

# **Plato and Lucretius as Philosophical Literature**

## **A Comparative Study**

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**University College, Oxford**

**Submitted for the Degree of Doctor Philosophiae**

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### Abstract

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This thesis compares the interaction of philosophy and literature in Plato and Lucretius. It argues that Plato influenced Lucretius directly, and that this connection increases the interest in comparing them.

In the Introduction, I propose that a work of philosophical literature, such as the *De Rerum Natura* or a Platonic dialogue, cannot be fully understood or appreciated unless both the literary and the philosophical elements are taken into account.

In Chapter 1, I examine the tradition of literature and philosophy in which Plato and Lucretius were writing. I argue that the historical evidence increases the likelihood that Lucretius read Plato. Through consideration of parallels between the *DRN* and the dialogues, I argue that Plato discernibly influenced the *DRN*. In Chapter 2, I extract a theory of philosophical literature from the *Phaedrus*, which prompts us to appreciate it as a work of literary art inspired by philosophical knowledge of the Forms. I then analyse Socrates' 'prelude' at *Republic* IV.432 as an example of how the dialogue's philosophical and literary teaching works in practice.

In Chapters 3 and 4, I consider the treatment of natural philosophy in the *Timaeus* and *DRN* II. The ending of the *Timaeus* is arguably an Aristophanically inspired parody of the zoogonies of the early natural philosophers. This links it to other instances of parody in Plato's dialogues. *DRN* II.333-380 involves an argument about atomic variety based on Epicurus, but also, through the image of the world 'made by hand', alludes polemically to the intelligently designed world of the *Timaeus*. Through an examination of Plato's and Lucretius' polemical adaptation of their predecessors, I argue that even the most seemingly technical passages of the *DRN* and the *Timaeus* still depend upon literary techniques for their full effect.

The Conclusion reflects briefly on future paths of investigation.

Word count (with permitted exclusions): 99, 476.

ite hinc, inanes, ite rhetorum ampullae,  
inflata rhoezo non Achaico uerba;  
et uos, Selique Tarquitique Varroque,  
scholasticorum natio madens pingui;  
ite hinc, inane cymbalon iuuentutis;  
tuque, o mearum cura, Sexte, curarum,  
uale, Sabine, iam ualete, formosi.  
nos ad beatos uela mittimus portus  
magni petentes docta dicta Sironis,  
uitamque ab omni uindicabimus cura.  
ite hinc, Camenae, uos quoque ite iam sane,  
dulces Camenae (nam fatebimur uerum,  
dulces fuistis) et tamen meas chartas  
reuisitote, sed pudenter et raro.

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## Abbreviations

The abbreviations of works of ancient authors follow standard scholarly practice. In addition, I have adopted the following abbreviations of key reference works:

- KRS Kirk, G. S., Raven, J. E., and Schofield, M. (1995, first edn. Kirk and Raven 1957) *The Presocratic Philosophers*, Cambridge.
- LS Lewis, C. T., and Short, C. (1879 revised edn., founded on Andrew's edn. of Freund's Latin Dictionary) *A Latin Dictionary*, Oxford, accessed on the Perseus website <<http://www.perseus.tufts.edu/hopper/resolveform?redirect=true&lang=Latin>>.
- LSed Long, A. A. and Sedley, D. N. (1987) *The Hellenistic Philosophers*, vv. 1-2, Cambridge.
- LSJ Liddell, H. G., and Scott, R. (ninth edition revised by H. S. Jones, 1940), *A Greek-English Lexicon*, Oxford, accessed on the Perseus website <<http://old.perseus.tufts.edu/cgi-bin/resolveform>>.
- OED (2012) *Oxford English Dictionary*, Oxford, accessed online at <<http://www.oed.com/>>.
- TLG (last modified 2011) *Thesaurus Linguae Graecae*, University of California <<http://www.tlg.uci.edu/>>.

I have followed standard editions of the Greek and Latin texts quoted.

# Introduction. Philosophical Literature

## 1. Overview

The terms ‘philosophy’ and ‘literature’ have a long history in Western thought, spanning over two millennia of intellectual and cultural development.<sup>1</sup> The aim of this study is to consider the relationship between philosophical and literary practices at two early stages of their development in Classical antiquity: the fourth and first centuries BC, when Plato and Lucretius respectively were writing.

Through a detailed study of passages from Plato’s dialogues and Lucretius’ *De Rerum Natura*, I shall advance a notion of ‘philosophical literature’. I shall use this to characterise works which, like those of Plato and Lucretius, cannot adequately be understood or appreciated unless their philosophical and their literary elements are taken into consideration.<sup>2</sup> I shall examine how, because of their combination of the philosophical and literary, these works have given rise to similar interpretative and evaluative problems. I shall also argue that Lucretius reveals signs of direct influence by Plato, and that this connection increases the meaningfulness of a comparison between them.

## 2. Philosophical literature

In describing the *DRN* and Plato’s dialogues as ‘philosophical literature’, I shall not rely on a strict definition of this concept in terms of necessary and sufficient conditions. Rather, I shall

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<sup>1</sup> This study is confined to the Western tradition of philosophy and literature, beginning with the ancient Greeks. It is hoped that it may also be of interest for readers of philosophical literature in other traditions.

<sup>2</sup> For the idea that the literary as well as philosophical aspects of the dialogues are relevant to their interpretation, see Blondell (2002): 4.

use ‘philosophical literature’ to refer to any written works which, on the spectrum of works of literature and philosophy in the Western tradition, fall roughly in the middle.<sup>3</sup> In particular, I shall use it heuristically to pick out certain features of Plato’s and Lucretius’ works; in conjunction with this, I shall refer back to their own conceptions of what they were doing. I shall begin by outlining some key philosophical and literary qualities pertinent to the dialogues and the *DRN*.

Plato seems to have been the first to develop the term φιλοσοφία, the ‘desire for wisdom’, to include enquiries into questions of morality, existence, knowledge, politics, and nature, which have since been refined into distinct branches of philosophy. However, this should not make us underestimate the extent to which his idea of philosophy differs from modern conceptions, nor the difficulty of pinning down some fundamental idea of philosophy in his elusive characterisations of it. Lucretius, in contrast, never uses *philosophia* or a Latin paraphrase at all.<sup>4</sup> Rather, he prefers *sapientia*, ‘wisdom’ already achieved, or *naturae species ratioque*, a Latinisation of Epicurus’ φυσιολογία, a ‘reasoned account of nature’.

