

ARCHELAUS ON COSMOGONY AND THE ORIGINS OF SOCIAL INSTITUTIONS

GÁBOR BETEGH

I

ANDRÉ LAKS entitled his magisterial book on Diogenes of Apollonia *Diogène d'Apollonie: la dernière cosmologie présocratique*. The second revised edition, published in 2008, contains some important additions, modifications, and corrections. There is also a change in the subtitle. Instead of *la dernière cosmologie présocratique* the new subtitle is simply *édition, traduction et commentaire des fragments et témoignages*.¹ A fully justified change, I think. The point is not merely that modern commentators debate where to draw the line; more interestingly, already our ancient sources standardly point out that not Diogenes but Archelaus of Athens was the last Presocratic natural philosopher who propounded a full-fledged cosmology. This is, for instance, how Diogenes Laertius introduces him:

Ἀρχέλαος Ἀθηναῖος ἢ Μιλήσιος, πατρὸς Ἀπολλοδώρου, ὡς δέ τινες, Μίδωνος, μαθητῆς Ἀναξαγόρου, διδάσκαλος Σωκράτους. οὗτος πρῶτος ἐκ τῆς Ἰωνίας τὴν φυσικὴν φιλοσοφίαν μετέγαγεν Ἀθήνας, καὶ ἐκλήθη φυσικός, παρὰ καὶ ἔληξεν ἐν αὐτῷ ἡ φυσικὴ φιλοσοφία, Σωκράτους τὴν ἠθικὴν εἰσαγαγόντος. (D.L. 2. 16= 60 A 1 DK, part)

Archelaus of Athens or Miletus, son of Apollodorus or, according to some, of Midon. He was a pupil of Anaxagoras and teacher of Socrates. He was the first to transfer natural philosophy from Ionia to Athens, and he was

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¹ A. Laks, *Diogène d'Apollonie: la dernière cosmologie présocratique* (Lille, 1983), and id., *Diogène d'Apollonie: édition, traduction et commentaires des fragments et témoignages*, 2nd rev. edn. (Sankt Augustin, 2008). All translations are my own unless otherwise noted. The text of Diogenes Laertius is from Dorandi's edition; the text of Aëtius, unless otherwise noted, is from Mansfeld and Runia's.

called a natural philosopher, so natural philosophy also came to an end with him as Socrates introduced moral philosophy.

Hippolytus, our other main source on Archelaus, closes his account in a similar vein:

ἡ μὲν οὖν φυσικὴ φιλοσοφία ἀπὸ Θάλητος ἕως Ἀρχελαίου διέμεινε· τούτου γίνεται Σωκράτης ἀκροατής. (Hipp. *Haer.* 1. 10 Marcovich)

So, then, natural philosophy continued to exist from Thales until Archelaus; it is of this latter that Socrates became the disciple.

Of course, Archelaus' role as the presumed teacher of Socrates makes him almost analytically the last Presocratic. Yet, as I shall argue, the doxographical tradition singles out Archelaus as the one who is not only the last in the line of Presocratic natural philosophers, but also someone who went beyond this tradition. This is how Diogenes Laertius continues his introduction (D.L. 2. 16= 60 A 1 DK, part):

ἔοικεν δὲ καὶ οὗτος ἄψασθαι τῆς ἠθικῆς. καὶ γὰρ περὶ νόμων πεφιλοσόφηκεν καὶ καλῶν καὶ δικαίων· παρ' οὗ λαβὼν Σωκράτης τῷ αὐξήσαι εἰς τὸ (ἄκρον) εὐρεῖν ὑπελήφθη.²

But he [sc. Archelaus], too, seems to have touched upon ethics. For he philosophized also about laws and about the fine and the just. Socrates took this over from him, but developed it to such an extent that he was supposed to have invented it.

Remarkably, in his review of the three parts of philosophy, Sextus Empiricus singles out Archelaus among the Presocratics as having combined natural philosophy and ethics:

τῶν δὲ διμερῆ τὴν φιλοσοφίαν ὑποστησαμένων Ξενοφάνης μὲν ὁ Κολοφώνιος τὸ φυσικὸν ἅμα καὶ λογικόν, ὡς φασὶ τινες, μετήρχετο, Ἀρχελαος δὲ ὁ Ἀθηναῖος τὸ φυσικὸν καὶ ἠθικόν· μεθ' οὗ τινες καὶ τὸν Ἐπίκουρον τάττουσιν ὡς [καὶ] τὴν λογικὴν θεωρίαν ἐκβάλλοντα. (S.E. *M.* 7. 14 Mau–Mutschmann=60 A 6 DK, part)

Of those who maintained that philosophy has two parts, Xenophanes of Colophon, as some people say, pursued the physical and the logical parts, whereas Archelaus of Athens pursued *the physical and the ethical parts*; with him some people also classify Epicurus as rejecting logical reflection. (trans. Bett)

² ἄκρον) is a supplement by Diels, accepted by Dorandi in his 2013 Cambridge edition.

The question I am interested in is not whether Sextus and his source were right in claiming that Archelaus was the only Presocratic to pursue natural philosophy *and* ethics, or at least the prime example of that combination. For most of us would agree that Heraclitus, Empedocles, Democritus, and others had interesting ethical views as well. Rather, what I find worth investigating is what feature, or features, of Archelaus' work marked him out for this role in the eyes of the ancients. There could of course be an easy historiographical answer to this question. One could simply say that the authors of *diadochai*—those who arranged the philosophers into chains of teacher–disciple relations—felt the need to make the transition within the Ionian tradition to Socrates smoother, and therefore attributed a little bit of ethics to the presumed teacher of Socrates. I shall try to show, however, that the attribution of some specific contribution in the sphere of ethics to Archelaus is not simply the invention of the authors of *diadochai*. What I shall argue for on the basis of some scattered pieces of evidence is that what distinguished Archelaus was that he appended to his cosmogonical narrative a *Kulturentstehungslehre*, a story about the origins of social, political, and cultural institutions.

I shall argue that tying together a cosmogony (including the emergence of living beings) and a *Kulturentstehungslehre* was not a traditional feature of Presocratic treatises, as has sometimes been maintained, but a novelty introduced during the lifetime of Socrates. I shall also examine why authors—both before and after Socrates—could find it preferable to keep the two accounts separate. This issue will lead me also to a brief examination of the relationship between the narratives of Timaeus and Critias, where the stories about the cosmos and living beings and the origins of communities, I shall argue, are consciously kept apart. I shall also briefly discuss other contemporaries of Archelaus, such as Antiphon and Democritus, who might have contributed to the same project of bridging the two narratives. Finally, I shall try to show that the conjunction of the two narratives has important theoretical ramifications, as Plato fully acknowledged in his criticism of irreligiosity in *Laws* 10, and could reinforce the negative public perception of natural philosophy, as evinced in Aristophanes' *Clouds*. Correspondingly, I shall put forward some evidence which suggests that Archelaus has a more important role in both the *Clouds* and *Laws* 10 than is customarily acknowledged. More

generally, I would like to show that Archelaus might have been a more important figure in the intellectual life of classical Athens than is usually thought.

In a way this is also an effort to react to the recent trend of leaving Archelaus completely out of the picture in standard reference works on the Presocratics.³ To be sure, I am not suggesting that Archelaus was a philosophical genius by any standard. On the other hand, I do wish to show that we can have a better understanding of the last generation of Presocratic philosophy, and the reception of it in Athens, if we keep him in view. I believe that he should receive at least the slimmest of chapters in future handbooks of Presocratic philosophy, as he had once in Guthrie's *History* and KRS.

³ Archelaus had at least a brief discussion in W. K. C. Guthrie, *A History of Greek Philosophy [History]*, ii. *The Presocratic Tradition from Parmenides to Democritus* (Cambridge, 1965), 339–44, and a five-page chapter in G. S. Kirk, J. E. Raven, and M. Schofield, *The Presocratic Philosophers: A Critical History with a Selection of Texts* [KRS] (Cambridge, 1983), 385–9. Yet he is customarily left out of more recent authoritative treatments of Presocratic philosophy. There is not a single mention of him in P. Curd and D. W. Graham (eds.), *The Oxford Handbook of Presocratic Philosophy* (Oxford, 2008), and he is left out of P. Curd and R. D. McKirahan, *A Presocratics Reader: Selected Fragments and Testimonia* (Indianapolis, 2011), and McKirahan's more comprehensive *Philosophy before Socrates: An Introduction with Texts and Commentary* (Indianapolis, 2010). He is missing from Dan Graham's even more extensive selection of Presocratic fragments (*The Texts of Early Greek Philosophy: The Complete Fragments and Selected Testimonies of the Major Presocratics* (Cambridge, 2010)), and his name occurs in only a single footnote in A. A. Long (ed.), *The Cambridge Companion to Early Greek Philosophy* (Cambridge, 1999) (at 43 n. 35). Again, no mention of him in the two excellent recent introductions to the Presocratics, one by James Warren (*Presocratics* (Stocksfield, 2007)) and another by Giannis Stamatellos (*Introduction to Presocratics: A Thematic Approach to Early Greek Philosophy with Key Readings* (Chichester, 2012)). And the phenomenon is not limited to English-language publications. For instance, Archelaus is not included in either Christof Rapp's collection (C. Rapp, *Die Vorsokratiker: Die Fragmente und Quellenberichte* (Stuttgart, 2008)) or the new Reclam *Vorsokratiker* edited by J. Mansfeld with O. Primavesi (*Die Vorsokratiker* (Stuttgart, 2011)). Nor does he appear in Maria Michela Sassi's remarkable recent book on early Greek philosophy (*Gli inizi della filosofia: in Grecia* (Turin, 2009)). And the list could be continued. The most recent systematic appraisal of Archelaus is in V. Tilman, 'Archélaos d'Athènes' ['Archélaos'], *Revue de philosophie ancienne*, 18 (2000), 65–107. For recent accounts of Socrates' relationship to Archelaus see A. Patzer, 'Sokrates und Archelaos: historische und fiktionale Texte über den jungen Sokrates' ['Sokrates'], in W. von der Weppen and B. Zimmermann (eds.), *Sokrates im Gang der Zeiten* (Tübingen, 2006), 9–56, and D. W. Graham, 'Socrates on Samos' ['Socrates'], *Classical Quarterly*, NS 58 (2008), 308–13.

II

Let me start with what we can know about the status of ethical topics and *Kulturentstehungslehre* in Archelaus' theory. For the time being I shall skip the earlier stages of Archelaus' cosmogony and pick up the narrative when the macrocosmic structure is already in place, the flat earth is fixed in the centre, and the heavenly bodies are carried around it by the whirling air. Everything is thus there for life to develop on earth, and indeed, from the earth. I am quoting Hippolytus, one of our major sources on Archelaus:

περὶ δὲ ζώων φησὶν ὅτι θερμαινομένης τῆς γῆς τὸ πρῶτον ἐν τῷ κάτω μέρει, ὅπου τὸ θερμὸν καὶ τὸ ψυχρὸν ἐμίσγεται, ἀνεφαίνετο τὰ τε ἄλλα ζῶα πολλὰ καὶ ἄνθρωποι, ἅπαντα τὴν αὐτὴν δίαιταν ἔχοντα, ἐκ τῆς ἰλύος τρεφόμενα—ἦν δὲ ὀλιγοχρόνια—ὑστερον δὲ αὐτοῖς ἢ ἐξ ἀλλήλων γένεσις συνέστη. (Hipp. *Haer.* 1. 9. 5.=60 A 4 DK)

On the topic of the animals he says that when the earth was first warmed up in the lower part, where the hot and the cold were mixing, many other animals as well as human beings appeared, all of which had the same regimen, given that they all were nourished by the mud. But they lived for a short time.⁴ Later on generation from one another was established.⁵

Hippolytus then continues (1. 9. 6):

καὶ διεκρίθησαν ἄνθρωποι ἀπὸ τῶν ἄλλων καὶ ἡγεμόνας καὶ νόμους καὶ τέχνas καὶ πόλεις καὶ τὰ ἄλλα συνέστησαν.

