In this he is followed by ps.Ammonius (Th 485).

Regarding god, we are told that Thales held that god is the sole ruler of the world (Lactantius [Th 258]) and that god is infinite because god has infinite power (Olympiodorus [Th 458]). Several sources state that Thales claimed that god is the intelligence/mind (νοῦς / *mens*) of the cosmos (ps.Plutarch [Th 149], Stobaeus [Th 340], Cyril of Alexandria [Th 375], ps.Galen [Th

¹² Diogenes Laertius says that some including Choerilus say that Thales was the first to hold this view. He also says ‘souls’, not ‘soul’.

¹³ This is not an unreasonable interpretation. On Aristotle’s interpretation that for Thales water is the material principle, all things that exist are (made of) water. Since Thales believed that souls exist, it follows that he thought that they were water. A parallel argument establishes that gods are water. (See below, p. 00.)

393], cf. Isidore of Seville [Th 475]). This claim is expanded by Cicero [Th 72], Minucius Felix [Th 229] and Lactantius [Th 254]: ‘god is the mind/intelligence that fashions/formed everything/all things from water’. We can conjecture how the expansion occurred, by combining the views that god rules the world, has infinite power and is the intelligence of the cosmos with the view that water is the material principle. But is this how it actually happened? And even if it did, and even if we explain away the claims that god is the sole ruler of the world and that god has infinite power as accretions from late antiquity, what are we to make of the report in so many testimonia that Thales held that god is the intelligence of the cosmos? It might be due to a commentator who thought that Thales anticipated one of Anaxagoras’s basic doctrines, or a variation on Aristotle’s claim that soul is intermingled in the universe or even seen as a precursor of the divine νοῦς of Aristotle’s *Metaphysics*. But how certain are we that it is not something that Thales might have believed?

Another group of testimonia (ps.Plutarch [Th 150], Athenagoras [Th 186], Eusebius [Th 275], and ps.Galen [Th 394]) attribute to Thales (among others: Pythagoras, Plato, and the Stoics) views on *daimons* and heroes and their relation to gods and suggest a somewhat different relation between the divine and the natural world. These testimonia agree that Thales held that *daimons* are ‘spiritual substances’ and that heroes are souls that are separated from bodies, adding that good souls are good heroes and evil souls are evil heroes. In addition, Diogenes Laertius 1.27 [Th 237], followed by the scholion on Plato [Th 578], reports the view that the cosmos is animate and full of *daimons* and similarly Stobaeus [Th 340] says that Thales held that whereas god is the intelligence of the cosmos, the universe is animate and full of *daimons*. Athenagoras [Th 275] volunteers that Thales was the first to distinguish between god, *daimons* and heroes. I do not have the time to discuss further this suggestive material, which although without an Aristotelian pedigree, belongs to the *placita* tradition.

There are also reports that Thales said that god knows not only everything we do but also everything we even think of doing (Valerius Maximus [Th 96], Clement of Alexandria [Th 207], Diogenes Laertius 1.36 [Th 237], and *Gnomologium Vaticanum* [Th 564] cf. Philoponus [Th 442]). The contexts in Diogenes Laertius and the *Gnomologium Vaticanum* show that this assertion belongs to the gnostic tradition that attributed such wise sayings to the Seven Sages (who of course included Thales) as found, for example, in Stobaeus [Th 365]), and is not part of doxographical tradition. Another saying that belongs to the gnostic tradition, that the divine is that which has neither beginning nor end, is found in several testimonia (Clement of Alexandria [Th 207], Hippolytus of Rome [Th 210], Diogenes Laertius 1.36 [Th 237], and *Gnomologium Vaticanum* [Th 564]).

On the other hand, an important group of testimonia not drawn from the doxographical tradition are found in Themistius [Th 301, Th 302], Simplicius [Th 422, Th 423, Th 424], Philoponus [Th 440, Th 442, Th 443] and Sophonias [Th 558, Th 559]. The Themistius and Sophonias passages occur in their paraphrases of Aristotle’s *De Anima*, while the Simplicius and Philoponus passages

all occur in their commentaries on the same work. In these cases, the authors are not just repeating more or less accurately what they have seen elsewhere, but have the text of Aristotle before them and are trying to present it and explicate it responsibly and accurately.

5. Reflections on Doxography, its Uses and its Limitations

I have suggested that much of the Thales doxography can be seen as based on early reports, mainly those found in Aristotle. Where the reports apparently combine disparate information, as where soul and god and even water come together, it is natural and reasonable to suppose that the author is trying to make sense of the information he has at hand. Indeed I think that we can see Aristotle himself doing this in *Th* 32, where he moves rather too quickly for comfort from soul to gods. And this what we do too (though with appropriate caution, hedging and qualifications) since our project as historical historians of philosophy requires us to attempt to make historical sense of the doxography, not just to present it.