There is likewise no word in either Latin or Greek which maps onto ‘literature’ in the modern sense; rather, there are genres of poetry and prose, which can be more or less literary. While Lucretius composed an epic-didactic poem, and Plato adopted the form of the Socratic dialogue,<sup>5</sup> the works of both of them contain elements of other poetic and prose genres, such as Greek tragedy and comedy and the three genres of rhetoric, in Plato’s case, and, in Lucretius’, the popular diatribe, Roman comedy and Hellenistic love poetry. How the two

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<sup>3</sup> My conception of philosophical literature is therefore less restrictive than the definition of the philosophical novel by Sharpe (2005) as ‘that subspecies of fiction which endeavours to present a particular philosophical viewpoint, sometimes metaphysical, sometimes ethical, sometimes aesthetic’. The journal *Philosophy and Literature* is devoted to the exploration of the interaction between philosophy and literature in a range of cases, including Plato and Lucretius – although not, I believe, comparatively.

<sup>4</sup> Epicurus uses φιλοσοφία (*VS 27*).

<sup>5</sup> On other writers of Socratic dialogues, see Kahn (1996): 1-35.

authors' conceptions of philosophy and their response to literary genres shape their work will become clearer in the chapters which follow.

In the modern Anglo-American tradition of philosophy, there is usually a difference between writing by professional philosophers intended to contribute to current thinking before an audience of peers in an academic setting, and those works aimed at a less knowledgeable audience, such as students or the general public. Philosophical writing aimed at philosophers, such as articles, treatises, or exegeses, is what would probably be thought of as its most serious form: engagement in arguments over philosophical issues for an audience trained in the appropriate methodologies and technical terms. Philosophy for students might be more didactic and operate at an introductory level, while philosophy for the general public, or popular philosophy, like popular science, would omit the most difficult arguments and concentrate on giving readers a taste of those ideas considered most interesting or relevant to their own lives.<sup>6</sup> As such, popular philosophy is often more literary than philosophy for philosophers, since it is concerned with attracting readers unfamiliar with the discipline rather than simply with presenting an argument to experts.

I shall take the output of modern Anglo-American academic philosophy written for philosophers as the extreme of non-literary philosophical writing. Works from this tradition often achieve clarity of expression with little literary embellishment.<sup>7</sup> This is not to say that the writings of analytic philosophy may not occasionally include literary elements; but rather, that any literary elements which they do contain do not tend to contribute to their value as philosophy, and, indeed, might be perceived as interfering with complete philosophical clarity. In taking the Anglo-American analytic tradition as my example of the extreme of philosophical writing, I do not wish to exclude more literary philosophical writing, whether

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<sup>6</sup> Two modern works of popular philosophy are Russell (1912) and Blackburn (1999); an example of popular science is Dawkins ([1976] 2006).

<sup>7</sup> Two examples are Lewis (1986) and Kripke (1980).

that of Richard Rorty and Martha Nussbaum, or Sartre, Kierkegaard, Nietzsche, and other ‘continental’ philosophers, from being philosophy. Rather, I would say that their works fall further towards the middle of the spectrum stretching from the least literary philosophy to the least philosophical literature. I would, in fact, consider Sartre’s *La Nausée*, and many of Nietzsche’s works, as philosophical literature.

Again, it might be argued that a literary work of philosophy was too populist or argumentatively weak because it involved non-rational or non-logical techniques of persuasion. Both Plato and Lucretius are open to this charge.<sup>8</sup> There are two responses to this charge. Firstly, a work can succeed as philosophical literature without successfully proving the philosophical arguments it involves. Secondly, the literary elements of a work can support and even enhance its philosophical claims. As I shall show later on, Plato and Lucretius provide examples of both these possibilities.

It should also be noted that, in the ancient world, philosophy included natural philosophy, the precursor of the sciences. In modern academic categorisations, the sciences form a separate group from philosophy, with their own methodologies and goals. However, it is hoped that this study’s analysis of Plato and Lucretius, which will consider the more ‘scientific’ elements of their work in Chapters 3 and 4, will be of interest for modern scientific literature as well as for philosophical literature.<sup>9</sup>

For the purposes of this study, I shall understand literature in the common modern sense of ‘works of literature’, such as poems, plays, novels, and short stories. While such literature is studied at universities, the practice of composing it is not part of an academic discipline in the way that writing an article or book on philosophy is. Some critics and aesthetic philosophers consider narrative fiction as the defining characteristic of literature in

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<sup>8</sup> See below, Section 4, and *passim* in Chs. 1-4.

<sup>9</sup> For aesthetic concerns about scientific poetry, see Huxley (1931): 32-42.

this sense.<sup>10</sup> However, I shall not take literature as requiring a narrative in the strict sense of a plot structure, according to the Aristotelian sense of an action performed by characters.<sup>11</sup> This is because the formal requirements which it imposes on a work for it to be called ‘literature’ are too strict. Indeed, one of the reasons why it is sometimes denied that works like the *DRN* or Plato’s dialogues are literature is because they are to a considerable extent structured around arguments rather than narratives of events.

However, the *DRN* and the dialogues both involve fictional situations, and I shall take them as literature under this looser requirement. Plato presents his discussions within narrative frames, or as overheard conversations, where a scenario is revealed gradually by the speakers. We as readers imagine the conversation from the outside, as if it were the script of a play, and are challenged to reflect on the relationship between the characters and their arguments, and to compare them with ourselves and our own ways of thinking. An illustration of this is at *Republic* 432, which I shall discuss in Chapter 2. Lucretius presents his poem as a lecture to Memmius, a silent addressee. In doing so, he directs us to imagine the relationship between his pupil and the domineering personality of his own poetic persona; the fictional space lies in the reader’s freedom to shift between the poet’s and addressee’s perspectives.<sup>12</sup>

In addition to the use of a fictional situation, a work of literature may be imaginative in the grander Romantic sense in which such a work is seen as the vision produced by the author’s creative imagination.<sup>13</sup> The ancient precursor of this is the motif of the poet who

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<sup>10</sup> Booth (1988), esp. 13-17; John (1998).

<sup>11</sup> *Poetics* VI.1449b23-1450b12; VIII.1451a16 ff.

<sup>12</sup> On Lucretius and his addressee, see Townend (1978); Mitsis (1993).

<sup>13</sup> See Shelley in Brett-Smith (1921).

writes under the inspiration of the Muses; not by coincidence, both Plato and Lucretius speak of their own works in this way.<sup>14</sup>

Another important aspect of literature is its artistry: the care with which it is constructed and its aesthetic qualities, such as elegance of rhythm or syntax. The language in which a scientific textbook is written, it has been argued, should be clear and ‘transparent’, allowing the reader to grasp the argument as easily as possible.<sup>15</sup> In contrast, as I shall show in the cases of Plato and Lucretius, the effects which a work of literature conveys is dependent upon its language in ways which go beyond the grasp of the words’ primary meaning; for example, through the use of imagery, allusion, alliteration and assonance, and other such paradigmatic literary devices. In literature, language is not a transparent window, but a prism which colours the meaning it reveals. Reading a work of literature is thus an experience in which aesthetic effects play a large role. Some philosophers, notably Kant in the *Critique of Judgement*, have connected the notion of aesthetic experience with that of the autonomy of the work of art which is able to provide an aesthetic pleasure detached from the person experiencing it and their concerns.<sup>16</sup> In Chapter 2, I shall show how the *Phaedrus* presents itself as an object of aesthetic as well as intellectual contemplation, and therefore as a precursor of the modern idea of the independent aesthetic experience.