And human beings got separated from the other animals, and leaders and laws and crafts and cities were established.

This last bit, briefly listing the topics covered in the rest of the story, and mentioning the establishment of laws, political institutions, and communities, is what Diogenes Laertius apparently refers to when he writes in his introduction that Archelaus 'also had a philosophical theory about laws and about the fine and the just'. Regrettably,

⁴ Alternatively: 'but this only lasted for a short time'.

⁵ Incidentally, the origin of life from the earth is probably the basis of yet another account of Archelaus' material principle. For according to Epiphanius, 'Archelaus . . . the natural philosopher declared that it is from the earth that everything was born. For this is the principle of the universe, as he said' (*De fide* 9. 9 (*Panarion* 3. 2. 9)=60 A 9 DK). The account apparently ignores the previous stages of Archelaus' cosmogony, and hence suggests that truncated versions circulated which started only with the emergence of life. As we shall see, this is also the point that the Epicureans pick up from Archelaus.

all we can know about the actual contents of this theory is what Diogenes adds a little later, and according to which

καὶ τὸ δίκαιον εἶναι καὶ τὸ αἰσχρὸν οὐ φύσει ἀλλὰ νόμῳ. (D.L. 2. 16=60 A 1 DK, part)

the just and the ignoble are not by nature but by convention.

Then, a further little snippet of information comes from the *Suda*'s entry on Archelaus:

συνέταξε δὲ Φυσιολογίαν καὶ ἐδόξαζε τὸ δίκαιον καὶ αἰσχρὸν οὐ φύσει εἶναι, ἀλλὰ νόμῳ. συνέταξε καὶ ἄλλα τινά. (*Suda*, s.v. Archelaus=60 A 2 DK)

He composed a work called *Enquiry into Nature* and taught that the just and the ignoble are not by nature, but by convention. He also composed some other works.

What is significant in this testimony is not the title, but rather that the formulation gives support to the point that Archelaus expounded his theory about the origins of moral norms in the work in which he wrote about the origins of the cosmic order. It is this work in which he discussed the just and the ignoble, mentioned also by Diogenes, whereas he wrote some other works too, the contents of which are not specified. (Incidentally, Plutarch, in *Cimon* 4. 1–10=60 B 1 DK, informs us that Archelaus also composed poetic works.)

'Is that all?' you might ask; 'Why all the brouhaha over this?' For indeed, it seems only natural that once you have conducted your narrative about the history of the cosmos to the point where animal life and human beings emerge, you do not just stop there, but continue the story and relate the origins of society and political institutions as well.

This was apparently the guiding intuition of Gérard Naddaf, who in *The Greek Concept of Nature* (originally published in French under the title *L'Origine et l'évolution du concept grec de phusis*)⁶ made a sustained effort to show that the Presocratic tradition, all through its history from Anaximander to Anaxagoras, from Ionia to Italy, contained not only a cosmogony and a zoogony, but also what Naddaf calls a 'politogony'—by and large identical to what I have been calling *Kulturentstehungslehre*. Few, however, have found

⁶ G. Naddaf, *L'Origine et l'évolution du concept grec de phusis* (Lewiston, NY, Queenston, Ont., and Lampeter, 1992), and id., *The Greek Concept of Nature* (Albany, NY, 2005).

Naddaf's attempt successful. As his reviewers, Malcolm Schofield and Jaap Mansfeld, agree, Naddaf's study has the merit of showing *negatively* that even if one leaves no stone unturned, as Naddaf does, one simply cannot find the traces of 'politogony' in standard Presocratic narratives.⁷ (It is worth noting, by the way, that Naddaf has only two passing references to Archelaus in the whole book.)

So here is the question: if it seems so trivial that someone like Archelaus continued his cosmogony with a *Kulturentstehungslehre*, why are we unable to find any sign of a comparable project in the works of previous cosmologists?

III

Let me start with a historical point. It has often been observed that the cosmogonical tradition issues from, or even starts with, Hesiod's *Theogony*. Now the *Theogony* tells us how from an assumed initial stage the gods representing the major structural parts of the physical world emerged, how the family of gods expanded and populated this world, and how Zeus established and consolidated his divine rule. The narrative, in its traditional version, stops with the list of goddesses who bore children from mortal partners. This limitation is understandable in so far as with this Hesiod has fulfilled his announced programme of singing about the birth of the deathless gods and goddesses (*Th.* 21). After all, this is a *theogony*. The result is that even though mortals are occasionally mentioned in the poem, and we do hear about their origins (*Th.* 559–612), we hear nothing about the way in which *their* world is organized, and how that structure came about. All that is left to another poem, the *Works and Days*. It is also in the *Works and Days* that Hesiod offers an aetiology of the human condition by providing a narrative about its origins. Gods are obviously actively involved in this story as well, yet the focus is on human society. I am not claiming that Hesiod's division of subjects between the *Theogony* and the *Works and Days* determined the scope of Presocratic cosmogonical narratives—it could, however, have a significant effect on this aspect of the tradition.

⁷ J. Mansfeld, review of G. Naddaf, *L'Origine et l'évolution du concept grec de physis*, in *Mnemosyne*, 50 (1997), 754–8, and M. Schofield, review of G. Naddaf, *The Greek Concept of Nature*, in *Classical Review*, NS 56 (2006), 14–16.

Surely, individual Presocratics could have their own theoretical and other reasons for not going beyond anthropogony. These possible individual motivations notwithstanding, there seems to be at least one overarching consideration, pertaining to the type of ontological and explanatory reductivism that characterizes much of Presocratic natural philosophy. An explanatory framework which operates with basic stuffs and elements, and the active mechanical forces and dynamism among these elements, can deliver an account not merely of the way in which the large-scale structures of the cosmos got organized, but also of how the same stuffs, under the effect of the same forces, build up the anatomy and physiology of human beings and other animal species. Yet it is *prima facie* plausible to say that the explanatory power of this basic ontology stops there. The hot and the cold, air and fire, condensation and rarefaction, have not much purchase when it comes to explaining the origin of political and cultural institutions.

Let me illustrate this point by reference to Anaxagoras. In his seminal paper on the origins of social contract theory, Charles Kahn also examined the question when or by whom *Kulturentstehungslehre* was appended to cosmogony for the first time.⁸ He admits explicitly that as far as the doxographical evidence goes, Archelaus is clearly the first on record. Kahn, however, wants to deny Archelaus' originality, and claims, in a way comparable to Naddaf, that *Kulturentstehungslehre* had always been part of Ionian narratives from the time of Anaximander. For this claim Kahn's principal piece of evidence is Anaxagoras 59 B 4a DK (=Simpl. *In Phys.* 34. 29–35. 9 Diels)—quite notably, nothing earlier comes into view. It will be worthwhile to quote the fragment *in toto*:

τούτων δὲ οὕτως ἐχόντων χρῆ δοκεῖν ἐνεῖναι πολλά τε καὶ παντοῖα ἐν πᾶσι τοῖς συγκρινόμενοις καὶ σπέρματα πάντων χρημάτων καὶ ἰδέας παντοίας ἔχοντα καὶ χροιάς καὶ ἡδονάς. καὶ ἀνθρώπους τε συμπαγῆναι καὶ τὰ ἄλλα ζῶα ὅσα ψυχὴν ἔχει. καὶ τοῖς γε ἀνθρώποισι εἶναι καὶ πόλεις συνωκημένας καὶ ἔργα κατεσκευασμένα, ὡσπερ παρ' ἡμῖν, καὶ ἡέλιόν τε αὐτοῖσι εἶναι καὶ σελήνην καὶ τὰ ἄλλα, ὡσπερ παρ' ἡμῖν, καὶ τὴν γῆν αὐτοῖσι φύειν πολλά τε καὶ παντοῖα, ὧν ἐκείνοι τὰ ὀνήϊστα συνενεγκάμενοι εἰς τὴν οἴκησιν χρόνται. ταῦτα μὲν οὖν μοι λέλεκται περὶ τῆς ἀποκρίσιος, ὅτι οὐκ ἂν παρ' ἡμῖν μόνον ἀποκριθεῖη, ἀλλὰ καὶ ἄλλῃ.

These things being so, one must believe (1) that many and varied things are in all the things that are combined, as are also seeds of all things, having

⁸ C. H. Kahn, 'The Origins of Social Contract Theory in the Fifth Century BC', in G. Kerferd (ed.), *The Sophists and their Legacy* (Wiesbaden, 1981), 92–108.

all sorts of shapes, colours, and savours; (2) that humans were also compounded and all the other animals that have souls. And also (3) that human beings, for their part, have cities that have been constructed, and works that have been produced, just as with us; and (4) that they have sun and moon and the rest, just as with us, and their earth grows many different things, of which they collect the most beneficial and bring them into their houses to make use of them. This is, then, what I had to say about separation—that it would not happen only where we are, but elsewhere too.

What Anaxagoras argues for in this passage is that his cosmological, physical explanatory theory has universal application. Given that the initial conditions are the same in all regions of the original mixture, the same cause will bring about the same effect at different locations. First, it will result in the same astronomical macrostructure: there will be earth, sun, and moon, and all the rest, at other locations as well. Then, since the mixture contains the same variety of seeds, the same life forms will develop elsewhere as well. Furthermore, given that human beings have the same type of rationality at other possible locations as well, in the same environment they will form communities and develop the same material culture. The final sentence of the fragment is crucial. For it shows that Anaxagoras has still been focusing on the effects of cosmic separation, and that his aim is to show to what extent its outcomes are uniform. His claim is that the existence of cities and agriculture is derivable from the initial spin in the primeval mixture. It seems clear that the minds of humans assume a role at the last stages, and their uniformity is part of the explanation. Anaxagoras is, however, not interested in the actual *reasons* why human beings endowed with mind started to organize their communities, established their laws, and began to consider some things just, others ignoble. In theories of social contract, and more generally in *Kulturentstehungslehren*, as we can see from the Critias fragment to Protagoras' myth, up until Lucretius, another level of explanation is operative, precisely because the focus is no longer on cosmic forces, but on agency and agents' reasons—why people find it beneficial to agree on certain social norms, or why one person considers it useful to subdue others by persuasion, manipulation, or force, and so on; or, alternatively, how the different gods taught humans different skills, established cultural, political, and religious institutions, and set the norms for societies.

All this is, however, missing from Anaxagoras' text. It is note-

worthy that Anaxagoras could also have made reference to the uniform working of *nous*, the rationality that is also inherent in humans, in order to explain why they would come up with the same kind of material culture and social institutions in different *kosmoi*. Anaxagoras' overall framework contains the conceptual and explanatory resources to come up with a naturalistic theory of the origins of culture. But, quite remarkably, he does not mention anything like that. Note also that the last sentence brings a closure—this is how much Anaxagoras wanted to say on the topic. Anaxagoras, then, mentions the emergence of cities and the material culture of human beings—thus far Kahn is right. Yet Anaxagoras is apparently interested in all this only in so far as these phenomena are related to the cosmological processes: he is *not* interested in them for their own sake. And this, I suggest, is precisely why Diogenes Laertius' characterization of Archelaus—that he 'seems to have touched upon ethics. For he also had a philosophical theory [*πεφιλοσόφηκεν*] about laws and about the fine and the just'—cannot apply to Anaxagoras. There is in Anaxagoras no proper philosophical reflection on the origin and nature of the laws and social and ethical norms.