I think that this is an important idea to consider, that many of our sources (those engaging in Mansfeld's doxography in the broad sense) are in their way doing the same that we do—trying to make sense of incomplete information for their own purposes as we do for ours. In effect we play a game of 'connect the dots.' The dots (data-points) are the claims made in the doxography, and we attempt to make them intelligible by seeing how they are related. If we can establish to our satisfaction that data-point A is the cause of data-point B or contributes to its explanation, we know more than if we have just the two data-points. Since this kind of connection is just what is missing in Mansfeld's narrower doxography, we are eager (perhaps sometimes too eager) to make them. And so, we may think, were some of the broader doxographers. In doing this kind of work they are interpreters, just like us; but in another way they can be seen as contributing to the doxographical record, since their interpretations could be and sometimes were taken by later authors to have the same authority as the doxographical accounts that they themselves had based these interpretations on.

And where does that leave us? There are two situations. In any given case, either we recognize that we have other (typically earlier) doxographical material that can be used to a testimonium or we do not. In the former case, whether we do or do not deconstruct it depends on our purposes. If our purpose is to determine what Thales actually thought, or to get as close to what he actually thought as the doxography permits, then we may decide to ignore the testimonium in question. On the other hand, if our concern is not with Thales himself but with how Thales was understood and how he was being treated by the author of the testimonium, or more generally during a period that includes the authorship of the testimonium, then the testimonium as it stands is precious evidence and we value it accordingly. In my opinion one of the most important features for the De Gruyter *Traditio Praesocratica* series is that it facilitates this

kind of research, as is already evidenced by some of the volumes published to date in the companion *Studia Praesocratica* series.¹⁴

In cases where we do not have doxographical material available to determine its origin (as may be the case with the testimonia that god is the intelligence of the cosmos), again we have two choices: either we accept the testimonium as evidence for what Thales thought or we reject it. It is not always a straightforward matter to decide which to do, but for us as historical historians of philosophy nothing is more important. For this situation actually occurs and in fact it is always present either immediately or in the background. I say this because this is precisely the situation we are in with the first occurrence of any tenet in the doxographical tradition. The question we need to face regarding pseudo-Plutarch's testimony that god is the intelligence of the cosmos (**Th** 149) in the second century CE (whether it derives from lost sources in the doxographic tradition, or was due to a faulty view of how ideas develop or just to a simple mistake) is no different from what we face in dealing with Aristotle's claims in **Th** 31 and **Th** 32, or with his account of Thales as the first natural philosopher in *Metaphysics* A.3 (**Th** 29). And like the authors of the Thales testimonia, we make use of the source materials that we have at hand together with our beliefs about what information and what kinds of reasoning Thales might have employed, and other beliefs of ours that we think relevant.

¹⁴ Schwab (2012) and Marcinkowska-Rosół (2014).

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APPENDICES

1. *Introductory remarks on a new collection of testimonia on Thales*

[The Appendix contains extracts from the Introduction/Preface to the new collection of the testimonia on Thales edited by Georg Wöhrlé and published in the *Traditio Praesocratica* series by De Gruyter (augmented English edition 2014, pp. 3–7). The extracts explain the methodology of the collection compared to previous collections and esp. the *Fragmente der Vorsokratiker* of Hermann Diels and Walter Kranz. The extracts are reprinted with permission of the publishing house.]

The new edition at hand is based on a fundamentally different approach from the ‘old’ Diels/Kranz edition. In his preface to the first edition of 1903, Hermann Diels acknowledged that an arbitrary selection of fragments inevitably results in inhibiting and patronising both teachers and students, which is why he sought to provide as complete a collection of fragments as possible, while at the same time he included relevant biographical and doxographical material. Nonetheless, the available material was subjected to a process of rigorous selection, since it was Diels’ objective to ‘trace the development of Greek thought *in statu nascendi* [Diels’ emphasis] by reference to original documents’ (ibid.). Consequently, he says the following with regard to the second edition (1906): ‘Selecting the material took me more time and effort than if I had sent the entirety of my material to the printer. However, I believe that I have provided a service not only to beginners by limiting the texts to the *relevant and original ones* [my emphasis]. It was my intention to only carry the wheat into the barn while leaving the chaff outside, even at the risk of leaving some good grain behind here and there.’ Let it be understood that it is not my purpose to criticise Diels’ procedure. His merits are not in question, and I assume he was familiar with most of the material in the present volume (except perhaps for the Syro-Arabic materials) – that were the ‘chaff’ in his metaphor. He was a child of his times, as we are children of our times, as well. By making this reconstructive selection, Diels set the standard against which, ultimately, thinkers like Thales, Anaximander, Anaximenes and others were to be measured. Occasionally, a new fragment has been added which may have modified this standard slightly, but whenever someone speaks of or writes about a Presocratic author, they still usually have in mind the image of the author as it was sketched out by Hermann Diels.