Finally, a work of literature has humanity: it is written to resonate with human emotions and experiences, and to convey a sense of what it is like to see the world from a particular perspective. Wayne Booth has spoken of the ‘ethos’ of a work of literature: the idea that such a work has its own distinct style and personality, so that the process of reading ought to be considered and evaluated in terms of an interaction analogous to that between two

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<sup>14</sup> *DRN* I.921-934; *Phdr.* 245a1-8; cf. *Ion* 533d-536d. On Platonic inspiration, see Ch. 2.

<sup>15</sup> Kivy (1997): 111.

<sup>16</sup> For a survey of the debate over aesthetic experience, see Collinson (1992), who argues that ‘in aesthetic experience the means *is* the end’ (176).

people.<sup>17</sup> Hume observed that ‘we choose our favourite author as we do our friends: from a conformity of humour and disposition’.<sup>18</sup> Each reader engages on a personal level with a work of literature; different styles will appeal to different personalities, and shape them to a greater or lesser degree. I shall return to this point in Chapter 2, when considering Plato’s ideas about how writing can become involved in the reader’s philosophical and moral development.<sup>19</sup> Cicero, too, appreciated the enduring pleasure of cultivated writings (*litterae*), those ‘arts which pertain to humanity’.<sup>20</sup>

It is not claimed that these three qualities of imagination, artistry and humanity are the exclusively defining qualities of literature. Rather, they will form three key ideas with which I shall work in analysing the interaction of philosophical and literary elements in Plato and Lucretius. Below I shall give some examples of ancient and modern works which in varying degrees combine the literary and philosophical qualities outlined above.

### **3. Philosophical literature ancient and modern**

In studying Plato and Lucretius together, I shall claim that they form two of the most important ancient examples of philosophical literature, and indeed occupy positions unparalleled by any other ancient works currently available. In addition to their intrinsic quality, the *DRN* and the dialogues have survived in a comparatively complete state, and have exerted a significant influence upon later philosophy and literature. They also make an interesting pair because of the probable relationship between them, which has not so far been sufficiently explored.

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<sup>17</sup> Booth (1988): 8-12, 169 ff. Cf. Collinson (1992): 155.

<sup>18</sup> Hume (1822) Essay XXIII, p. 231.

<sup>19</sup> On the moral value of literature, see Nussbaum (1985).

<sup>20</sup> *Arch.* 2 and 16; cf. Horace, *Ep.* II.1.126-33.

Empedocles qualifies as one of the earliest writers of philosophical literature, and one who, as will be discussed, had an important influence on both Plato and Lucretius. However, he is not the focus of this study, for three reasons. Firstly, in comparison to Plato and Lucretius, he exerted a relatively slight influence on the post-Classical tradition of philosophy and literature. Secondly, his works are much more fragmentary and less complete than theirs. Thirdly, he was writing at a time before the concept of philosophy had emerged as something which could be distinguished from poetry, played off against it and consciously combined with it, as happens in Plato and Lucretius.

Later ancient works located between the literary and the philosophical include, for example, Ennius' fragmentary *Epicharmus*;<sup>21</sup> Manilius' *Astronomica*; the pseudo-Virgilian *Aetna*; and probably the lost *Empedoclea* of Sallustius, mentioned by Cicero.<sup>22</sup> The same is true of Cicero's philosophical works and Seneca's *Epistles*.<sup>23</sup> Book XV of Ovid's *Metamorphoses*, especially Pythagoras' speech, could also be considered philosophical literature. This is a less straightforward case, however, partly because it may be a parody, and partly because it only forms one part of a much larger, mythical narrative.<sup>24</sup>

Post-antiquity, there are a large number of works which could be considered philosophical literature. A few prominent examples are Dante's *Divina Commedia*, Milton's *Paradise Lost*, the short stories of Voltaire and Jorge Luis Borges, the novels of Iris Murdoch, Milan Kundera, Umberto Eco and David Foster Wallace, Hermann Hesse's *Das*

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<sup>21</sup> On the *Epicharmus*, see Courtney (1993): 4, 30-6.

<sup>22</sup> See Ch. 1.

<sup>23</sup> It would be interesting to compare Lucretius' and Seneca's treatment of the second-person speaker and fictionalised addressee.

<sup>24</sup> For Pythagoras and his philosophy at *Metamorphoses* XV.60-546 (cf. line 6), see Hardie (1995).

*Glasperlenspiel*, and Tom Stoppard's *Arcadia*.<sup>25</sup> These works, despite their diversity, are united in their fusion of theoretical argument and doctrine with a high level of creative artistry and moral insight.

#### 4. Plato and Lucretius as philosophical literature: Methods and approaches

From antiquity, the ambiguous status of the works of Plato and Lucretius has been reflected in their reception by poets, novelists, philosophers, theologians and scientists. In addition to philosophers, Plato has inspired writers of literature, including Virgil, Sir Philip Sidney, Thomas Mann, Hermann Hesse and Jorge Luis Borges. Lucretius' atomism has influenced poets, philosophers and scientists, from Giordano Bruno to Primo Levi.<sup>26</sup>

In Classical scholarship, there has in recent decades been an increasing interest in the question of how philosophy, poetry and rhetoric interact in Plato and Lucretius.<sup>27</sup> Regarding Plato, there are those who argue that the dialogues must be read as philosophy rather than philosophical literature, even though they involve literary elements, because of their 'sheer proportion of overt and original philosophical argument'.<sup>28</sup> Others see them as 'philosophical poetry' or 'works of art', part of our 'literary tradition', and appealing to 'a public far wider than the public for technical philosophy'.<sup>29</sup> The exact proportions of literary and

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<sup>25</sup> For further examples of 'philosophical literature', see Cooksey (2006). I would also include *Sophie's World* by Jostein Gaarder and Norton Juster's *The Phantom Tollbooth*; even though they are children's novels, they play in a charming and imaginative way with philosophical and mathematical ideas.

<sup>26</sup> On Lucretius' influence, see Gillespie and Hardie (2007); Greenblatt (2011). Primo Levi's *Il Sistema Periodico* alludes to Lucretius: Thomson (2012).

<sup>27</sup> Useful discussions of Lucretius as poet and philosopher include those by Santayana (1953), Nussbaum (1994), and Porter, J. I. (2003, 2007). On Plato's place between literature and philosophy, see Rosen (1988); Gould (1990); Murdoch (1999); Rowe (2007); McCoy (2008); Wolfsdorf (2008); Petraki (2011).

<sup>28</sup> Blondell (2002): 37-8.