Before I move on to the next section, let me add one further point. One could object that at least some cosmologies, from the time of Anaximander, operated also with ethical and political concepts—and most notably with the notion of cosmic justice. It seems to me, however, that even that will not pave the way for a *Kultur-entstehungslehre*, precisely because such a cosmological account will still lack agency and the normative reasons of agents which appear central to *Kulturentstehungslehre*.

IV

At this point it will be worthwhile to take a brief look at the *Timaeus–Critias* complex. It is a commonplace that the *Timaeus*, among other things, is Plato's reflection on the Presocratic cosmogonic tradition, and in a sense the culmination of that tradition. Remarkably, *Timaeus'* narrative also ends with an anthropogony and zoogony, but does not continue with a *Kulturentstehungslehre*. Even more remarkably, the dialogue *does* contain a *Kulturentste-*

hungslehre, but put into the mouth of another character, Critias, who initially states the distribution of topics:

ἔδοξεν γὰρ ἡμῶν Τίμαιον μὲν, ἅτε ὄντα ἀστρονομικώτατον ἡμῶν καὶ περὶ φύσεως τοῦ παντὸς εἰδέναι μάλιστα ἔργον πεποιημένον, πρῶτον λέγειν ἀρχόμενον ἀπὸ τῆς τοῦ κόσμου γενέσεως, τελευτᾶν δὲ εἰς ἀνθρώπων φύσιν· ἐμὲ δὲ μετὰ τοῦτον, ὡς παρὰ μὲν τούτου δεδεγμένον ἀνθρώπους τῷ λόγῳ γεγονότας κτλ. (*Tim.* 27 A 2–8)

We thought that because Timaeus is our expert in astronomy and has made it his main business to know the nature of the universe, he should speak first, beginning with the origin of the world and concluding with the nature of human beings. Then I'll go next, once I'm in possession of Timaeus' account of the origin of human beings, etc. (trans. Zeyl, modified)

Plato thus sticks to the traditional scope of the cosmogonical discourse and makes the cut after zoogony and anthropogony even though he wants his dialogue to include a *Kulturentstehungslehre*. The distribution of topics in the *Timaeus* is a further strong indication that the traditional cosmogonic narratives extend only to zoogony and anthropogony, and do not continue with a *Kulturentstehungslehre*.

The articulation between the respective speeches of Timaeus and Critias has received a penetrating analysis in Sarah Broadie's recent book.⁹ Yet, while Broadie's focus is on the relationship between cosmogony and history, what interests me in the present context is the relationship between cosmogony and *prehistory*. One of the starting points of Broadie's analysis is the keen observation that Critias' speech on antediluvian Athens offers considerably more than what Socrates originally requested. For Socrates did not ask for a 'true' story, and did not expect the story to be about Athens.¹⁰ Let me now add a further point to this. Socrates did not ask for a story about the *origins* of the city either; he only wanted to see the city—already established and fully functional—interacting with other cities in war and peace. The Egyptian priest, and following him Solon and Critias, nonetheless also tells the story of the foundation of Athens, the origin of its inhabitants, and the ways in which their political system and laws were first established and their education introduced.

This part of the narrative is present in both Critias' brief preliminary summary preceding Timaeus' speech and the full, although

⁹ S. Broadie, *Nature and Divinity in Plato's Timaeus [Nature]* (Cambridge, 2012) ch. 5.

¹⁰ *Ibid.* 126.

unfinished, account he offers as a sequel to Timaeus' grand monologue. After some methodological provisos (109 B–D), Critias relates in the longer version how the inhabited earth was divided up among the gods, peacefully and by common consent, for strife would not be fitting for gods. In the next step the gods, each in their allotted land, started to breed, shepherd, and guide human beings, not by force but by persuasion.¹¹ We then learn that Athena and Hephaestus received a region in common because of the closeness of their natures, and especially because of their shared love of arts and wisdom. Athena was also given the seeds of the people of the land from the earth and Hephaestus (*Tim.* 23 E). Then, either all by herself (as we have it in the preliminary summary) or with the help of Hephaestus (according to the longer version in the *Critias*), she nurtured the people of Attica, founded the city of Athens, educated the people, and 'gave them a conception of the political order'.¹² It soon turns out that Athena not merely taught the arts and sciences to prehistoric Athenians, but also instructed them to establish a socio-political organization based on the separation of classes that characterizes the city Socrates depicted on the previous day. It is not only the bare outlines of the social structure that are due to Athena. For instance, it can be derived from the martial nature of the goddess that the city gives the same military training to men and women.

It is by starting with a narrative of foundation that Critias can make good his original promise of picking up Timaeus' story at the point when human beings are created; without a *Kulturentstehungslehre*, there would be a temporal, and more importantly also an explanatory, gap between the two narratives. In important ways, Critias' prehistory seamlessly continues Timaeus' narrative.

Note, however, that the main agents of Critias' *Kulturentstehungslehre*—as opposed to the rest of his story—are not the human beings created by the Demiurge and his auxiliaries in Timaeus' account, but the gods. These gods, moreover, are not the cosmic, or cosmological, gods, but the traditional Olympians, Athena, Hephaestus, and their relatives. To be sure, the traditional gods do make their appearance already in Timaeus' narrative; the account of their origin and natures, however, is explicitly demarcated from

¹¹ For a closely parallel account of divine shepherds of early peoples, see *Laws* 4, 713^A–714^A.

¹² *Crit.* 109 D 2: ἐπὶ νοῦν ἔθεσαν τὴν τῆς πολιτείας τάξιν.

Timaeus' own discourse since it lies outside the purview of both rational proof and likely reasoning. As Timaeus says:

περὶ δὲ τῶν ἄλλων δαιμόνων εἰπεῖν καὶ γνῶναι τὴν γένεσιν μεῖζον ἢ καθ' ἡμᾶς, πειστέον δὲ τοῖς εἰρηκόσιν ἔμπροσθεν, ἐκγόνοις μὲν θεῶν οὖσιν, ὡς ἔφασαν, σαφῶς δὲ που τοὺς γε αὐτῶν προγόνους εἰδόσιν· ἀδύνατον οὖν θεῶν παῖσιν ἀπιστεῖν, καίπερ ἄνευ τε εἰκότων καὶ ἀναγκαίων ἀποδείξεων λέγουσιν, ἀλλ' ὡς οἰκεία φασκόντων ἀπαγγέλλειν ἐπομένους τῷ νόμῳ πιστευτέον. οὕτως οὖν κατ' ἐκείνους ἡμῖν ἢ γέनेσις περὶ τούτων τῶν θεῶν ἔχέτω καὶ λεγέσθω. (*Tim.* 40 D 6–E 4)

As for the other divine beings, it surpasses our task to know and speak of how they came to be. We should accept on faith the assertions of those figures of the past who claimed to be the offspring of gods. They must surely have been well informed about their own ancestors. So we cannot avoid believing the children of gods, even though their accounts lack plausible or compelling proofs [ἄνευ τε εἰκότων καὶ ἀναγκαίων ἀποδείξεων]. Rather, we should follow custom and believe them, on the ground that what they claim to be reporting are matters of their own concern. Accordingly, let us accept their account of how these gods came to be and state what it is. (trans. Zeyl, modified)

Most commentators assume that Timaeus strikes an ironical tone here with his reference to mythical poets speaking about their own ancestors. I, for one, cannot believe this to be the case. Timaeus—and at this point we can just as well speak of Plato—has no intention of getting rid of the traditional gods, even if he is eager to purify the traditional myths of all that is in conflict with his theological principles about the supreme goodness of the gods.¹³

The result is thus twofold. Critias' narrative about the foundation of the city is continuous with Timaeus' narrative in so far as all the main actors of Critias' story are already put on the scene in Timaeus' account. Critias' *Kulturentstehungslehre* is, however, discontinuous with Timaeus' account in so far as the principal characters for the prehistory will be precisely those divine beings whose origin and individuated characteristics are not derivable from the explanatory principles of the rest of the cosmological account, and are clearly flagged as external additions. In a way, what Plato expresses by Timaeus' caveats is parallel to what we have seen in

¹³ It is also noteworthy that he is referring not simply to the most traditional theogonic narratives, such as that of Hesiod—Hesiod, after all, did not claim to be a direct descendant of the gods—but to those of more 'divine' poets such as Orpheus. This departure from Hesiod also allows him to start with Ouranos and Gaia, i.e. two cosmological gods who have been introduced in Timaeus' own cosmological narrative, and whose 'birth' is thus still part of Timaeus' 'likely story'.

Anaxagoras: the same explanatory framework is not applicable to cosmology and *Kulturentstehungslehre*. However, what the articulation between Timaeus' cosmogony and Critias' prehistory shows is that the difference between the two explanatory schemes cannot be reduced to the difference between a mechanical, physical framework on the one hand, and a rational agency-based model on the other. In the Platonic context *both* sides are fundamentally based on rational, goal-directed agency. Yet the two domains, as it turns out, still resist explanatory unification.

I shall not be able to give a full elucidation of this fact here. Let me nonetheless offer a few considerations. First, in so far as Critias' narrative is continuous not only with Timaeus', but even more so with Socrates' description of the just city, its status will be necessarily different. Timaeus' account is meant to be aetiological and explanatory of the way things are in the natural world around us and constituting us. As opposed to this, Critias' narrative may have a comparable aetiological force only for the Egyptian society of the fictional world, where things are still supposed to be arranged in accordance with what was once established by the goddess. Because of the series of cataclysms and other factors, nothing remains of this in Athens—Critias' *Kulturentstehungslehre* can thus have no explanatory force regarding the state of affairs there. On the other hand, his narrative puts an *ought* on current-day Athenians by displaying their divinely instituted and sanctioned original, but forgotten, social order. And it is at this point that Critias' story might rejoin, at another level, Timaeus' explanation of the cosmic order, which also puts an *ought* on us, at the level of the individual, by uncovering the original, divinely instituted order in the rational souls of each of us, an order to which we as individuals should return.

Furthermore, Critias' account can explain the differences among various constitutions without the charge of relativism. All of them ultimately derive from gods, shepherding and educating human beings, but the different Olympians have different characteristics. Thus, the prehistoric Athenians could obtain the most philosophical political system because they received it from the goddess of wisdom. Although Critias does not mention it, we can well imagine that a city established, for instance, on the lot of Ares, the god of war, was organized according to different principles, just as the constitution and characteristics of Atlantis are related to the fact that their god is not Athena, but Poseidon. It is, however, not easy to

see how such individualizing features of divine beings—as opposed to humans—could issue from Timaeus' top-down account. Yet the cultural and political identity of the *polis* is based on its relation not to some abstract cosmic divinities, but to its own personalized ancestral gods. The story related by the Egyptian priest is meant to be to some extent revisionary, and is presented as a corrective to the Athenian popular tradition. Nonetheless, it preserves those elements that were considered fundamental to Athenian identity, such as the autochthony of Athenians and, even more crucially, their privileged relation to Athena.

This relationship is at the same time closely parallel to what we can observe in Plato's *Laws*. In his address to the citizens of the new city, the Athenian explicitly circumscribes the groups of gods who will be worshipped in the city: the Olympians, the chthonians, daimones, heroes, and ancestral gods. However, the cosmological argument of *Laws* 10, even if successful, will not deliver these gods and other divine beings who are worshipped in the public rites of the *polis* and who have a key role in providing the cohesion and cultural identity of the community.