Thus, the objective of the present work is not – once again – to present a collection which may offer some ‘new’ elements or others, but which ultimately aims at reconstructing authentic thoughts and works. Rather than that, this edition – in accordance with the title of this new series: *Traditio Praesocratica* – seeks to document the history of (the adaptive) reception as it can be traced from the earliest extant evidence through the late Middle Ages. Perhaps the Milesian philosophers Thales, Anaximander and Anaximenes are particularly suitable for this procedure, since there is no verbatim tradition. Therefore, we need not bother to reconstruct works which

may never have existed as such. What actually survives amounts to testimonies about a doctrine which in the course of *traditio* has been viewed from different perspectives. It is all about this perspective, since it is not because of what our distant ancestors thought or uttered that we have arrived where we are now, but because of what history has made of these thoughts and utterances. To me, it makes sense – at least in this context – to speak of testimonies, but in the double sense of the word, referring both to the doctrine of the philosopher in question and also to the perspective of the author/text that has delivered this doctrine to posterity. While these texts are certainly in a fragmentary condition ..., it would be misleading to speak of an ‘incomplete tradition’ in a narrowly philological sense. After all, we are unable to identify what this ‘complete’ body of texts or doctrines would have been, at least for the Milesians, and most of all in the case of Thales.

Admittedly, the selection of testimonies is more or less arbitrary. However, this need not be regarded as a shortcoming, since even completeness could only aim at including what has come down to us in the first place. What should bother us instead is the fact that only testimonies mentioning the author by name are included. As a matter of course, Thales’ idea that water is the source of all things is to be found in many texts that do not mention the author. Had we included these testimonies, the material would have exceeded all limits. (Mistaken names in the context of gnomologies, i.e. if a maxim usually attributed to a different author is attributed to Thales in a particular context, are still a different problem.) In order to prevent further confusion (which is bound to occur when rummaging through a heap of ‘chaff’, to put use Diels’ metaphor), the testimonies are provided with an apparatus of similia enabling the reader to access the material thematically. Keywords which allow a first approach to the content are assigned to each of the similia. Using the keywords makes tracing a doctrinal, biographical or gnomological attribution to Thales in the history of reception much easier. One can, for example, trace the development of the anecdote about Thales falling into a well from Plato down through the Christian Middle Ages. It goes without saying that this is not intended to entail direct dependence on particular earlier sources – although in some cases this is obvious and in others it cannot be ruled out, which is why similarities within a group of similia are occasionally pointed out. The diachronic arrangement shows which ‘motifs’ were passed on and which were not (and which ones were added), and it illustrates which topics have been particularly interesting to specific authors or at specific times. It is a shortcoming of the doxographic arrangement according to Peripatetic categories (e.g., principles, god, cosmos, meteora, psychology, physiology) that the testimonies of the authors are scattered among various lemmata. The user of the edition at hand, however, can tell at first sight which author considered which piece of Thales’ information worthy of being recorded and discussed, and why. It makes quite a difference whether the same story – for example that of Thales’ prediction of a solar eclipse – is told in the context of an historical account, in an excursus within a history of philosophy or in a Christian chronicle. This also applies to the doxographers in the narrower sense of the word, who today are mostly seen as a quarry for collecting fragments (which was hardly their intention). Authors such as pseudo-Plutarch and Stobaeus were interested

in collecting important views on crucial problems – not in reconstructing ‘Thales’ or other authors. I have tried to counteract the ‘fragmentation’ of these collections of texts by adding the chapter headings in which the respective lemmata are found.

Therefore, an artificial distinction between the indirect and the direct traditions, testimonies on Thales’ life and doctrine as opposed to fragments in the narrower sense (sections ‘A’ and ‘B’ in Diels’/Kranz’ edition) cannot be upheld. This is *prima facie* the case with the ‘Milesians’, who, in effect, are known only through the indirect tradition. With other authors such as Empedocles and Parmenides, this kind of approach is a step backwards in terms of method when compared to the insights of Schleiermacher and Diels, who were well aware that understanding testimonies depends upon understanding the authors who included them in their works. However, the goal of this collection is not primarily a reconstructive one. Moreover, the context, too, can be of vital importance in understanding a verbatim ‘fragment’. Furthermore, it is evident that so-called ‘imitations’ and ‘forgeries’ have to be taken into account, as well; for every age creates its own ‘Thales’, an image that may not withstand critical examination. Still, it is this very image and its development over the course of time that is interesting in itself. It is important to make clear from what angle Thales was viewed by readers at different times. Within the limits of an edition, however, this does not necessarily mean we need to judge this perspective (as one would by using the biased categorisation mentioned above), not even in the case of apparent or obvious misunderstandings. To put things somewhat sympathetically, these authors and texts are assigned a dignity of their own, which they lose when being regarded as mere reference points in the process of reconstruction. I would like to end this general introduction by emphasising that the way I have chosen to present the material does not obstruct further reconstructive efforts. It is possible to employ philological methods to reconstruct doxographical continuities. Material for doing this work for Thales is provided here, but it also allows further inferences to be drawn when this material will be considered together with material provided in future volumes of this series. Likewise, it is possible to engage in philosophical reconstruction. At any rate, one should bear in mind that the two disciplines mutually depend on each other: philosophy provides the intellectual framework for philological efforts, but at the same time it should not move beyond what is philologically possible and probable.