<sup>29</sup> The first quotation is from Nussbaum (1982): 90-1; the rest are from Bacon (2001): 341-4. Cf. Thompson (1868): xv; Murley (1955): 287; Kurke (2006).

philosophical qualities in Platonic dialogues vary considerably, from the most difficult, abstract dialogues like the *Parmenides* and *Theaetetus*, to the most poetical and dramatic ones, such as the *Phaedrus* and *Symposium*.<sup>30</sup> For the purposes of this study, I shall focus on those dialogues which combine a high level of literariness with reflection upon their own status, in particular the *Phaedrus*, *Republic* and *Timaeus*. I shall argue that in such dialogues, whether or not this is true for the whole Platonic corpus, the philosophical argument and the literary effect are interdependent: one cannot be appreciated without the other.

As early as the Renaissance, Sir Philip Sidney included Lucretius on his list of philosophical poets, who, he claimed, were like ‘the meaner sort of Painters, who counterfeyt onely such faces as are set before them’.<sup>31</sup> Similarly Shelley, who was influenced by Sidney, praised Lucretius as a ‘creator’, but criticised him for having ‘limed the wings of his swift spirit in the dregs of the sensible world’.<sup>32</sup> While Sidney’s and Shelley’s views differ in their details, the general point is clear: the subject of philosophical poetry is limited by its confinement to this world, which, if the poet is to describe it faithfully, imposes restrictions on his creative freedom; while the poet who, like Plato, creates an ideal world from his own imagination, can make it morally and aesthetically superior to the one in which we live.<sup>33</sup> In the last century, however, Santayana argued that a ‘naturalist conception’ of the world, such as Lucretius’, with its concomitant ability to see things truthfully, displayed a greater imaginative ability than that shown by the mythological poets. He characterised the *DRN* as ‘the poetry of things’, effective by its very ‘impersonality’.<sup>34</sup> From this perspective, then, Lucretius’ poetry resides precisely in its materialism and focus on the natural world. In

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<sup>30</sup> For literary analysis of Plato’s late dialogues, see Blondell (2002) chs. 5-6; Gill and McCabe (1996).

<sup>31</sup> Sidney (2002): 10.

<sup>32</sup> Shelley (1921): 41.

<sup>33</sup> Cornford (1997): 31-2, made a similar distinction: see the introduction to Chapter 3.

<sup>34</sup> Santayana (1953) ch. 1.

Chapter 4, I shall argue that even the most technical sections of the *DRN*, carefully read, have important poetic effects; Epicurean theory thereby becomes the inspiration for imaginative literature.

While some critics have produced separate studies of both Plato and Lucretius,<sup>35</sup> and while the two have been compared in passing,<sup>36</sup> it is much rarer for them to be studied in tandem, even when it would be appropriate to do so. A recent study by Barfield, for example, on the quarrel between philosophy and poetry from Plato to the present day, ignores Lucretius.<sup>37</sup> Two earlier articles which do draw sustained parallels will be discussed in later chapters.<sup>38</sup>

My approach to Plato and Lucretius will be based on two different claims, even though the same evidence will sometimes support both. Firstly, all evidence considered, it is likely that Lucretius read at least some of Plato's works, and that the *DRN* reveals their direct influence. Secondly, parallels can be drawn between the way in which Plato and Lucretius, at different points within the same literary, philosophical and cultural tradition in Greece and Italy, treat certain themes; these parallels provide a way of understanding how literature and philosophy may be combined in the same work.

In addition, the Platonic and Epicurean philosophical systems display a number of important oppositions, as well as unexpected parallels. Whether deliberately or by chance, Lucretius attacks identifiably Platonic views. This adds to the interest in considering how, why and with what success Plato and Lucretius, despite espousing such different philosophical outlooks, nevertheless both composed works of philosophical literature. For

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<sup>35</sup> Such as Clay (1983, 1988, 2000) and Nussbaum (1982).

<sup>36</sup> E.g. Kosman (1992): 75; Fowler (2002): 161; Campbell (2003): 1-2.

<sup>37</sup> Barfield (2011).

<sup>38</sup> Shorey (1901); de Lacy (1983). I have not been able to find any other sustained comparisons of Plato and Lucretius in Classical scholarship.

this reason, the evidence for there being a strong philosophical and literary tradition linking Plato and Lucretius, which I shall discuss in Chapter 1, makes them worth comparing even if Plato did not influence Lucretius directly.

## 5. Treatment of predecessors

One compositional technique linking Plato and Lucretius is their adeptness in assimilating and reapplying the writings of their predecessors, whether philosophical or literary or both, within their own imaginative and philosophical framework. Plato's creative engagement with the writings of his contemporaries and predecessors is well established. I will, however, examine some further instances of it, in Chapter 2 with the rhetoricians, and in Chapter 3 with the early natural philosophers.

Lucretius' situation is less well established. A considerable amount of the physical doctrine in the *DRN* can be closely paralleled by what remains of Epicurus' works.<sup>39</sup> However, Lucretius' account of the physical universe and the poetical and ethical views which he derives from this is also shaped by other works, including those which he subverts. I shall argue that the *DRN* is not a reworking or adapted translation of Epicurus' writings, but rather an interpretation and re-imagining of selected parts of them, intermingled with the influence of other writers, for a personality, time and language very different from Epicurus' own. Despite claiming to be following Epicurus' *signa*,<sup>40</sup> Lucretius presents his own original interpretation of the *doctrina* by which he was inspired, with new literary and philosophical associations.

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<sup>39</sup> Sedley (1998): 86, n. 108, estimates this as 'considerably less than one per cent' of the total.

<sup>40</sup> III.3-4.

Thus, while Epicurus' works may exert a more pervasive influence on the *DRN* than others do, and while Lucretius does not tend to reject or undermine the truth of Epicurus' doctrines as he does un-Epicurean views, in other respects it cannot be said that he makes a more philosophical use of Epicurus and a more literary use of other writers. Rather, as I shall show, Lucretius treats Epicurean material in a creative rather than a scholarly fashion.

Most scholars, with the notable exception of de Lacy, have assumed from Lucretius' declarations of Epicurean allegiance that where he seems to be engaging with a pre-Epicurean work, Epicurus must have previously engaged with it and that Lucretius is following his treatment. In considering Lucretius' treatment of Plato, I shall argue that the need to posit Epicurus as an intermediary between them is often unnecessary, and that it is a mistake to assume that an anti-Platonic argument used by Lucretius but not found in Epicurus' extant works must have appeared somewhere in Epicurus' lost works. Rather, it is just as plausible, and sometimes more so, that Lucretius could have found his own arguments to supplement Epicurus', just as he encourages Memmius at *DRN* I.400-417 to develop the poem's arguments for himself.<sup>41</sup>

Just as it is not usually suggested that Lucretius followed Epicurus in adapting Thucydides in *DRN* VI, or in the language of his diatribe against *amor* in *DRN* IV, so, I shall argue in Chapters 1 and 4, Lucretius' specific references to Plato and other pre-Epicurean authors should be seen not as reworkings of Epicurus' polemic against them, but rather as instances of Lucretius' own original engagement with them, albeit on Epicurean principles. In particular, Lucretius' treatment of Plato illustrates the way in which Lucretius turns non-Epicurean sources against themselves, as argued by de Lacy and Campbell.<sup>42</sup> This technique

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<sup>41</sup> See Asmis (1984): 258-9, on Lucretius' development of arguments beyond what is found in Epicurus.