With this, we have of course arrived at the well-worn distinction between *theologia naturalis* and *theologia civilis*. Yet, the way we have reached this point, starting from the question of the discontinuity between cosmogony and *Kulturentstehungslehre*, might give some further shades to the picture. In particular, it might show a further facet of the often remarked phenomenon that the public showed no intolerance towards the demythologized explanations of the physical world in Presocratic cosmologies prior to Anaxagoras' trial in Athens. What ultimately counts for the *polis* is its special relation to its ancestral gods: how they founded the city, what role *these* gods played in the aetiological myths about the city's cultic places and practices, ancestral institutions, and skills. Yet, as we have just seen, cosmologists were not supposed to say anything on these topics, since their narratives stopped before they reached these acts of foundation. Moreover, at least theoretically, cosmologists could leave open the question whether and, if so, how the traditional gods of the city could be incorporated into their world, just as Timaeus could incorporate the traditional gods simply by invoking tradition, and without integrating them into his explanatory framework.

At this point Anaxagoras fragment 4a DK (=Simpl. *In Phys.* 34.

29–35. 9 Diels), considered above, becomes significant again. For even if as I have argued it does not include a *Kulturentstehungslehre* proper, the reference to the role of cosmic separation in the emergence of cities, agriculture, and crafts leaves very little room—if any—for the involvement of gods in the organization of human culture. Apparently, these cities do not need gods for their foundation, and farming and viticulture can be learnt without Demeter and Dionysus. It would obviously be foolish to suggest that fragment 4a was *the corpus delicti* in the charge of *asebeia* against Anaxagoras. But, at any rate, it must have rendered the task of the defence more difficult.

V

If the fusion of cosmogony and *Kulturentstehungslehre* was such a notable and consequential innovation, and Archelaus was indeed the first, or one of the first, to practise it, would we not expect this innovation to have been noted by his contemporaries? But is there any sign of this? In what follows, I shall try to show that there are indeed strong indications that contemporaries did take notice of it. However, let me first make a preliminary remark, for it is always tricky to try to attribute a signal achievement to an apparently minor thinker. Note that all the evidence I have marshalled and all the points I have made thus far do not commit me to an image of Archelaus as one who carefully thought through all these difficulties and factors, and made a break with tradition on the basis of thorough theoretical considerations. It is just as possible that he learnt about physical theories becoming fashionable around Anaxagoras, but that he also became acquainted with the narratives of sophists such as Protagoras about the origins of societies and the differences among them, and simply stitched the two types of narrative together, without giving much thought to it. Yet even on such a scenario, others could have realized what the stakes and possible ramifications of such a move are.

So, back to the question whether there are any signs that contemporaries understood the significance of the innovation. As André Laks has recently emphasized, we have two major documents in which the Presocratic cosmological tradition is criticized for its deleterious consequences for ethics and theology: Aristophanes'

Clouds and Plato's *Laws* 10.¹⁴ I would like to submit that the conjunction of cosmological, physical doctrines and theories about the origins of social and political norms in general, and the contribution of Archelaus in particular, are material to both of these texts.

I have examined the presence of Archelaus in the *Clouds* in a separate paper,¹⁵ so let me now limit myself to a summary of my principal arguments.

Ever since Diels formulated the view, it has been customarily held that even if the tenets Aristophanes puts into the mouth of Socrates are a ragbag of comically distorted doctrines coming from different sources, Socrates' physical 'theories' are modelled on those of Diogenes of Apollonia.¹⁶ This contention is primarily based on Socrates' first exchange with Strepsiades, in which the philosopher explains why he is suspended in a basket:

οὐ γὰρ ἂν ποτε
ἐξηγῆρον ὀρθῶς τὰ μετέωρα πράγματα
εἰ μὴ κρεμάσας τὸ νόημα καὶ τὴν φροντιδα
λεπτὴν καταμείζας εἰς τὸν ὄμοιον ἀέρα.
(*Clouds* 227–30)

For I would never discover things in the sky correctly except by suspending mind and commingling my subtle thought with its like, the air.¹⁷

According to the scholarly consensus, Socrates' claim that his mind or thought is similar to, or is the same as, air echoes the views of Diogenes of Apollonia, as formulated, for example, in fragments 4 and 5:

. . . ἄνθρωποι γὰρ καὶ τὰ ἄλλα ζῶα ἀναπνέοντα ζῶει τῷ ἀέρι. καὶ τοῦτο αὐτοῖς

¹⁴ A. Laks, *Introduction à la 'philosophie présocratique'* (Paris, 2006), 14 n. 2; and id., 'Encore une histoire primordiale de la théorie' ['Encore'], in A. Laks and R. Saetta Cottone (eds.), *Comédie et philosophie: Socrate et les 'présocratiques' dans les Nuées d'Aristophane* (Paris, 2013), 227–34 at 230–2.

¹⁵ 'Socrate et Archélaos dans les Nuées', in Laks and Saetta Cottone (eds.), *Comédie et philosophie*, 87–106.

¹⁶ H. Diels, 'Über Leukipp und Demokrit' ['Leukipp'], in *Verhandlungen der 35. Vers. der deut. Philologen und Schulmänner zu Stettin 1880* (Leipzig, 1881), 96–109. For the most detailed statement of this view see P. Vander Waerdt, 'Socrates in the *Clouds*' ['Socrates'], in P. Vander Waerdt (ed.), *The Socratic Movement* (Ithaca, NY, and London, 1994), 48–86. See also Laks, 'Encore'. For detailed studies on the presence of other Presocratics in the *Clouds* see the papers collected in Laks and Saetta Cottone (eds.), *Comédie et philosophie*, and M. Rashed, 'Aristophanes and the Socrates of the *Phaedo*', *Oxford Studies in Ancient Philosophy*, 36 (2009), 107–36.

¹⁷ Translations from the *Clouds* are by Henderson with occasional modifications.

καὶ ψυχὴ ἔστι καὶ νόησις . . . (Simpl. *In Phys.* 152. 18 Diels=64 B 4 DK, part)

. . . humans and other animals live by means of air, by breathing it. And this is for them both soul and intelligence . . .

καὶ μοι δοκεῖ τὸ τὴν νόησιν ἔχον εἶναι ὁ ἀὴρ καλούμενος ὑπὸ τῶν ἀνθρώπων . . . (Simpl. *In Phys.* 152. 21–3 Diels=64 B 5 DK, part)

And it seems to me that that which has intelligence is what men call air . . .

Moreover, in fragment 5 Diogenes maintains also that air is divine and steers all things,¹⁸ which could then be parodied by Socrates' divinization of all the airy phenomena: the Air, the Aither, and the Clouds.¹⁹

What is not taken into account, however, is that there is perfectly good ancient evidence to show that Archelaus, too, taught the relevant doctrines about both the relationship between mind and air and that between air and god. First, Sextus in his survey of the different *archai* lists Archelaus together with Diogenes:

Ἀναξιμένης δὲ καὶ Ἰδαῖος ὁ Ἱμεραῖος καὶ Διογένης ὁ Ἀπολλωνιάτης καὶ Ἀρχέλαος ὁ Ἀθηναῖος, Σωκράτους δὲ καθηγητῆς, καὶ κατ' ἐπίουσι Ἡράκλειτος ἀέρα [sc. πάντων εἶναι ἀρχὴν καὶ στοιχείον]. (S.E. *M.* 9. 360=60 A 7. 1 DK)

¹⁸ Simpl. *In Phys.* 152. 23–5 Diels: καὶ ὑπὸ τούτου πάντας καὶ κυβερνάσθαι καὶ πάντων κρατεῖν· αὐτὸ γάρ μοι τοῦτο θεὸς δοκεῖ εἶναι καὶ ἐπὶ πᾶν ἀφίχθαι καὶ πάντα διαπιθέειν καὶ ἐν παντὶ ἐνεῖναι ('and all men are steered by this and that it has power over all things. For this very thing seems to me to be a god and to have reached everywhere and to dispose all things and to be in everything').

¹⁹ It has also been claimed that Socrates should think that his elevated position in the basket is conducive to superior cognitive achievements because the air is purer and drier higher up; a belief which—the argument goes—is based on Diogenes' view that purer and drier air is better for intelligence, and that the air is purer and drier higher above the ground: 'Thought, as it has been said, is caused by pure and dry air; for a moist emanation inhibits the intelligence; . . . That moisture removes intelligence is indicated by the fact that other living creatures are inferior in intellect, for they breathe the air from the earth and take to themselves moister sustenance. Birds breathe pure air, but have a constitution similar to that of fishes' (Thphr. *De sens.* 44). Yet, despite the surface resemblance, this cannot be Socrates' reason, for he specifies in the verses immediately following the above quotation that 'If I had been on the ground and from down there examined what is up, I would have made no discoveries at all; the earth, you see, simply must forcibly draw to itself the moisture of thought. The very same thing happens also to the watercress' (*Clouds* 231–4). In other words, he is high up in the basket not in order to breathe the purer and drier air higher above the ground, but rather in order to prevent the earth from 'dehydrating' his intelligence; for his cognitive tasks it is preferable to have a due proportion of humidity in his mind. This clearly implies another model than the one put forward by Diogenes of Apollonia. (Cf. P. Demont, 'Socrate et le cresson (Aristophane, *Nuées*, v. 218–238)', in *Stylus: la parole dans ses formes. Mélanges Jacqueline Dangel* (Paris, 2010), 389–97, repr. in *Cahiers du théâtre antique*, 1 (2015), 95–104.)

Anaximenes and Idaeus of Himera and Diogenes of Apollonia and Archelaus of Athens, Socrates' teacher, and according to some Heraclitus [say] that the air . . . is the principle and element of all things.

To this Aëtius adds that Archelaus took the air to be god:

(τίς ἐστὶν ὁ θεός) Ἀρχέλαος ἀέρα καὶ νοῦν τὸν θεόν. (Aët. 1. 7. 14=60 A 12 DK, part)²⁰

Archelaus (maintained that) the god is air and mind.

So this is not a good enough reason to prioritize Diogenes. Then, there are further, more specific, points that are supposed to demonstrate that Aristophanes' Socrates must be drawing on the doctrines of Diogenes of Apollonia. For instance, Socrates in the *Clouds* calls the air 'boundless' and 'immeasurable' (264 ἀμέτρητ'; 393 ἀπέραντον), on which Vander Waerdt comments: the 'view that the natural principle of air is "boundless", to which only Diogenes among the pre-Socratics subscribed'.²¹ This is, however, flatly contradicted by Aëtius, showing that Archelaus, too, thought that the air is infinite:

(περὶ τῶν ἀρχῶν τί εἶσιν) Ἀρχέλαος Ἀπολλοδώρου Ἀθηναῖος ἀέρα ἄπειρον, καὶ τὴν περὶ αὐτὸν πυκνότητα καὶ μάνωσιν. (Aët. 1. 3. 6=60 A 7. 2 DK, part)²²

Archelaus, the son of Apollodoros, of Athens [held that the principle is] the infinite air with its condensation and rarefaction.

Moreover, in the first verse mentioning the boundless air, Socrates claims that the Air keeps the earth aloft (264: ὃς ἔχεις τὴν γῆν μετέωρον)—a view that is also supposed to reflect Diogenes' views. But, yet again, this view is attributed to Archelaus as well. Diogenes Laertius tells us that Archelaus taught that the circular motion of the aither dominates the atmospheric air, which in turn dominates the earth;²³ something that may be parodied in the *Clouds* in the gibes about the supreme rule of Dinos. In sum, all of the doctrines that are customarily listed as evincing the influence of Diogenes of Apollonia are also attributed to Archelaus. If so, I would maintain, it is much more economical to consider Aristophanes' Socrates as taking his views from Archelaus rather than from Diogenes. It is important to note once again that Archelaus was after all well known

²⁰ Text from Diels-Kranz.

²¹ Vander Waerdt, 'Socrates', 74.

²² Text from Mansfeld and Runia (unpublished).