2. *Thales Testimonia*

The following listing of testimonia referred to in the main text of the article is taken from Wöhrle's edition in the De Gruyter *Traditio Praesocratica* series (2009, 2014). References to texts and editions and also chronological indications are as given in that edition.

Th 29

Aristotle (384–322 BCE)

Metaphysica 1.3.983b20–984a7 (ed. Ross)

[...] Thales, the founder of this kind of philosophy, states it [the principle] to be water. (This is why he also declared that the earth rests on water.) He may have got this idea from seeing that the nourishment of all things is moist, and that even the hot itself comes to be from this [the moist] and lives on this (the principle of all things is that from which they come to be)—getting this idea from this consideration and also because the seeds of all things have a moist nature; and water is the principle of the nature of moist things. Some believe that the people of remote antiquity who lived a long time before the present generation and were the first to speculate about the gods had the same belief about nature too; for they made Okeanos and Tethys parents of generation [Hom. *Æ* 201] and made water, which the poets called Styx, the thing by which the gods swore their oaths. For the most ancient is the most honored, and the most honored thing is what oaths are sworn by. It is perhaps unclear whether [984a] this view about nature is early and ancient, but in any case this is how Thales is said to have expressed himself about the first cause ...

Th 31

Aristotle (384–322 BCE)

De anima 1.2.405a19–21 (ed. Ross)

Thales too, to judge by what is reported, seems to have held that the soul causes motion, since in fact he said that the magnet has a soul because it moves iron.

Th 32

Aristotle (384–322 BCE)

De anima 1.5.411a7–8 (ed. Ross)

Some say that it [soul] is intermingled in the universe, and it is perhaps for that reason that Thales believed that all things are full of gods.

Th 72

Marcus Tullius Cicero (106–43 BCE)

De natura deorum 1.25–26 (ed. Pease)

For Thales of Miletus, who was the first to investigate these matters, said that the origin of things is water, and that god is the intelligence that fashions everything from water (supposing that there can be gods who lack sensation). And why did he attach intelligence to water if intelligence can exist by itself without a body? ...

Th 76

Marcus Tullius Cicero (106–43 BCE)

De legibus 2.26 (ed. Ziegler)

For this view [that the gods should have temples in cities] promotes a religious feeling that is useful to cities, if indeed it was well said by Pythagoras, a most learned man, that piety and religious feeling are in our minds above all when we are performing religious rites, and in the saying of Thales, the wisest of the Seven, that people should believe that everything they see is full of gods, because then everyone would be more pure, as happens when they are in the holiest shrines ...

Th 96

Valerius Maximus (first half of the 1st cent. CE)

Facta et dicta memorabilia 7.2.8 (de externis) (ed. Kempf)

Thales too [said something] wonderful. Asked whether the gods fail to notice people's actions, he said: 'Not even their thoughts', so that we should wish to have not only our hands clean but our minds as well, if we believed that a celestial power is present when we have secret thoughts.

Th 126

Plutarch (ca. 45–before 125 CE)

Septem sapientium convivium 21.163D (ed. Paton/Wegehaupt/Gärtner)

... Anacharsis said that as Thales had done well to suppose that there is a soul in all the principal and most important parts of the *cosmos*, it is inappropriate to wonder whether the most excellent things are brought to pass by the judgment of God.

Th 149

Pseudo-Plutarch (ca. first half of the 2nd cent. CE ?)

Placita philosophorum 1.7.881D8 (ed. Lachenaud)

Thales [holds that] god is the intelligence of the *cosmos*.

Th 150

Pseudo-Plutarch (ca. first half of the 2nd cent. CE ?)

Placita philosophorum 1.8.882B1–7 (ed. Lachenaud)

The account of *daimons* and heroes should be pursued in parallel with the account concerning the gods. Thales, Pythagoras, Plato, and the Stoics hold that *daimons* are spiritual substances; that heroes are souls that are separated from bodies, and that good [souls] are good [heroes] and evil [souls] are evil [heroes].

Th 165

Pseudo-Plutarch (ca. first half of the 2nd cent. CE ?)

Placita philosophorum 4.2.898B10–12 (ed. Lachenaud)

Thales was the first to declare that the soul is always-moving or self-moving in nature.