<sup>42</sup> Campbell (2003): 180-184 (cf. *id.* 2002: 4 ff.), compares the phenomenon to Richard Dawkins' cultural 'memes', which can 'replicate' themselves in individuals, imitate other memes and replace them.

presents another point of comparison with Plato, whose physical explanations in the *Timaeus*, I shall argue in Chapter 3, are the result of an imaginative and sometimes irreverent reworking of his predecessors.<sup>43</sup>

## 6. Structure

All four chapters will, from different angles, consider the interaction of philosophical and literary elements in Plato and Lucretius. In Chapter 1, I shall examine the tradition of literature and philosophy in which they were writing. I shall argue that, given the circumstantial evidence, it would be far from surprising for Lucretius to have read Plato; or rather, given his education, surprising if he had not. I shall then use specific parallels between the *DRN* and certain of the dialogues to argue that there is a discernible Platonic influence on the *DRN*. In Part I of Chapter 2, I shall extract the outline of a theory of philosophical literature from the *Phaedrus* and related dialogues.<sup>44</sup> I shall argue that the *Phaedrus* prompts us to appreciate it as a work of literary art inspired by philosophical knowledge of the Forms. In Part II, I shall analyse Socrates' 'prelude' at *Republic* IV.432 as an example of how the dialogue's philosophical and literary teaching works in practice.

In Chapters 3 and 4, I shall consider the treatment of natural philosophy in the *Timaeus* and *DRN* II respectively, within the context of related works. In particular, I shall examine their polemical adaptation of their predecessors. I shall argue that even the most seemingly technical passages of the *Timaeus* and the *DRN* still depend upon literary techniques for their full effect, which stimulates the reader's imagination as much as it makes

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<sup>43</sup> On Plato in the ancient scientific tradition, see Hall (1965): 120; on his predecessors, McCabe (2000).

<sup>44</sup> Gaiser (1984): 97, suggests that Plato's account of writing is the first theory of philosophical literature.

him or her think analytically. Finally, the Conclusion will reflect briefly on future paths of investigation stemming from this thesis.

This study is not a work of aesthetic philosophy, in that it does not claim to propound any general rules as to how philosophical and literary elements will combine in any written work, but rather to show how they do combine in two cases. From the point of view of Classical scholarship, I hope to show that detailed analysis of select passages, properly contextualised, can provide at least as fruitful an understanding of Plato and Lucretius as a broader ranging but less detailed discussion. I shall look especially at passages which have so far not received sufficient scholarly attention, as well as those in which I feel a comparative approach will lead to a better understanding of the passage's purpose and effects within the work as a whole.

This study, therefore, is intended both as an interpretative work of literary criticism and history, a meditation on the differing natures of philosophy and literature and the ways in which they might be combined, and an illustration of the potential of philosophical literature as a form of artistic writing. My approach will be part analysis and commentary, and part the connecting of the individual passages discussed to the wider argument and to other ancient works of philosophy and literature, in order to understand Plato's and Lucretius' originality and significance.



## Chapter 1.

# Plato and Lucretius: Their Place in the History of Ancient Thought, and Parallels between Them

### 1.1 Argument

The last study to be devoted to the relationship between Plato and Lucretius was de Lacy's article of 1983. De Lacy argued that Lucretius and Plato had opposing views on the world, but that Lucretius also used Platonic imagery and arguments to make the opposite point to their original author: 'an examination of the evidence ... suggests very strongly that Lucretius did indeed have a first-hand knowledge of Plato's writings and that he not only rejected Platonism but even derived anti-Platonic arguments from the *Dialogues*, thus turning Plato against himself'.<sup>1</sup> What is unusual about de Lacy's view is his contention that Lucretius knew Plato first hand and, in many places, directly responds to him, rather than indirectly through Epicurus or other Epicurean writings; and that the *DRN* is far from being a simple reflection of Epicurus' own doctrines.<sup>2</sup>

In this chapter, following de Lacy, I shall consider evidence from ancient sources on the connection between Plato and Lucretius, as well as more recent scholarship. Through this I hope to bring the Epicurean tradition in general and Lucretius in particular closer to Plato. The lack of extant material from Epicurus himself, as well as from Democritus and other sources, makes the argument necessarily speculative. Despite this, I shall argue that the ancient evidence, along with work done by other scholars, points to a significant number of direct links between Plato and Lucretius; that Platonic thought is in many ways the natural

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<sup>1</sup> De Lacy (1983): 291.

<sup>2</sup> Cf. de Lacy (1948): 12-13.

counterpoint to Epicureanism; and that Plato was an opponent of whom the Epicureans in general and Lucretius in particular were very well aware. Finally, I shall show how certain images from the *DRN* engage with Plato, and consider the effects of this intertextuality. This evidence will be complemented by later chapters, in which I consider the tactics which Plato and Lucretius use in combining philosophy and literature.

## 1.2 Plato and his sources

### 1.2.1 Orientation: the *περὶ φύσεως* tradition

Ancient works on nature (*περὶ φύσεως*) and natural philosophy stretch from Democritus to Lucretius and onwards.<sup>3</sup> While the *Timaeus* contains Plato's most extended treatment of natural philosophy, questions reflecting and reacting to the tradition of thought *περὶ φύσεως* also feature in other dialogues. Epicurus in turn responded to Plato, as well as the Presocratics, and Lucretius, arguably, responded directly to Epicurus and Plato, and perhaps also to Democritus and others. I shall here consider some of the most important strands, as far as they can be traced from the fragmentary evidence, through which Plato and Lucretius are associated in the tradition of natural philosophy, and within the encompassing tradition of ancient philosophy as a whole. The primary aim of this study, it should be emphasised, is not *Quellenforschung* but a comparative account of the way in which Plato and Lucretius create philosophical literature. Their individual imagination and originality therefore matter, as well as the relationship between them, and it is to bring these aspects out more clearly that the comparisons with other writers are made.

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<sup>3</sup> For the tradition of the work on nature, for which the title *Περὶ Φύσεως* was often used, see Sedley (1998): 21-22. Diogenes Laertius (IX.5) reports this title for Heraclitus' book (KRS: 102-3, 184). Schmalzriedt (1970): 83, argues that the ancient testimonies on *Περὶ Φύσεως* make its use by the Presocratics very likely. On 'nature' in the title of Empedocles' work or works, see Osborne (1987): 26.