²³ D.L. 2. 17=60 A 1 DK, part: ὅθεν ἢ μὲν ὑπὸ τοῦ ἀέρος, ὁ δὲ ὑπὸ τῆς τοῦ πυρός περιφορᾶς κρατεῖται ('Wherefore the earth is dominated by the air, whereas the air is dominated by the circular motion of fire').

to the Athenian public as the first local natural philosopher. What is more, he was considered to be Socrates' companion and teacher not only by the entire subsequent tradition,²⁴ but already by their contemporaries, such as Ion of Chios,²⁵ whereas we have no direct evidence of the immediate influence of Diogenes on contemporary Athenian life.²⁶

Indeed, even Plato appears to acknowledge that Socrates was influenced by Archelaus' physical ideas. Speaking about his early encounter with natural philosophy in the *Phaedo*, the very first question Socrates mentions is the following: 'Is it when the hot and the cold start to decompose, as some people were saying, that living things grow into a unity?' (trans. Long).²⁷ This is generally accepted by commentators on the *Phaedo* to be a reference to Archelaus' theory of the origin of living beings.²⁸ Burnet even made the intriguing suggestion that the 'someone' whom Socrates heard reading from the book of Anaxagoras (*Phaedo* 97 B 8) is most likely to be the most important Athenian follower of Anaxagoras and the

²⁴ D.L. 2. 16=60 A 1 DK, part; *Suda*, s.v. Archelaus=60 A 2 DK; Hipp. *Haer.* 1. 10=60 A 4 DK, part; Simpl. *In Phys.* 27. 23 Diels=Thphr. *Phys. op.* 228a FHS&G ad fin.=60 A 5 DK; S.E. *M.* 9. 360=60 A 7 DK; Aug. *Civ. Dei* 8. 2=60 A 10 DK; Cic. *Tusc.*, 5. 10; [Gal.] *Hist. phil.* 3. 7; John of Damascus (?), *Passio s. Artemii martyris* 47 Kotter. On the relationship between Socrates and Archelaus see Tilman, 'Archelaos', 60–73, with bibliography.

²⁵ *FGrH* iii. 392F=D.L. 2. 23=60 A 3. 2 DK: Ἴων δὲ ὁ Χίος καὶ νέον ὄντα εἰς Σάμον σὺν Ἀρχελάῳ ἀποδημήσαι ('Ion of Chios said that he [sc. Socrates], when he was young, made a trip to Samos with Archelaus'). The question of how this report can be squared with Plato's claim that Socrates never left Athens has been repeatedly examined; cf. most recently Graham, 'Socrates'. Patzer, 'Sokrates', 11–15, shows conclusively, at least to my mind, that Ion's report is historically correct, and moreover that Ion's wording and the structure of the text exclude the possibility that Socrates and Archelaus travelled together to Samos as part of the Athenian military campaign, as has sometimes been suggested; the reference must be to a private journey.

²⁶ Cf. C. H. Kahn, 'Greek Religion and Philosophy in the Sisyphus Fragment', *Phronesis*, 42 (1997), 247–62 at 251 n. 8: 'The influence of Diogenes of Apollonia on Athenian thought of the fifth century seems to be a figment of modern scholarship without basis in the text.'

²⁷ *Phaedo* 96 B 2–3: ἀρ' ἐπειδὴν τὸ θερμὸν καὶ τὸ ψυχρὸν σηπεδῶνα τιὰ λάβη, ὡς τιwes ἔλεγον, τότε δὴ τὰ ζῶα συντρέφεται;

²⁸ J. Burnet, *Plato's Phaedo* [*Phaedo*] (Oxford 1911), ad loc., with reference to Hippolytus' testimony in 60 A 4 DK, on which see more below. Burnet adds that 'It is significant that Socrates should mention the theory of Archelaus first.' The identification of the reference to Archelaus is accepted by most commentators; cf. e.g. D. Bostock, *Plato's Phaedo* (Oxford, 1986), ad loc.; M. Schoepflin, *Platone: Fedone* (Rome, 2007), ad loc.; F. Trabattini and S. Martinelli, *Platone: Fedone* (Turin, 2011), ad loc., etc.

companion of Socrates: Archelaus.²⁹ On the other hand, it is equally easy to see why Plato—and for that matter Xenophon—had a vested interest in dissociating Socrates from Archelaus as far as possible. For both political and philosophical purposes, Plato had good reason to suppress Socrates' possible connections with natural philosophy, as he clearly does in the *Apology*. This is especially so if, as I shall suggest in the next section, Plato fully realized the dangerous ramifications of Archelaus' views.

Be that as it may, the *Clouds* appears to contain even more specific references to Archelaus' doctrines, such as the theory about the physiology of hearing,³⁰ and the close similarity between Socrates' explanation of the thunderbolt (*Clouds* 404–7) and Archelaus' account of earthquakes (*Sen. Nat.* 6. 12=60 A 16a DK).

But there is more—and this will finally bring us back to the connection between natural philosophy and ethics. As we have seen, our ancient sources emphasize that Archelaus 'also had a philosophical theory about laws and about the fine and the just' (D.L. 2. 16=60 A 16a DK, part). As it happens, this corresponds very closely to the way in which the Weaker Argument introduces itself in the second part of the *Clouds*:

ἐγὼ γὰρ ἤττων μὲν λόγος δι' αὐτὸ τοῦτ' ἐκλήθη
 ἐν τοῖσι φροντισταῖσιν, ὅτι πρῶτιστος ἐπενόησα
 τοῖσιν νόμοις καὶ ταῖς δίκαις τάναντί' ἀντιλέξαι.
 (1038–40)

For this very reason I've earned the name Weaker Argument in intellectual circles, because I pioneered contriving how to argue against *nomoi* and things that are just. (trans. Henderson)

Later, young Pheidippides brags about his newly acquired understanding of the nature of the *nomoi* (1185–6), which also enables him to despise established customs.³¹ Close to the very end of the play we then learn something about what exactly Pheidippides learnt from the Weaker Argument. When his father points out that it is

²⁹ Burnet, *Phaedo*, 97–8. See approvingly e.g. R. Hackforth, *Plato: Phaedo* (Cambridge, 1955), 124 n. 4: 'Whether or not we take this incident as historical, it is natural, as Burnet says, to think of the reader as Archelaus, the successor of Anaxagoras at Athens.'

³⁰ This is already mentioned in Diels's original study as a point of contact with Archelaus ('Leukipp', 196 n. 35).

³¹ 1399–1400: ὡς ἤδ' ἄν καινοῖς πράγμασιν καὶ δεξιόις ὀμλεῖν | καὶ τῶν καθεστῶτων νόμων ὑπερφρονεῖν δύνασθαι ('How sweet it is to be acquainted with novel and clever things, and to be able to look down upon established customs').

nowhere the custom that sons beat up their fathers, Pheidippides answers:

οὐκουν ἀνὴρ ὁ τὸν νόμον θεῖς τοῦτον ἦν τὸ πρῶτον,
 ὥσπερ σὺ κἀγώ, καὶ λέγων ἔπειθε τοὺς παλαιούς;
 ἦττόν τι δῆτ' ἕξεστι κάμοι καινὸν αὖ τὸ λοιπὸν
 θεῖναι νόμον τοῖς υἰέσιν, τοὺς πατέρας ἀντιτύπτειν;
 ὅσας δὲ πληγὰς εἴχομεν πρὶν τὸν νόμον τεθῆναι,
 ἀφίεμεν, καὶ δίδομεν αὐτοῖς προῖκα συγκεκόφθαι.
 σκέψαι δὲ τοὺς ἀλεκτρύονας καὶ τᾶλλα τὰ βοτὰ ταυτί,
 ὡς τοὺς πατέρας ἀμύνεται· καίτοι τί διαφέρουσιν
 ἡμῶν ἐκείνοι, πλήν γ' ὅτι ψηφίσματ' οὐ γράφουσιν;
 (1421–9)

Well, wasn't it a man like you and me who originally established this law and persuaded by speech the ancients to adopt it? If so, am I any less allowed to establish in my turn a new law for the sons of tomorrow, that they should beat their fathers back? We award amnesty to fathers for all the blows we got before the law took effect, and we waive compensation for our beatings. Consider how the roosters and other such beasts avenge themselves on their fathers. And after all, how do they differ from us, except that they don't write decrees? (trans. Henderson)

There are two conspicuous points in Pheidippides' reasoning: first, that *nomoi* in general, and whether it is just or ignoble to beat one's father in particular, are strictly human constructs. Humans differ from other animals only in that they make laws; indeed Strepsiadetes continues by pressing his son on the point that there is no substantial difference between humans and beasts. The second point is that the laws can be changed and the new law has the same authority as the previous one. These points correspond closely to the little we can know about Archelaus. As we have already seen, Diogenes Laertius informs us that according to Archelaus 'the just and the ignoble are not by *phusis* but by *nomos*'.³² More importantly, we have Hippolytus' doxography about Archelaus' view on the similarity and difference between humans and non-human animals that I have already quoted at the beginning of the article as a piece of evidence for the conjunction of Archelaus' physical theory and *Kulturentstehungslehre*:

καὶ διεκρίθησαν ἄνθρωποι ἀπὸ τῶν ἄλλων καὶ ἡγεμόνας καὶ νόμους καὶ τέχνας καὶ πόλεις καὶ τὰ ἄλλα συνέστησαν. νοῦν δὲ λέγει πᾶσιν ἐμφύεσθαι ζῴοις ὁμοίως·

³² D.L. 2. 16=60 A 1 DK, part: καὶ τὸ δίκαιον εἶναι καὶ τὸ αἰσχρὸν οὐ φύσει, ἀλλὰ νόμῳ.

χρήσθαι γὰρ ἕκαστον καὶ τῶν ζώων ὄσω³³ τὸ μὲν βραδυτέρως, τὸ δὲ ταχυτέρως.
(Hipp. *Haer.* 1. 9. 6=60 A 4 DK, part)

And human beings got separated from the other animals, and leaders and laws and crafts and cities were established. He says that mind is inborn in all animals alike. For each of them uses mind to varying degrees, one more slowly, another more quickly.

So, once again, all the salient ethical positions of the second part of the play are attributed to Archelaus by the doxographical tradition. Incidentally, it is worth noting that bringing Archelaus into the limelight also offers an answer to a puzzle concerning the structure of the *Clouds*. For it has often been claimed that there is no intrinsic connection between the first part, in which physical doctrines are parodied, and the second, in which Aristophanes turns to ethical relativism. Just as Diogenes of Apollonia is supposed to be the prime candidate for the source of the first part, Protagoras or other sophists are customarily mentioned for the second part, without, however, implying either that Diogenes also subscribed to a relativist ethics or that Protagoras advocated the relevant physical doctrines. Yet, as I have tried to show, with Archelaus we find someone who apparently held both the physical *and* the ethical doctrines that are mocked in the play, who was moreover considered to be an associate of Socrates by their contemporaries, and who, as an Athenian, was obviously well known to the audience. If we accept that Archelaus is in the background of Socrates' presentation, the apparent problem about the relationship between the two parts of the play also disappears. Just as importantly, Aristophanes presents Socrates in the play as particularly dangerous precisely because of the conjunction of his subversive theology in the first part and his subversive ethics in the second.

My claim is not that Archelaus is the unique source of the ideas put into Socrates' mouth by Aristophanes, who could obviously throw all kinds of other ingredients into the comic mix. Nonetheless, at the very least there are strong reasons for thinking that Archelaus is considerably more relevant to the Aristophanean portrayal of Socrates than is usually thought—indeed, just as Archelaus is missing from recent comprehensive treatments of the Presocratics, there is not a single mention of him in standard commentaries on the *Clouds* from Dover through Meineck to Guidorizzi.

³³ Accepting the reading of the manuscripts.