Th 186

Athenagoras the Apologist (end of the 2nd cent. CE)

Legatio pro Christianis 23.2 (ed. Marcovich)

Thales was first to distinguish between god, *daimons* and heroes, as those who have exact knowledge of his views record. God he holds to be the intellect of the *cosmos*, *daimons* he considers to be spiritual substances, and heroes, souls separated from humans, good souls being good heroes and bad [souls] evil ones.

Th 207

Clement of Alexandria (ca. 150–211/16 CE)

Stromata 5.14.96.4 (ed. Stählin/Treu)

... Indeed, when asked what is divine, Thales said ‘that which has neither beginning nor end.’ When someone else asked if anyone does anything without the divine knowing, he said ‘How could he, since he cannot [do so] even if he is just thinking [of doing anything]’.

Th 210

Hippolytus of Rome (ca. 160–235 CE)

Refutatio omnium haeresium 1.1 (ed. Marcovich)

It is said that Thales of Miletus, one of the Seven Sages, was the first to pursue natural philosophy ... This [i.e., water] is god since it has neither beginning nor end ...

Th 220

Quintus Septimius Florens Tertullianus (ca. 160/70–after 212 CE)

Adversus Marcionem 1.13.3 (ed. Braun)

In order to say something too about the alleged unworthiness of this world, the name of which among the Greeks also means adornment and culture, not uncleanness: its unworthy substances have been declared gods by those very professors of wisdom from whose clever theories every

heresy takes its life—water by Thales, fire by Heraclitus, air by Anaximenes, by Anaximander all the celestial bodies, by Strato heaven and earth, by Zeno air and aether, and by Plato the stars [...].

Th 221

Quintus Septimius Florens Tertullianus (ca. 160/70–after 212 CE)

De Anima 5.2 (ed. Waszink)

And I am not speaking only of those who say that it [soul] is made of things obviously corporeal as Hipparchus and Heraclitus [say it is made] of fire, Hippo and Thales of water, Empedocles and Critias of blood, and Epicurus of atoms [...].

Th 229

Marcus Minucius Felix (active between 197 and 246 CE)

Octavius 19.4–5 (ed. Kytzler)

... The same Thales of Miletus said that water is the origin of things, and that God is the mind that formed all things from water ...

Th 237

Diogenes Laertius (work dated to mid-3rd cent. CE)

Vitae philosophorum (ed. Marcovich)

[1.24] Some, including the poet Choerilus, say that he [Thales] was also the first to say that souls are immortal ... Aristotle and Hippias say that he attributes souls even to inanimate things, instancing the magnet and amber as evidence ...

[1.27] He posited water as the principle of all things and that the cosmos is animate and full of *daimons* ...

[1.36] Someone asked him if a man could do wrong without the gods knowing. He answered, 'Not even if he is only thinking [of it]'. To an adulterer who asked if he should swear on oath that he had not committed adultery, he said 'Perjury is no worse than adultery'. When asked what is difficult, he said 'To know oneself.' What is easy? 'To tell someone else what to do.' What is most pleasant? 'Success'. What is divine? 'That which has neither beginning nor end.' What had he seen that is hard to occur? 'An aged tyrant'. How can one most easily endure misfortune? 'If he sees his enemies even worse off.' What is the best and most just way to live? 'If we do not do what we blame others for doing.'

Th 254

Lactantius (ca. 250–325 CE)

Divinae institutiones 1.5.16 (ed. Heck/Wlosok)

... Thales of Miletus, who was one of the Seven Sages and is considered the first of all to have investigated natural causes, said water is that from which all things were generated, and that God

is the mind which formed everything from water. Thus he located the matter of things in moisture, but he established the principle and cause of generation in God.

Th 258

Lactantius (ca. 250–325 CE)

Epitome divinarum institutionum 4.3 (ed. Heck/Wlosok)

It is a lengthy task to review what Thales, Pythagoras and Anaximenes in earlier times, or later the Stoics Cleanthes, Chrysippus and Zeno, or what our Seneca, who followed the Stoics, or what Tullius [Cicero] himself declared about the highest God, since all of them attempted to define what God is and asserted that the world is ruled by Him alone and that He is subject to no other nature since every nature is generated by Him.

Th 272

Eusebius of Caesarea (before 260–between 337 and 340 CE)

Praeparatio Evangelica 14.16.6 (ed. Des Places)

Thales [holds that] the *cosmos* is God.

Th 275

Eusebius of Caesarea (before 260–between 337 and 340 CE)

Praeparatio Evangelica 15.43.2 (ed. Des Places)

Thales, Pythagoras, Plato and the Stoics [hold that] *daimons* exist as spiritual substances, that heroes are souls separated from bodies, and that good souls are good [heroes] and evil [souls] are evil [heroes].