## 1.2.2 Plato and Democritus

Scholars have generally been cautious about the extent to which Plato alludes to Empedocles and Democritus, two figures also of significance for Epicureanism, particularly for Lucretius. Aristotle and Theophrastus provide the earliest named testimony on Democritus.<sup>4</sup> Plato does not mention Democritus by name in any of his extant works,<sup>5</sup> while he does name a considerable number of Socrates' philosophical contemporaries and predecessors: Empedocles, Thales, Parmenides, Heraclitus, Anaxagoras, Protagoras, Gorgias, and Hippocrates of Cos all feature repeatedly. Diogenes Laertius reports, unfortunately without elaboration, that the omission was noticed in the light of Plato's having spoken against 'almost all those before him' (σχεδὸν ἅπανσι τοῖς πρὸ αὐτοῦ).<sup>6</sup> However, Democritean influence, as far as can be judged from citations and second-hand reports on his works, has been seen in certain parts of the dialogues, particularly in the *Timaeus*.<sup>7</sup> The latter's construction of the world out of the geometrical solids which compose the four elements and the triangles from which they are formed can be viewed as a type of 'geometrical atomism', which seems to synthesise atomistic and Empedoclean explanations into an overarching 'theory of everything' within a Platonic teleological framework.<sup>8</sup> At the same time, the theory

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<sup>4</sup> Silvestre (1985): 13. On Plato's use of the Presocratics, see Solmsen (1960): 15, 19, 48-50, 116-120.

<sup>5</sup> Nor does Plato mention Leucippus (for whom see Marciano 2010: 486-7). Silvestre (1985): 17, suggests that Epicurus' denial of Leucippus' existence may have indicated his low estimation of him.

<sup>6</sup> Diogenes Laertius, III.25; Ferwerda (1972): 337-8. Plato does not mention Aristotle, unless he is the interlocutor of that name in the *Parm.*, which is debated (Scolnicov 2003: 45). On why Plato did not mention Democritus, see Nikolaou (1998): 201-4.

<sup>7</sup> Nikolaou (1998): 201, identifies *Phlb.* 29a3-4 and *Tim.* 48b5-c2 as near-certain references to Democritus; further suggestions in Shorey (1888): 402, with n. 1.

<sup>8</sup> Aristotle compares Democritus' atomic theory with Plato's at *GC* 324b35-326b6 = Taylor (1999), *Test.* 48; Aristotle also recognised that sensory qualities should not be attributed to atoms. Cf. Taylor (1999): *Test.* 76 = Plutarch, *De Primo Frigido* 8.948c. Dillon (2003): 1-4, argues that Aristotle assimilates the theories of the atomists and Plato in the *Tim.* in order to polemicise against both simultaneously; cf. *Cael.* 300b8-301a11, 306a26-307b5. Gregory (2000): 238, argues that Plato's 'atomism' is in some respects closer to modern theories than Democritus'. Nikolaou (1998): 194-206, argues that Democritean atomism influenced the *Tim.*

of perception developed in the *Timaeus* (45b-46a, 61c-69a) was singled out along with Democritus' theory for particular discussion by Aristotle's successor, Theophrastus.<sup>9</sup>

O'Brien concludes that in his theory of sense-perception, Plato is 'largement tributaire de ses prédécesseurs, Empédocle, Démocrite et d'autres'.<sup>10</sup> Ierodiakonou has argued that Plato's choice of four basic colours at *Timaeus* 68b5-c7, and his treatment of colours as 'real and objective', appears to have roots in Democritus' positing of four basic colours and treatment of all colours as secondary qualities.<sup>11</sup> On the level of metaphor, Cleary notes that in the account of space, or the place in which material things come to be, at *Timaeus* 52a8-b5, the phenomenon is said to be grasped by λογισμῷ τινὶ νόθῳ (52b2), that is, by an epistemologically dubious, 'illegitimate' sort of reasoning, as opposed to the νόησις, or pure thinking, with which Being is apprehended (52a4), and the senses by which objects in the physical world are. Cleary compares this with Democritus, who was said to have distinguished between a 'legitimate cognition', γνώμη γνησίη, and a 'bastard' kind, σκοτίη.<sup>12</sup> Even if Plato's distinction is more subtle than Democritus',<sup>13</sup> it could be argued that Plato is deliberately reapplying Democritus' metaphorical language of illegitimacy against the concept of the void closely associated with the latter.<sup>14</sup> Plato will go on to redefine space in such a way as attempts to exclude void in the atomists' sense.<sup>15</sup>

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<sup>9</sup> Theophrastus, *De Sensibus* 49-82; see Ferwerda (1972): 341; Baltussen (2000): 15.

<sup>10</sup> O'Brien (1997): 305.

<sup>11</sup> Ierodiakonou (2005a): 227, 229-30; cf. Struycken (2003): 282.

<sup>12</sup> Democritus, DK B11; Sextus, *Adv. Math.* VII.138-40. For the legitimate-bastard contrast in a metaphorical sense, see *Phaedr.* 276a1-2, discussed in Ch. 2.

<sup>13</sup> As argued by Cleary (1997): 241-2, with n. 2.

<sup>14</sup> As suggested by Einarson and de Lacy (1967): 166, Plato may be alluding to Democritus' metaphorical language in B117 DK at *Parm.* 130d7-8. Democritus claims we know nothing: ἐν βυθῷ γὰρ ἡ ἀλήθεια. Socrates may parody this image when he describes himself as δείσας μὴ ποτε εἶς τινα βυθὸν φλυαρίας ἐμπεισῶν διαφθαρῶ.

<sup>15</sup> See Ferwerda (1972): 356-7, on *Tim.* 60c, 79b, and the relationship between Plato's διάκενα and the atomists' κενόν.

As Ferwerda observes, ‘it is typical of Plato first to borrow images and comparisons from other philosophers and then to adapt them to the needs of his own thought’;<sup>16</sup> as we shall see, the same comment may be made of Lucretius. Aristotle reports that Democritus and Leucippus described the parts of the universe separated by the void as having one φύσις, as if they were pieces of gold: τὴν δὲ φύσιν εἶναί φασι αὐτῶν μίαν, ὥσπερ ἂν εἰ χρυσὸς ἕκαστον εἴη κεχωρισμένος.<sup>17</sup> At *Timaeus* 50a5-b5, Plato, in explaining the nature of the receptacle, also uses the analogy between gold and the substrate out of which substances are formed, as a way of underlining the original undifferentiated nature of the substrate.<sup>18</sup> He therefore seems to be using the gold analogy to make the opposite point to the atomists: that the substrate is prior to the emergence of distinct shapes, rather than that originally distinct shapes have one nature. This connection, if Aristotle’s report is accurate, would furnish an example of Plato’s technique of reworking described by Ferwerda.