VI

Let me now turn to Plato's *Laws*. As commentators customarily note, the arguments in *Laws* 10 against the proper atheists, the first version of irreligion, present some puzzling features. For instance, there is some uncertainty as to who is targeted when the Athenian describes and argues against the theoretical basis of the atheist views, and seems to speak both about Ionian-type natural philosophers in general and about a more specific theory or theories with definite contours.³⁴ However, commentators agree that this specific cosmological theory presented by the Athenian is difficult to relate to any of the *prima facie* relevant Presocratic theories.³⁵ As readers will have already guessed, I would like to suggest that Archelaus is material to the theory presented by the Athenian.

The first clue is this. The Athenian expresses repeatedly that the type of atheism he is describing, and the cosmological doctrines that are the immediate causes of it, are concentrated in Athens (cf. 886 B) and are, moreover, fairly recent. The Athenian doubts whether his interlocutors are acquainted with such texts and people, whereas, as he says, he himself has encountered them personally. This description of the doctrines forming the theoretical basis of the atheist view would best fit those natural philosophers who pursued their activity in Athens—such as, most prominently, Anaxagoras and his presumed disciple Archelaus, renowned for being the first local philosopher to propagate Ionian philosophy in Athens.

Next, the most patent sign of their scandalous doctrines is that they treat the heavenly bodies—which all peoples honour as gods—as consisting of mere stones and earth. Many details about the trial of Anaxagoras are unclear and controversial, but if we can say anything about it with a fair degree of certainty, it is that the main indictment against him was his theory about the heavenly bodies, and in particular that the sun and moon are made of earth and stones. This is also the view that, according to Plato's *Apology*, Meletus at-

³⁴ D. Sedley, 'The Atheist Underground' ['Underground'], in V. Harte and M. Lane (eds.), *Politeia in Greek and Roman Philosophy* (Cambridge, 2013), 329–48. For an overview of alternative hypotheses concerning the identity of the theorists targeted see *ibid.* 334 n. 19. Cf. also the arguments by J. Tate, 'On Plato: *Laws* X 889cd' ['*Laws*'], *Classical Quarterly*, 30 (1936), 48–54 at 52, for a single theory targeted.

³⁵ Cf. e.g. R. Mayhew, *Plato: Laws 10 [Laws]* (Oxford, 2008), 122–4.

tributed, apparently falsely and by contamination, to Socrates (*Ap.* 26 D). Indeed, taking the sun to be a stone or clod remained synonymous with atheism. Even in such detheologized contexts as the *Placita* literature, authors could indicate their outrage by inserting in otherwise factual inventories of *doxai* an *ἐτολήσαν* ('dared to') when they arrived at Anaxagoras' view (cf. Ach. Tat. *Isag.* 11 Maass–Di Maria ad init. (not in DK)). And even those authors who for their own Judaeo-Christian theological commitments did not treat the heavenly bodies as gods (e.g. Philo, *Aet.* 47; Aug. *Civ. Dei* 18. 41) could still find Anaxagoras' view about the material constitution of heavenly bodies particularly repugnant and an obvious indication of atheism.³⁶

Archelaus apparently followed Anaxagoras on this specific point. As Aëtius informs us:

Ἀρχέλαος μύδρους [ἔφησεν εἶναι τοὺς ἀστέρας], διαπύρους δέ. (Aët. 2. 13. 6=60 A 15 DK)

Archelaus (declared that the heavenly bodies are) clumps of iron, but inflamed. (text and translation from Mansfeld and Runia, modified)

It is remarkable that the Sisyphus fragment, which, as David Sedley has argued, may be crucial in identifying the primary targets of *Laws* 10,³⁷ uses the very same word *mudros*, 'clump of iron' or 'ingot', to describe the sun (l. 35). At the same time, this point can exclude some other possible candidates, such as Antiphon, who apparently took the sun to be fire (cf. Aët. 2. 20. 15=87 B 26 DK).³⁸

Although the material constitution of the heavenly bodies is an important point of contention, the kernel of the Athenian's argument concerns the priority and motor function of soul. As the Athenian complains, these outrageous and injurious thinkers teach that the elements and the opposites are primary, that they come to be and exist first by nature, whereas soul derives from physical stuffs (891 C); these thinkers thus 'deny the priority of what was in fact the first cause of the birth and destruction of all things, and regard it as a later creation' (891 E, trans. Saunders). To illustrate that these thinkers deny the motor function of soul, the Athenian gives some details of their theory. Most of these theorists, says

³⁶ Note also that when a little later, at 898 E 10–899 A 1, the Athenian speaks about the bodies of the heavenly gods, he says that they must be fire or some kind of air (*σώμα αὐτῆ πορισμένη πῦρ ἢ τῶς ἀέρος*).

³⁷ Sedley, 'Underground'.

³⁸ More on Antiphon below.

the Athenian, posit a stage of the cosmos when everything comes together to a standstill.³⁹ The Athenian then points out the absurdity of trying to introduce motion into this motionless mixture not by the effect of the self-moving soul, but by the mechanical interaction of physical stuffs. Note that for the argument of the Athenian it is important that the criticized theory posits such a motionless state. Because it is motionless, the holders of the theory need to give an account of the origin of motion. Moreover, this temporal starting point of cosmogony requires that they establish the temporal priority relations between the elements and the soul—what was there from the beginning, what was generated later, in what order, and so forth.

The expression *τὰ πάντα ὁμοῦ γεγόμενα* ('everything having come together', 895 A 6) and the image of the motionless stage obviously remind the reader of Anaxagoras. Indeed, the conjunction of the earthy/stony sun and moon and the expression *τὰ πάντα ὁμοῦ γεγόμενα* strongly suggests that the target must be someone close to Anaxagoras. Just as clearly, Anaxagoras himself is not a suitable target because in his theory Mind is not posterior to, or derived from, the elements and the opposites, and, moreover, it is precisely not the elements and the opposites that initiate motion, but the Mind.⁴⁰ At the same time, the argument is ill-suited as an attack on the atomists, for they explicitly deny that there ever was or will be such a motionless state.

Let me try to show that these worries do not arise in the case of Archelaus. For this purpose I need to have a closer look at the cosmological and physical fragments. The evidence is lamentably scarce; however, the testimonies do provide the outlines and make up a fairly coherent narrative. As usual, the ultimate source is probably Theophrastus, who, according to the catalogue of his works in Diogenes Laertius, devoted a book-length study to Archelaus (D.L. 5. 42). Incidentally, this is a further indication that Archelaus was considered to be a notable thinker in Athens: indeed, on this count, Archelaus is on a par with Anaxagoras, Anaximenes, Democritus, Diogenes (either of Apollonia or of Sinope), and Empedocles, to whom Theophrastus apparently consecrated one book each; Theophrastus wrote no book on, say, Hippo. Be that as it may, the starting point of most doxographies stemming from Theophrastus

³⁹ 895 A 6: *εἰ σταλή πως τὰ πάντα ὁμοῦ γεγόμενα*.

⁴⁰ Mayhew, *Laws*, 123–4.

is Archelaus' dependence on his presumed teacher Anaxagoras. In this vein Simplicius, quoting Theophrastus, presents him as a rather unimaginative epigone:

καὶ Ἀρχέλαος ὁ Ἀθηναῖος, ᾧ καὶ Σωκράτη συγγεγονέναι φασὶν Ἀναξαγόρου γενομένῳ μαθητῇ, ἐν μὲν τῇ γενέσει τοῦ κόσμου καὶ τοῖς ἄλλοις πειράται τι φέρειν ἴδιον, τὰς ἀρχὰς δὲ τὰς αὐτὰς ἀποδίδωσιν ἄσπερ Ἀναξαγόρας. οὗτοι μὲν οὖν ἀπίρους τῷ πλήθει καὶ ἀνομογενεῖς τὰς ἀρχὰς λέγουσι, τὰς ὁμοιομερείας τιθέντες ἀρχὰς. (Simpl. *In Phys.* 27. 23 Diels=Thphr. *Phys. op.* 228a FHS&G ad fin.=60 A 5 DK)⁴¹

Archelaus of Athens, of whom they say that Socrates was an associate, and who was himself a pupil of Anaxagoras, tried to bring in some personal contribution in cosmogony and other subjects, but gave the same account of the principles as did Anaxagoras. So these men say that the principles are unlimited in number and different in kind, and posit the homoeomerics as principles.

We learn more about the initial state of cosmogony, as well as about Archelaus' relation to Anaxagoras, from part of the long testimony by Hippolytus:

εἶναι (δέ) ἀρχὴν τῆς κινήσεως (τὸ) ἀποκρίνεσθαι ἀπ' ἀλλήλων τὸ θερμὸν καὶ τὸ ψυχρὸν, καὶ τὸ μὲν θερμὸν κινεῖσθαι, τὸ δὲ ψυχρὸν ἡρεμεῖν. (Hipp. *Haer.* 1. 9. 2=60 A 4 DK, part)

(Archelaus maintained that) the origin of movement is the separation of the hot and the cold from one another, and the hot moves and the cold stays still. (trans. Fortenbaugh, modified)

Identifying the separation of the hot and the cold as the origin of motion clearly implies that the initial state was motionless, whereas the emphasis on separation indicates that initially they were mixed.⁴² This is highly significant for our present purposes. For it shows that although the description of the initial state is close to Anaxagoras'—i.e. a motionless mixture—Archelaus rejected Anaxagoras' most remarkable innovation, namely that Mind introduced motion into this standstill. Incidentally, these reports about the separation of the hot and the cold being the *archē* of motion can explain why some later sources, such as Hermias in 60 A 8 DK, thought that Archelaus' principles are the hot and

⁴¹ Cf. also Hipp. *Haer.* 1. 9. 1=60 A 4 DK, part: 'He spoke about the mixture of matter in a way similar to Anaxagoras, and in the same way about the principles.'

⁴² Cf. also D.L. 2. 16. 5–6=60 A 1 DK, part: ἔλεγε δὲ δύο αἰτίας εἶναι γενέσεως, θερμὸν καὶ ψυχρὸν ('He said that there are two causes of generation, hot and cold').

the cold. Making the separation of hot and cold from an original mixture the starting point of the birth of the cosmos is at the same time highly reminiscent of the beginning of Anaximander's cosmogonic narrative (cf. [Plut.] *Strom.* 2=12 A 10 DK). At any rate, this is clearly the type of account about the origin of motion that the Athenian presents as his target.⁴³

But what about mind, then? In Archelaus' theory, Mind apparently loses not only its motor function, but also its fundamental Anaxagorean characteristic—its purity. As Hippolytus puts it in the sentence immediately preceding the one I have just quoted:

τῶ νῶ [codd. τῶ νόω] ἐννπαρχεῖν τι εὐθέως μύγμα.⁴⁴ (Hipp. *Haer.* 1. 9. 2=60 A 4 DK, part)

There was a certain mixture inhering in mind right from the start.

This, once again, shows that the original state was a mixture as in Anaxagoras, with the notable difference of mind being part of the mixture. The same point might hint at the reason why mind cannot have the same function here as in Anaxagoras.⁴⁵ To this we should add what we have already seen in the context of the *Clouds*, viz. that a number of sources clearly state that Archelaus adhered to the more traditional Ionian view, attested from Anaximenes to Diogenes of Apollonia, according to which mind—which he may or may not have distinguished from soul—is air or airy (Aët. 4. 3. 2=60 A 17 DK, part). Most notable among these is the Aëtian chapter on god that I quoted earlier. At that point, however, I left out the final words of the lemma. The full text runs like this:

⁴³ One caveat could be that the joint effect of Simplicius' and Hippolytus' testimonies is that the primary ingredients for Archelaus appear to be the Anaxagorean-type elements, whereas the theory described by the Athenian starts with the four elements. I do not mean to minimize this discrepancy; but we shall see that the first steps of the cosmogony of Archelaus are about the generation of the four elements.