Th 301

Themistius (ca. 317–ca. 388 CE)

In Aristotelis libros de anima paraphrasis 3.13.21–25 (ed. Heinze) [*de an.* 1.2.405a2–b8]

Thales too seems to suppose that the soul is something that causes motion, if in fact this is why he said that iron is attracted by a magnet because that stone is animate ...

Th 302

Themistius (ca. 317–ca. 388 CE)

In Aristotelis libros de anima paraphrasis 3.35.26–29 (ed. Heinze) [*de an.* 1.5.411a7–8]

There is another view about the soul in addition to the ones already mentioned—that the soul is intermingled in every thing-that-is and pervades the entire *cosmos*, every part of which is animate. This view is the reason why Thales too believed that all things are full of gods.

Th 311

Augustine (354–430 CE)

De civitate Dei 8.2 (ed. Dombart/Kalb)

The founder of the Ionian kind [of philosophy], however, was Thales of Miletus, one of the men who were called the Seven Sages ... He held that water is the principle of things and that from it are generated all the elements of the world, the world itself, and all that comes to be in it. However, over this work, which we observe to be so wonderful when we contemplate the world, he placed nothing that stems from divine intelligence ...

Th 323

Nemesius of Emesa (text ca. 400 CE)

De natura hominis 2.68–69 (ed. Morani)

There has been an endless disagreement among those who declare the soul to be incorporeal, some saying that it is an immortal substance, others that it is incorporeal but neither a substance nor immortal. For Thales was the first to declare that the soul is always-moving and self-moving...

Th 336

Theodoret (ca. 393–ca. 466 CE)

Graecarum affectionum curatio 5.17 (ed. Canivet)

Thales called the soul unmoved by nature.

Th 340

Iohannes Stobaeus (5th cent. CE)

Anthologium 1.1.29b (ed. Wachsmuth/Hense)

Thales [said that] god is the mind of the *cosmos*, that the universe is animate and also full of *daimons*, and that there pervades the elementary moisture a divine power that causes it to move.

Th 359

Iohannes Stobaeus (5th cent. CE)

Anthologium 1.45.1 (ed. Wachsmuth/Hense)

Plato and Thales [held that] plants too are animate living things. This is obvious from the fact that they shake and hold their branches extended, and the way they bend when pulled and then rebound violently, so that they even pull up heavy weights.

Th 360

Iohannes Stobaeus (5th cent. CE)

Anthologium 1.49.1a (ed. Wachsmuth/Hense)

Thales was the first to declare that the soul is always-moving or self-moving.

Th 362

Iohannes Stobaeus (5th cent. CE)

Anthologium 1.3.172.4 (ed. Wachsmuth/Hense)

Demetrius of Phaleron, *Sayings of the Seven Sages*. Thales of Miletus, son of Examias, said: 'Give a pledge and disaster is at hand. Remember friends both present and absent. Do not beautify your face but be beautiful in your practices. Do not get wealth in a bad way. Let no word accuse you in regard to those who have shared in your trust. Do not be reluctant to flatter your parents. Do not accept evil. Expect to receive from your children in your old age the same services you give to your parents. The good is hard to know. The most delightful thing is to get what you desire. Laziness is incurable. Lack of self-control is harmful. Lack of education is a burden. Teach and learn what is better. Do not be lazy, not even if you are rich. Hide evil at home. Do not be pitied for the sake of envy. Use moderation. Do not trust everyone. Ruler, rule thyself.'

Th 375

Cyril of Alexandria (this work written ca. mid 5th cent. CE)

Contra Iulianum 1.38.544D–545B (ed. Burguière/Évieux)

... Thales of Miletus says that god is the mind of the cosmos ...

Th 393

Pseudo-Galen (compilation completed ca. 500 CE)

De historia philosophica 35.10–12 (ed. Diels)

Thales believed that god is the mind of the *cosmos* ...

Th 394

Pseudo-Galen (compilation completed ca. 500 CE)

De historia philosophica 36.1–5 (ed. Diels)

Thales, Plato, Pythagoras, and the Stoics as well think that these [heroes and *daimons*] are similar, and that they are spiritual substances. Heroes are souls separated from bodies, the good ones belonging to humans who lived their life best, and the bad ones being [those] of wicked men ...

Th 405

Pseudo-Galen (compilation completed ca. 500 CE)

De historia philosophica 130.1–3 (ed. Diels)

Thales and Plato [hold that] plants are animate living things, that this is obvious from the fact that they shake and the way it takes strength to bend them and that they then rebound violently, so that they even pull up heavy weights.

Th 422

Simplicius (ca. 490–560 CE)

In Aristotelis libros de anima commentaria 31.20–26 (Hayduck) [*de an.* 1.2.405a19: *It appears from what they record that Thales too.*]

... He [Aristotle] reported only this much about Thales, and in fact with a touch of criticism, that he assigned a soul to the magnet since it causes iron to move, in order to confirm that according to him the soul causes motion. He did not attribute to him the view that soul is water, although he posited water as the element, since he said that water is the element of bodies; but it is likely that he [Thales] supposed it [the soul] to be incorporeal.