In general, the extent to which Plato’s geometrical atomism or theory of perception were specific reactions to Democritean atomism seems difficult to determine for certain, although it seems more probable than not that Plato was acquainted with Democritus’ works, especially if the latter visited Athens.<sup>19</sup>

Further passages from the *Timaeus* and other dialogues seem to show traces of Democritean language, imagery and thought.<sup>20</sup> For instance, it has been argued that the *Ion*

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<sup>16</sup> Ferwerda (1972): 354.

<sup>17</sup> *Cael.* 275b29-276a1; the wording quoted above suggests that Aristotle is reporting an analogy used by the atomists themselves. Cf. Taylor (1999), *Test.* 52a.

<sup>18</sup> On this difficult passage, see Taylor (1928): 321-4; Cornford (1937): 181-5. Taylor notes that Aristotle, in *GA* II.329a13-24, criticises the gold analogy in the *Tim.* Aristotle does not connect this with the atomists’ account.

<sup>19</sup> Ferwerda (1972): 359. Sachs (1917): 193-206, concludes that Plato’s geometrical atomism is presented in polemical contrast to Democritus’. On Democritus in Athens, see DL IX.36 and Cicero, *Tusc.* V.36.104 (trans. Taylor 1999: D1). For a more general conceptual link between the atomists and Plato, see Stenzel (1966).

<sup>20</sup> For later references to Democritus and Plato together, see Ferwerda (1972): 341-2; Taylor (1999): 55-7 (citing DL IX.37); Stobaeus II.7.3i with Taylor (1999): *Test.* 189. Stobaeus reports that Plato and Democritus κοινῶς ἐν τῇ ψυχῇ τὴν εὐδαιμονίαν τίθενται.

alludes to and reverses Democritus' idea of the inspired poet, by divorcing inspiration from τέχνη, which Democritus seems not to have done,<sup>21</sup> and by developing his idea of ἐνθουσιασμός into one of mindless μανία.<sup>22</sup> Democritus also wrote a book on magnetism; this allows the speculation that the combination of magnets and inspiration in the *Ion* is a double reference to him.<sup>23</sup> Moreover, Cicero presents Democritus and Plato as having a more energetic and brilliant *locutio*, or 'literary style', than the comic poets, whose use of rhythm is closer to prose; as such these philosophers are the truer poets.<sup>24</sup> Aristotle remarks on Democritus' greater intelligibility of expression than that of Empedocles', while Cicero also emphasises his comprehensibility in comparison with Heraclitus.<sup>25</sup>

Aristotle distinguished Empedocles, and all writing in verse on medicine or nature (ιατρικὸν ἢ φυσικὸν τι διὰ τῶν μέτρων), from those, such as Homer, who were really poets κατὰ τὴν μίμησιν, that is, because their poetry contained a 'representation' of human actions.<sup>26</sup> Homer was thus a ποιητής, but Empedocles a φυσιολόγος, and the work of the two had nothing in common except the use of metre.<sup>27</sup> Diogenes Laertius reports that Aristotle, in his lost work *On Poets*, called Empedocles Ὀμηρικὸς and skilled in the use of metaphors and other poetic devices.<sup>28</sup> However, Aristotle also criticised Empedocles on the grounds that his

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<sup>21</sup> Tigerstedt (1970) and Murray (1981, 1996) argue that Plato is the first clearly to separate poetic inspiration and τέχνη; cf. Verdenius (1962); Ford (2002).

<sup>22</sup> Brancacci (2007): 200-205. For a survey of Democritus' and Plato's conceptions of poetic inspiration, and attitude to poetry more generally, see Ferwerda (1972): 342-350.

<sup>23</sup> Ferwerda (1972): 343 n. 2; cf. Diels and Kranz (1952): 146, *ad fr.* 18, with *Ion* 534b; Murray (1996): 112-14. For scepticism as to our understanding of Democritus, see Tigerstedt (1970).

<sup>24</sup> Cicero, *Orator* XX.67; cf. Dionysius, *Comp. Verb.* 24, with Ferwerda (1972): 342-3, and Taylor (1999): *Test.* 41. Brancacci (2007): 189, also suggests that Democritus' idea of sounds may have influenced the *Crat.*; cf. Taylor (1999): *Test.* 167. On *locutio* here in the sense of *elocutio*, see Lausberg et al. (1998): §498, 793.

<sup>25</sup> Aristotle, *GA* II.8.747a25-34; Taylor (1999): *Test.* 143; Cicero, *De Interpr.* II.64.133. Aristotle's remark is directed specifically at the two authors' accounts of the sterility of mules, but could be indicating a typical quality.

<sup>26</sup> On the term μίμησις, see Lucas (1972): 258-272; Halliwell (1987): 70-73.

<sup>27</sup> *Poetics* 1447b16-20; Most (1999): 332-3.

<sup>28</sup> DL VIII.57; Lucas (1972): 60-61.

poetic mode of expression made his ideas obscure.<sup>29</sup> Epicurus' works are scarcely paradigms of literary elegance, a criticism made, of Epicurean writing in general, by the admittedly hostile Cicero.<sup>30</sup> In this as in other respects, Epicurus is to be strongly contrasted with Lucretius, whose *multa lumina ingeni, multae tamen artis* were, like the *clarissima uerborum lumina* of Democritus and Plato, recognised by Cicero, if too peremptorily to constitute a satisfying judgement. Lucretius' emphasis on his own clarity and art, and his ways of achieving it, such as by avoiding technical terms<sup>31</sup> and by using comparisons with everyday experience, should therefore perhaps be seen as following in the tradition of the poetical exposition of philosophy established by Democritus and, paradoxically, by Plato.

Kahn has argued for thematic connections between Plato's and Democritus' ethical ideas, for example, in the motif of the soul which uses the body as its instrument.<sup>32</sup> However, his connections remain largely speculative, not least because of the fragmentary and indirect nature of our sources on Democritus. Morel has drawn attention to a number of other possible connections between Plato and Democritus, and in particular has speculated that Plato's concept of the necessary or spontaneous cause in the *Timaeus* and elsewhere may have similarities with Democritus' necessity, which he identified with the whirlwind of the cosmos.<sup>33</sup> Finally, Democritus is recorded from Cicero onwards as the philosopher who

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<sup>29</sup> *Met.* 1.985a10, ἃ ψελλίζεται λέγων Ἐμπεδοκλήης; *Rh.* 1407a32-37. Catherine Osborne discussed these passages in a paper on Aristotle and Empedocles at the *GANPh* 2010 conference in Würzburg.

<sup>30</sup> *Tusc.* III.33; *ND* I.58-59. Epicurus' letters, designed for a wider audience, are written in a less dense and technical style than his *Περὶ Φύσεως*. However, while the *ad Men.* contains stretches of rhetoric, none of the letters makes extended use of imagery, myth, characterisation or similar devices appropriate to literature. In contrast, Cicero admired the literary elegance of Aristotle's exoteric works: *Fin.* I.14 (in contrast to Epicurus' unadorned style); *ND* II.95.