⁴⁴ M. Marcovich, *Hippolytus: Refutatio omnium haeresium* (Berlin, 1986), emends the text to read ἀτὸς δὲ τοῦ νοῦ ἐννπαρχεῖν τι εὐθέως (τῶ) μύγμα(τι).

⁴⁵ The report is echoed in Aug. *Civ. Dei* 8. 2: 'Anaxagorae successit auditor eius Archelaus. etiam ipse de particulis inter se similibus, quibus singula quaeque fierent, ita putavit constare omnia, ut inesse etiam mentem diceret, quae corpora aeterna, id est illas particulas, coniungendo et dissipando ageret omnia' ('Anaxagoras was succeeded by his disciple Archelaus. The latter also held that the universe is composed of homogeneous particles out of which each individual thing was made. But he also held that mind is inherent in them, which governs the universe by conjoining and separating eternal bodies, that is, those particles').

(τίς ἐστὶν ὁ θεός) Ἀρχέλαος ἀέρα καὶ νοῦν τὸν θεόν, οὐ μέντοι κοσμοποιὸν τὸν νοῦν. (Aët. 1. 7. 14=60 A 12 DK)⁴⁶

Archelaus (maintained that) the god is air and mind; *mind, however, is not maker of the cosmos.*

The last tag—‘mind, however, is not maker of the cosmos’—is, once again, noteworthy in the present context. For it appears as a strong recognition of the fact that in Archelaus’ theory mind had an even less prominent role than in Anaxagoras’, and, arguably, air/mind had also a lesser part in organizing the cosmos than in Diogenes of Apollonia. On the other hand, this identification of mind, and god, as air must be the motivation behind the alternative tradition, which takes air, and not the homoeomerics or the hot and the cold, to be Archelaus’ *archē*. For as we have seen above, the two most important lists of *archai*—S.E. *M.* 9. 360=60 A 7. 1 DK (the most extensive inventory we have) and Aëtius’ chapter *περὶ τῶν ἀρχῶν τί εἰσιν*—enlist Archelaus among those who teach that the air is the principle. The formulation in Aëtius is particularly noteworthy:

(περὶ τῶν ἀρχῶν τί εἰσιν) Ἀρχέλαος Ἀπολλοδώρου Ἀθηναῖος ἀέρα ἄπειρον, καὶ τὴν περὶ αὐτὸν πυκνότητα καὶ μάνωσιν. τούτων δὲ τὸ μὲν εἶναι πῦρ τὸ δ’ ὕδωρ. (Aët. 1. 3. 6=60 A 7. 2)⁴⁷

Archelaus, the son of Apollodoros, of Athens (held that the principle is) the infinite air with its condensation and rarefaction. Of these the former is water, the latter fire.

Once again, this is much more redolent of Anaximenes than of Anaxagoras. As a matter of fact, the return to the Ionian model of the intertransformation of the elements along some quantitative scale is the denial of Anaxagoras’ theory of matter based on the principles of ‘everything in everything’ plus ‘predominance’. Piecing these bits together, it appears that Archelaus did not after all slavishly follow Anaxagoras, but combined his theory with more traditional Ionian doctrines.

When we turn to the later stages of the cosmogony, we soon understand why the air/mind/god of Archelaus could not function as the primary operative agent in arranging the cosmos. Singling out the separation of hot and cold as the origin of motion, and thereby the initial step in the cosmogonic process, and maintaining that air was part of the mixture, already suggests that it was not

⁴⁶ Text from Diels–Kranz.

⁴⁷ Text after Mansfeld and Runia (unpublished).

there from the beginning in its pure, separated-out form. This is borne out by the admittedly rather obscure account in Hippolytus, paralleled also in the testimony of Diogenes Laertius:

εἶναι (δὲ) ἀρχὴν τῆς κινήσεως (τὸ) ἀποκρίνεσθαι ἀπ' ἀλλήλων τὸ θερμὸν καὶ τὸ ψυχρὸν, καὶ τὸ μὲν θερμὸν κινεῖσθαι, τὸ δὲ ψυχρὸν ἡρεμεῖν. τηκόμενον δὲ τὸ ὕδωρ εἰς μέσον ρεῖν, ἐν ᾧ κατακαίόμενον ἀέρα γίνεσθαι καὶ γῆν· ὧν τὸ μὲν ἄνω φέρεσθαι, τὸ δὲ ὑφίστασθαι κάτω. (Hipp. *Haer.* 1. 9. 2=60 A 4 DK, part)

(He also maintained that) the origin of movement is the separation of the hot and the cold from one another, and the hot is moved, whereas the cold stays still. When water is melted, it flows into the middle, where, having been burnt up, it becomes air and earth, of which the former is carried upwards, whereas the latter settles below.

This text, speaking about the generation of air together with earth, strongly suggests that elemental air appeared at a later stage of the cosmogonic process. Making the air derivative marks Archelaus' distance from other earlier and contemporary air theorists, such as Anaximenes and Diogenes of Apollonia, whose respective divine/air/minds are clearly primary, and part of the original ontological furniture of the world—a further indication that Archelaus pared down the role of cosmic intelligence. At the same time, this corresponds once again remarkably well to the theory presented by the Athenian: soul is derivative and appears only at a later stage of the cosmogonic process.

One may object at this point that the Athenian's targets are those who deny that there are gods. As a counter to this, we have just seen that air is also god for Archelaus. I do not want to minimize the force of this objection; indeed, as far as we can see Archelaus was not included in the ancient list of atheists.⁴⁸ It is also true, as I have just tried to show, that in Archelaus' account the air is not only distanced from the traditional gods, but has even lost all the prerogatives that the divine first principles of other Presocratics retained. It is neither prior, nor a source of motion, nor again a principal factor in cosmogony, nor again unmixed. In fact, it is hard to see what its divinity could consist in at all. Moreover, we simply do not know whether or not Archelaus included the traditional gods at any point of his story. Even more important, the Athenian seems to make a distinction between the views of the atheists on the one hand, and the physical theories that form the basis of the atheists'

⁴⁸ I owe this point to David Sedley.

views on the other.⁴⁹ It is entirely conceivable that Archelaus could be included among those who developed theories that fuelled atheist views, without himself being taken as one of the representatives of atheism proper.

Finally, *Laws* 10 leads me back to where I started—the conjunction of cosmogony and *Kulturentstehungslehre*. For the pernicious theoreticians of *Laws* 10 continue their narrative about the origins of the cosmos and living beings with an account about the origins of the arts, crafts, and the *nomoi* that organize the life and set the respective value systems of different communities. Two points have to be emphasized in this respect: first, that for the coherence of the position it is crucial that these steps, from the origin of cosmogonic motion down to the *nomoi* of communities, are presented as stages of one continuous narrative; it is only through this comprehensive, continuous account that the contrast between what comes about by nature, what comes about by art, and what comes about by *nomoi* can become fully conspicuous. As Tate has rightly pointed out in his argument against those previous commentators, such as Taylor and England, who had thought that the Athenian is just stitching together a Presocratic-type cosmological theory with a *Kulturentstehungslehre* from the sophists: '[t]his is one argument, not a conflation of two'.⁵⁰ Second, we have also seen that this kind of comprehensive narrative was far from being the traditional norm, but was rather introduced by some people, such as Archelaus, in the lifetime of Socrates. This fully bears out the contention of the Athenian that what we have here is a fairly recent phenomenon.

As the Athenian emphasizes, these people declare that all the crafts and all politics and customs (*nomoi*) are human creations and can be changed, even if some of the arts, such as medicine and agriculture, have some share in nature. Gods, on the other hand, are denied any role in the emergence of any of these aspects of human culture. Indeed, the gods themselves exist by the *nomoi* of the different communities, and are arrived at by the agreement of the lawgivers.⁵¹ Then the Athenian adds:

⁴⁹ Cf. e.g. 891 E 7: οἱ τὴν τῶν ἀσεβῶν ψυχὴν ἀπεργασάμενοι λόγοι.

⁵⁰ Tate, 'Laws', 53. The importance of this continuity is also evident from the diagraphmatic presentation of the stages of the theory in Sedley, 'Underground', 348.

⁵¹ 889 E 3–5: θεούς, ὦ μακάριε, εἶναι πρῶτόν φασι· οὗτοι τέχνη, οὐ φύσει ἀλλὰ τισιν νόμοις, καὶ τούτους ἄλλους ἄλλη, ὅπη ἕκαστοι ἑαυτοῖσι συναμολόγησαν νομοθετοῦμεν ('The first thing they claim about the gods, my dear friend, is that they exist by art, not by nature but by certain conventions, which are different at different places,

καὶ δὴ καὶ τὰ καλὰ φύσει μὲν ἄλλα εἶναι, νόμῳ δὲ ἕτερα, τὰ δὲ δὴ δίκαια οὐδ' εἶναι τὸ παράπαν φύσει, ἀλλ' ἀμφισβητούντας διατελεῖν ἀλλήλοις καὶ μετατιθεμένους αἰεὶ ταῦτα, ἃ δ' ἂν μετὰθωνται καὶ ὅταν, τότε κύρια ἕκαστα εἶναι, γιγνόμενα τέχνη καὶ τοῖς νόμοις ἀλλ' οὐ δὴ τινι φύσει. (889 E 5–890 A 2)

And in particular they claim that fine things by nature differ from fine things by conventions, whereas nothing at all is just by nature, but people continue to disagree with one another, and keep altering these things [i.e. what is considered just], and every modification becomes binding at that time, even though it has come into being by art and by conventions, but in no way by any nature. (trans. Mayhew)

I do not want to claim that our information about Archelaus is very specific. Nonetheless, it seems to me that what the Athenian says once again accords remarkably well with the little we know—the human origin of laws, cities, and crafts, a philosophical theory about the fine and the just, and the view that the just and the ignoble in particular are not by nature but by convention.

Admittedly, the evidence is cumulative rather than decisive. But remember what we were looking for: a theory current especially in Athens, relatively recent, advancing a specific physical, cosmogonic theory, which is close to that of Anaxagoras but denies the cosmogonic role of mind, taking the elements to be the source of motion, and one which continues in a narrative about the conventional origins of human institutions and norms. All possible caveats notwithstanding, I find the match with Archelaus remarkable.⁵²

VII

Some readers might have been wondering for some time why I have not given fuller consideration to figures who are customar-

according to the way in which the lawgivers agreed among themselves' (trans. Mayhew, modified)).

⁵² At this point at least I am not completely alone in seeing Archelaus in the background of the Athenian's argument. On the basis of arguments often overlapping with those I have marshalled, Tate, 'Laws', 53, arrives at the following conclusion: 'Now Archelaus was an Athenian and probably taught his doctrines at Athens. May we not assume that his Athenian disciples treated his doctrines in the same way as he himself had treated those of Anaxagoras, modifying them in the direction of purely mechanical materialism and ethical subjectivism? If so, we can at last understand what argument Plato is attacking. It is the popular and somewhat eclectic materialism of fourth-century Athens, which, whatever it may owe to other sources, owes most to the teaching of Anaxagoras and his Athenian disciple, Archelaus.'

ily mentioned in the context of the relationship between physics and *Kulturentstehungslehre*, and most of all to Antiphon and Democritus. My strategy has been to make—as I hope—a strong case for Archelaus and only then to turn to other contenders. It is of course not my aim to deny their relevance; I still wish to suggest, however, that they are comparatively less relevant, and especially less relevant for my two target texts, the *Clouds* and *Laws* 10.