Th 423

Simplicius (ca. 490–560 CE)

In Aristotelis libros de anima commentaria 32.14–17 (Hayduck) [*de an.* 1.2.405b1–2: *Some of the cruder ones, like Hippo, have also declared it to be water.*]

Thales also posited water as the element, but [as the element] of bodies, and he did not think that the soul was in any way body.

Th 424

Simplicius (ca. 490–560 CE)

In Aristotelis libros de anima commentaria 73.19–23 [*de an.* 1.5.411a8: *This is perhaps why Thales also thought that all things are full of gods.*]

No one would doubt that all things are filled with god, who creates, perfects and sustains them. But that is not what is meant, nor did he say ‘perhaps’ [a7] for this reason but with reference to being intermingled. For perhaps that is how ‘Thales thought that all things are full of gods,’ by being intermingled in them. And that is absurd.

Th 440

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis libros de anima commentaria I Prooemium 9.5–12 (ed. Hayduck)

Of those who have said that the soul is a simple body, some have said that it is an aetherial body... still others that it consists of water, like Thales ... For since they saw that seed consists of a moist substance, they thought that the principle of things-that-are is in fact water.

Th 442

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis libros de anima commentaria 86.11–35 (ed. Hayduck) [*de an.* 1.2.405a19–20: *From what people report, it seems that Thales too supposed the soul to be something that causes motion.*]

It seems not inappropriate for him [Aristotle] to mention Thales’ view here; for since it is his present purpose to show that those who concentrated on the cognitive aspect of the soul declare

that it too is composed of the principles from which they posited that things are composed—because like is known by like, in examining the view of Thales he says nothing like what he said about the others, but only that he [Thales] called the magnet, which attracts iron, animate, meaning that motion is characteristic of the soul. Yet, while reporting the views of those that attend to its kinetic aspect, he said that each of them declared that what he held to be the most kinetic of all was the element of the soul; ... however, in the case of the view of Thales, who posited water as the principle of things-that-are, he says nothing of the sort. For example, he does not say that Thales posits the soul to be water and declares that this is why the magnet attracts iron, because it is animate and therefore consists of water. He does not say this, but only that he called the magnet animate. For what purpose? Either because no treatises of Thales have been handed down but only his sayings, and for this reason he [Aristotle] shied away from the vulgarity of criticizing his account without written evidence, or because he [Aristotle] has a certain reverence for him [Thales], because many worthwhile doctrines of his are reported. They declare that he [Thales] said that Providence pervades the extremities [of the *cosmos*] and nothing escapes its notice, not even the slightest thing. This is why he does not say that this view that the soul is composed of water was his [Thales'], but only that he too attributed motion to the soul ...

Th 443

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis libros de anima commentaria 188.12–18 (ed. Hayduck) [*de an.* 1.5.411a7–8: *Some also declare that it [the soul] is intermingled in the universe, which is perhaps why Thales thought that all things are full of gods.*]

He [Aristotle] sets out another view about the soul. Some, he declares, suspected that the soul is intermingled in every body, so that everything is an animate body; and that on the basis of such a view Thales believed that everything is full of gods, since Thales supposed that the divine is everywhere in a spatial sense, either by supposing that the soul itself is God, or that it has a share of the divine.

Th 448

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis physicorum libros commentaria 86.25–87.10 (ed. Vitelli) [*Ph.* 1.4.187a10]

Heraclitus posits fire as his single principle; Anaximenes [posits] air; Thales, water; Anaximander, the intermediate. These men have two approaches. Some of them generate the other things by rarefaction and condensation of the element they identify (as Thales, positing air as his element, said that when rarefied this makes fire, and when condensed slightly it makes wind, when condensed more it makes clouds, and [when condensed] still more [it makes] water, and [when condensed] still more [it makes] all earthy things) ...

Th 449

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis physicorum libros commentaria 110.4–7 (ed. Vitelli) [*Ph.* 1.5.188a19]

... And those who generate the other things by rarefaction or condensation of the element that they identify, including Thales, all posit the contraries as principles, for rarefaction and condensation are contraries.

Th 450

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis physicorum libros commentaria 116.18–21 (ed. Vitelli) [*Ph.* 1.5.188a19]

... And ‘those [who say] rare and dense,’ including Thales. For after positing air as matter he forms the other things from it by means of rarefaction and condensation.

Th 451

Iohannes Philoponus (ca. 490–ca. 575 CE)

In Aristotelis physicorum libros commentaria 123.14–17 (ed. Vitelli) [*Ph.* 1.5.188b26]

Those who have taken as principles either the hot and cold (like Parmenides) or the rare and dense (like Thales) or the great and small (like Plato) all take principles that are more familiar to perception ...

Th 458

Olympiodorus (the Alchemist ?), possibly identical with the Neoplatonist Olympiodorus born between 495 and 505 CE, still teaching in 565 CE)

Commentary on Zosimus’s Concerning Energeia 2.20.4–5 (ed. Berthelot/Ruelle)

And notice that Thales of Miletus, looking at the substance of God, said that he [God] is infinite, for God has infinite power.

Th 475

Isidore of Seville (ca. 560–636 CE)

Etymologiae 8.6.18 (ed. Lindsay)

... Thales of Miletus, understood God in a spiritual way, as mind.

Th 485

Pseudo-Ammonius (? mid 9th cent. CE)

The views of the Philosophers 13.1–28 (ed. Rudolph)

... [Thales] said that this element [water], which is first and last, is the element of corporeal things and bodily things, but not of things that are unqualifiedly spiritual ...

Th 495

Suda (10th cent. CE)

Lexicon theta 17.1–18.3 (ed. Adler)

... Thales was the first to bear the title of Sage and was the first to say that the soul is immortal ...

Th 499

Siwan al-hikma (*The Vessel of Wisdom*) (10th cent. CE)

The Vessel of Wisdom 13–17 (ed. Dunlop)

... [Thales] believed that the first thing which God (be He exalted) created was water and that all entities dissolved first into the water. He was brought to this view by the fact that all things come from moisture.

Th 516

Michael Psellus (ca. 1018–ca. 1078 CE)

Opuscula psychologica, theologica, daemonologica 13.32.18–23 (ed. O'Meara)

Some declare the soul to be incorporeal, others [declare it to be] body, and of the latter some say it is simple and others that it is composite, and of the latter some say that it composed of continuous things and others of discontinuous. Of those [who say that it is] simple, some [say it is] aetherial... others watery, like Thales ...

Th 517

Michael Psellus (ca. 1018–ca. 1078 CE)

Opuscula psychologica, theologica, daemonologica 13.44.20–21 (ed. O'Meara)

Thales says that there is soul in every body ...

Th 525

Georgius Cedrenus (11th/12th cent. CE)

Compendium historiarum 1.275 (ed. Migne PG 121.312A)

... Thales was... the first to say that the soul is immortal ...

Th 558

Sophonias (turn of the 14th cent. CE)

In Aristotelis libros de anima paraphrasis §14.19–21 (ed. Hayduck)

... Thales too supposed that of the principles the soul also causes motion, since in fact he stated that the magnet is animate because it moves iron; but according to him, water is the principle of the magnet and of all things.

Th 559

Sophonias (turn of the 14th cent. CE)

In Aristotelis libros de anima paraphrasis 36.9–11 (ed. Hayduck)

... Some declare that it [the soul] is intermingled in the universe and suppose that every body is animate. This is why Thales too believed that all things are full of gods.

Th 564

Gnomologium Vaticanum (14th cent. CE) 316–321 (ed. Sternbach)

When asked whether anyone does anything without god knowing, Thales the Sage replied, 'not even if he is just thinking [of doing it]'.

[317] When someone asked him whether he should swear that he had not committed adultery, he told him not to swear, declaring that the oath would harm him more than the deed.

[318] When his mother encouraged him to marry, he said that it was not yet the right time, and later when he was being pressed [by her] he said that the right time had passed.

[319] Once he was gazing at the sky at night and as a result fell down a well, his young servant girl who was attending him came when he called and with difficulty managed to pull her master up with the help of a ladder. 'Thales,' she said, 'because you were looking at things in the sky you did not see the things on the earth'.

[320] Thales said, when asked What is the oldest of existing things? 'God, for he is unbegotten'.

What is most beautiful? 'The *cosmos*, for it is the creation of god.'

What is largest? 'Place, for it has room for everything'.

What is swiftest? 'Intelligence, for it quickly moves through everything.'

What is strongest? 'Necessity, for it rules all things'.

What is wisest? 'Time, for it finds everything out'.

[321] The same man said, when asked What is difficult? 'To know oneself'.

What is easy? 'To tell someone else what to do.'

What is most pleasant? 'Success'.

What is divine? 'That which has neither beginning nor end'.

What had he seen that is hard to find? 'An aged tyrant'.

How should a person best endure misfortune? 'If he sees his enemies even worse off.'

What is the best and most just way to live? 'If we do not do what we blame others for doing.'

Who is happy? 'He who is healthy in body, wealthy in soul, and well educated in nature'.

Th 578

Scholia on Plato (after the 6th cent. CE, possibly by Hesychius)

Scholia in Platonem, Res publica 600A1–10 (ed. Greene)

[Thales] was the first of the Greeks... to claim that even inanimate things somehow possess soul, judging from magnets and amber. He held that water is the principle of the elements, that the *cosmos* possesses soul and is full of *daimons* ...