Let me start with Antiphon. He is certainly a close competitor for a number of roles I have attributed to Archelaus. In particular, some scholars have claimed that it is primarily Antiphon who is parodied in the *Clouds*.⁵³ Most specifically, it has been maintained that Pheidippides' tirade about fathers mistreating their sons and sons retaliating should be seen as a direct reference to Antiphon 87 B 44A, col. 5. 4–8 DK.⁵⁴ Whether or not we should take this as a direct reference to Antiphon, I have highlighted that what is theoretically more prominent in Pheidippides' position is the denial of a natural distinction between humans and beasts; the difference is not in cognitive capacities but only that humans have *nomoi*, without any essential distinction. Against this, Antiphon appears to recognize a much more pronounced intrinsic difference between humans and animals when he writes that 'human beings are the most divine-like among all the animals'.⁵⁵

It has also been argued that Antiphon is pre-eminent in the Athenian's argument in *Laws* 10. There is hardly any doubt that the way in which Antiphon distinguished the respective roles of *nomos* and *phusis*, and in particular the dynamic but completely value-neutral conception of *phusis*, is relevant to the theory described by the Athenian.⁵⁶ There are, on the other hand, non-negligible details that make it, I think, unlikely that Antiphon was the Athenian's main target: for instance, he took the sun and the moon to be fiery, as opposed to consisting of mere earth and stone, and there is little reason to think that he had a cosmogonical theory close to Anaxagoras'.

⁵³ G. J. Pendrick, *Antiphon the Sophist: The Fragments* [Antiphon] (Cambridge, 2002), 38 n. 67 with earlier bibliography.

⁵⁴ See most recently M. Bonazzi, 'L'uomo, gli dei, le bestie: a proposito dell'antropologia di Antifonte' ['L'uomo'], *Elenchos*, 26 (2006), 101–15 at 112–15 (after an excellent account of Antiphon's philosophical anthropology). See, however, Pendrick, *Antiphon*, 340–1.

⁵⁵ 87 B 48 DK: ἄνθρωπος, ὃς φησι μὲν πάντων θηρίων θεειδέστατον γένεσθαι.

⁵⁶ Bonazzi, 'L'uomo', 54.

Crucially, it is more difficult to ascribe to Antiphon the type of continuous, integrated narrative that, as I have argued, is so important in the context of the polemics in *Laws* 10. Let me very briefly review the relevant evidence. First and foremost, it is true that the two books of Antiphon's *On Truth* apparently contained both a Presocratic-type physical theory and a fairly detailed and original ethical theory. Fragments 24–8 clearly contain the vestiges of a cosmological and astronomical theory that included the ubiquitous cosmic rotation (87 B 25 DK), argued that the moon has its own light (87 B 27 DK), and, somewhat surprisingly, subscribed to the Heraclitean doctrine that the heavenly bodies are hollow bowls that collect the fiery evaporations (87 B 26 and 28 DK). Other fragments show a broad range of interests covering various standard topics pertaining to natural philosophy: the origin of the saltiness of the sea, earthquakes, human physiology and pathology. In the ethical and political fragments the *nomos–phusis* antithesis appears to play a prominent part. In particular, the three sections of fragment 44 explain that *nomoi* constitute justice, but are imposed on man's nature and are to be followed only when someone else observes the action. When there is no witness around, man should rather follow what is advantageous by nature.

Yet Antiphon's *On Truth* apparently embraced an even broader range of subjects, including such properly geometrical questions as the squaring of the circle (87 B 13 DK). This at least raises the possibility that *On Truth* was not conceived as a single continuous narrative from a cosmogonical initial state to the present state of social institutions, but rather as a work in which Antiphon showed his comprehensive knowledge, and pronounced his views on all possible issues that were discussed in intellectual circles. This impression is strengthened by further considerations. For instance, the fragments on cosmology and natural philosophy are explicitly ascribed to the *second* of the two books of *On Truth*, whereas a great number of scholars consider that fragment 44, which discusses the *nomos–phusis* antithesis, comes from the first book. An indication of this is that Antiphon's famous thought experiment, mentioned by Aristotle, to determine the nature of a chair—viz. that it is wood and not its structure—is explicitly assigned to the first book. The emerging picture is that the *nomos–phusis* distinction and the ensuing ethical discussion preceded the discussion of physical topics. It is of course possible that Antiphon wanted to provide an integrated

theory; these indications, however, suggest at the very least that he did not put it forward in the form of a continuous linear narrative. Moreover, there is very little evidence to show that the theory about justice and the *nomos-*physis** antithesis was expounded through, or in the context of, a narrative about the origins of social and cultural institutions. Indeed, Maria Serena Funghi, who has produced the most developed argument for a *Kulturentstehungslehre* in Antiphon, had to base her case merely on the aorist of the uncertainly restored verb *συν|εχώρη[σαν]*.⁵⁷ But even if we accept the supplement, translate A 4 as ‘Each group agreed to their satisfaction . . . and enacted laws’,⁵⁸ and agree that Antiphon explained the differences between different local customs and norms with reference to the way in which they were first introduced, this does not oblige us to think that he gave this account in direct continuation of his cosmogonical account. As we have seen, this explanation about *nomoi* most likely *preceded* the account about the birth of the cosmos. All in all, it seems to me that although Antiphon’s book could very well contain all the relevant topics, and much more, he did not present them as one continuous narrative.

The case for Democritus is in a way more intriguing, partly because the arguments can be made on a considerably wider textual basis. For, if we accept the thesis put forward by Gregory Vlastos and developed by Maria Michela Sassi, Democritus might have used the same explanatory framework for his physics and his ethical theory.⁵⁹ Even more importantly for my present purposes, Thomas Cole has made a sustained effort to show that Vlastos’s suggestions can also be transferred to the relationship between Democritus’ cosmogonical theory and his narrative about the origins and development of society.⁶⁰ I cannot discuss these arguments in full detail here. As to Vlastos’s claim, let me simply state that I find C. C. W. Taylor’s considerably more circumscribed view more persuasive:

⁵⁷ Funghi, P. Oxy. 3647, in *Oxyrhynchus Papyri*, 52 (1984), 1–5; *contra* Pendrick, *Antiphon*, 354.

⁵⁸ P. Oxy. 1364, fr. A, col. 4, ll. 4–9: *κατὰ τὸ ἀρέ[σκειν συν|εχώρη[σαν | ἕκαστοι [. . .] καὶ τοὺς νόμ[ους ἔθεν]το*.

⁵⁹ G. Vlastos, ‘Ethics and Physics in Democritus’, *Philosophical Review*, 54 (1945), 578–92, and *ibid.* 55 (1946), 53–64, repr. in R. E. Allen and D. J. Furley (eds.), *Studies in Presocratic Philosophy*, vol. ii (London, 1975), 381–408, and in G. Vlastos, *Studies in Greek Philosophy*, ed. D. W. Graham, vol. i (Princeton, 1995), 328–50; and M. M. Sassi, *Le teorie della percezione in Democrito* (Florence, 1978).

⁶⁰ T. Cole, *Democritus and the Sources of Greek Anthropology* [*Democritus*] (Cleveland, 1967).

Democritus surely made his atomist physics and his ethics compatible, yet he did not try to draw any ethical conclusions from his physics.⁶¹ So, for instance, any ethically relevant state of the soul is also a physical state of the atomic aggregate constituting the soul, yet there is absolutely no evidence in Democritus' fragments that he would have tried to provide a physical description of ethically relevant states of the soul in terms of the physical states of the component atoms, or, conversely, that he would have tried to elicit ethical conclusions from the physical description of the soul.

Although he presents his suggestions as closely continuous with those of Vlastos, Thomas Cole's thesis is in fact somewhat different. Instead of claiming that Democritus drew conclusions about the development of society from the description of the underlying atomic states, Cole suggests that Democritus described cosmogony and the origin of society on the basis of an analogy: just as the *kosmoi qua* atomic aggregates are formed as growing *rhusmoi* of atoms whirling in vortices, so also societies *qua* aggregates of individuals are formed as growing *rhusmoi* of quasi-atomic individual human beings first haphazardly getting together and colliding.⁶²

This is undoubtedly a fascinating hypothesis. Without subjecting it to a critical scrutiny, let me make some very brief remarks about its relevance to the major claims of my discussion. First, a chronological point. Although the dates of both authors are uncertain, there are reasons to think that Archelaus, an older contemporary of Socrates, came first. But even if their theories were contemporary, or even if Democritus came earlier, there is no reason to think that Archelaus was directly influenced by him. Everything we know about Archelaus' theory, and everything our ancient sources tell us about its pedigree, suggests that he developed it on the basis of Anaxagoras', combining it with some older Ionian doctrines, such as the intertransformation of elements through condensation and rarefaction. Moreover, even if, against all odds, Archelaus was influenced by Democritus in linking the two narratives, it was Archelaus, not Democritus, who was the more prominent figure in the eyes of the Athenian public in this respect. There is no significant trace of Democritus in Aristophanes' portrayal of Socrates in the *Clouds*, and Democritus' theory does not fit the bill

⁶¹ C. C. W. Taylor, *The Atomists: Leucippus and Democritus* (Toronto, 1999), 232–3.

⁶² Cole, *Democritus*, 117–20.

for the specifics of the physical theory advanced by the Athenian in *Laws* 10.

VIII

The most detailed and best-known surviving conjunction of cosmology and *Kulturentstehungslehre* comes in Lucretius' poem, and there is of course no denying that Democritus' relevant views play a prominent role in Epicurean theory. Yet, as it happens, we also have unmistakable traces that Lucretius—surely following Epicurus—integrated a number of elements of Archelaus' theory. For instance, all commentators on Lucretius agree that the image of the earth nourishing the first generation of the newly born animals with a milk-like slime echoes Archelaus' idea that the different animal species that emerged from the hot earth were first fed on milk-like mud.⁶³

But there was apparently more. For as Diogenes Laertius informs us:

μάλιστα δὲ ἀπεδέχετο, φησὶ Διοκλῆς, τῶν ἀρχαίων Ἀναξαγόραν, καίτοι ἔντισιν ἀντειρηκῶς αὐτῷ, καὶ Ἀρχέλαον τὸν Σωκράτους διδάσκαλον. (D.L. 10. 12, not in DK)

Of all the ancient philosophers, says Diocles, he [sc. Epicurus] approved of Anaxagoras—even if on some points he contradicted him—and Archelaus, the teacher of Socrates.

I cannot help thinking that what earned Epicurus' qualified appreciation of Anaxagoras, and the apparently even fuller approval of Archelaus, was not such particular details of physical theory as the

⁶³ D.L. 2. 17. 4–6=60 A 1 DK, part: γενᾶσθαι δὲ φησι τὰ ζῶα ἐκ θερμῆς τῆς γῆς καὶ ἰλὸν παραπλησίαν γάλακτι οἶον τροφὴν ἀνείσης· οὕτω δὲ καὶ τοὺς ἀνθρώπους ποιῆσαι ('He says that the animals grow from the hot earth, as it spews up mud resembling milk as a sort of nourishment; this is also how it produced human beings'). Cf. Lucr. 5. 807–13: 'hoc ubi quaeque loci regio opportuna dabatur, | crescebant uteri terram radicibus apti; | quos ubi tempore maturo patefecerat aetas | infantum, fugiens umorem aurasque petessens, | convertibat ibi natura foramina terrae | et sucum venis cobeat fundere apertis | consimilem lactis . . .' ('So, where a suitable place was given, wombs grew fastened to the earth by roots, and when in due time the age of infants had broken these open, fleeing the moisture and seeking the breezes, nature redirected these pores of the earth and forced juice-like milk to flow from open veins . . .') (trans. Campbell). Cf. G. Campbell, *Lucretius on Creation and Evolution: A Commentary on De rerum natura Book Five, Lines 772–1104* (Oxford, 2003), ad loc. with further bibliography, and Tilman, 'Archélaos', 87–91.

milk-like mud, but much rather the overall project of giving a unified, non-teleological account of the origin of the cosmos and the origin of human society and culture.

Christ's College, Cambridge

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