<sup>31</sup> For a study of this see Sedley (1998), Ch. 2.

<sup>32</sup> Kahn (1985), esp. 8-11, with Democritus B 159 DK.

<sup>33</sup> Democritus, DK 68 A 1, A 83, with Morel (1996), esp. 70-1.

laughed at human affairs.<sup>34</sup> This suggests another speculation: that Plato's attitude towards humans as the playthings of the gods, and towards human life as of little ultimate value, was a religious reworking of a Democritean view based on a fundamentally irreligious understanding of nature.<sup>35</sup>

### 1.2.3 Plato and Empedocles

In contrast to his silence on Democritus, Plato mentions Empedocles by name in two places: *Meno* 76c4-e6 and *Theaetetus* 152e3-4. He probably alludes to him at a number of other places.<sup>36</sup> At *Meno* 76c4-e6, Socrates presents a definition of colour in a way which will be attractive to Meno, but which, he stresses, is not as good as his previous definitions of shape. While the latter were based on a form of dialectical analysis, the attractive definition of colour is given κατὰ Γοργίαν, but also employs ἀπορροαί τινες τῶν ὄντων κατὰ Ἐμπεδοκλέα. The repetition in κατὰ Γοργίαν and κατὰ Ἐμπεδοκλέα in two successive sentences by Socrates associates the ideas of the two thinkers closely, while Meno is asked to confirm not only his own but also Gorgias' acceptance of the existence of effluvia, and therefore of the definition which Socrates draws from it (76c7).

The final definition of colour is preceded by a quotation from Pindar in the form of a direct command (76d13), as if addressing the audience from a position of superior authority. This definition, derived from Empedoclean premises, is moreover τραγική, 'grandiose' and

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<sup>34</sup> Cicero, *De Orat.* II.58.235. This description both associates Democritus with laughter and frames a typically Presocratic physical explanation for him. Cf. Julian, *Epist.* 201, trans. Taylor (1999), *Test.* 27; Philostratus, *Vita Ap.* VIII.7.14, trans. Taylor, *Test.* 28, with other references.

<sup>35</sup> Cf. the comments by the third-century Bishop of Rome, Hippolytus, in *Haer.* I.12-13; cit. Taylor (1999): *Test.* 78, with p. 263. Cf. *DRN* III.1039-41.

<sup>36</sup> Empedocles is also listed in the spurious *Sis.* (389a), alongside Anaxagoras and 'the other star-gazers'. The scholiast on the *Gorg.* cites a line from Empedocles, καὶ δις γὰρ ὁ δεῖ καλὸν ἐστὶν ἐνισπεῖν, repeated almost verbatim in Plutarch, *Non posse* 1103f (Wright 1995: 184-5); this is echoed at *Gorg.* 498e11-499a1, *Phlb.* 60a1-2, and *Leg.* 956e7-957a1. For Empedoclean references in Plato, see Solmsen (1965).

‘rhetorical’, the sort associated with poets and sophists.<sup>37</sup> Without going into the debate over the definition’s philosophical status,<sup>38</sup> it seems clear that we are supposed to view it as less satisfactory than Socrates’ previous examples (74b-76a). It is associated with the status of poetic utterance, which Plato elsewhere portrays as inspired verse without knowledge.<sup>39</sup> The word ἀποροαί seems to have been used by Empedocles as a technical term for the effluences which all bodies give out and which are responsible for all types of sense perception.<sup>40</sup> Plato’s use of ἀποροαί together with a quotation from Pindar thus mingles the poetical and the scientific in a way which suggests a parody of Empedocles’ own oracular style.<sup>41</sup>

It might be argued that Socrates’ requirement at 75d5 ff. that a dialectical definition should be true, as well as using those terms which the questioner agrees he knows, implies that the definition of colour at 76c4-e6 is also to be taken as endorsed as a physical explanation by Socrates, or rather Plato.<sup>42</sup> However, the point of the reference to Gorgias at the beginning of Socrates’ colour definition and to tragedy, and the emphasis on the definition’s unsatisfactoriness, is surely to distinguish it from Platonic definitions involving the clarification of the relation between terms. Socrates nowhere says that he endorses the premises stated at 76c7-11, on which his definition at 76d4-5 is dependent. Moreover, the defining of shape (74b-76a) and colour is intended as a practice exercise to illustrate the kind of definition Socrates is looking for with ἀρετή. Socrates’ Gorgianic-Empedoclean definition is just what follows from the premises which he has given and Meno has accepted. It is

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<sup>37</sup> The nuances of this term are discussed by Scott (2006): 43; Bluck (1961).

<sup>38</sup> See Bluck (1961); O’Brien (1970): 144, n. 24; Sansone (1996).

<sup>39</sup> See *Ion* 533e-535a, *Leg.* 719c.

<sup>40</sup> Γνούς, ὅτι πάντων εἰσὶν ἀποροαί, ὅσ’ ἐγένοντο, fr. B89 = Plutarch, *Quaest. Nat.* 916d; Garani (2007): 195; Long (1966): 259-260.

<sup>41</sup> The effluences theory is given a comic twist at *Phdr.* 251b2, c5-d1; 253e5-6; 255c1-d3; cf. Freeland (2010): 67.

<sup>42</sup> This is roughly Scott’s argument (2006: 43-5). See *Meno* 75d5-7: ἔστι δὲ ἴσως τὸ διαλεκτικώτερον μὴ μόνον τάληθῆ ἀποκρίνεσθαι, ἀλλὰ καὶ δι’ ἐκείνων ὧν ἂν προσομολογῆ εἶδέναι ὁ ἐρωτώμενος, and 75c8.

philosophically unsatisfactory because it does not tell us what colour is, but only how it may be perceived.

The image of Empedocles himself which this brief passage suggests is a polemically humorous one tainted by association with the sophistic argumentation characteristic of Gorgias and the poets' overweening claims to authority, as well as with the use of obscure technical language. It is implicitly critical of the type of physicalist explanation of colour which Plato extracts from Empedocles; even if Plato may be unfair to take as Empedocles' definition of colour what seems rather, from comparison with other sources such as Theophrastus, to be his account of sight.<sup>43</sup>

The definition of colour in the *Meno* is similar to that introduced at *Timaeus* 67c, and developed at 67d1-68d7, in reference to a theory of sight expounded at 45b2-46a2.<sup>44</sup> At 67c5-7, Timaeus introduces the *συχνὰ ... ποικίλματα ... ἃ σύμπαντα μὲν χροᾶς ἐκαλέσαμεν, φλόγα τῶν σωμάτων ἐκάστων ἀπορρέουσιν, ὅψει σύμμετρα μόρια ἔχουσιν πρὸς αἴσθησιν*. He uses the idea of colour as an effluvium (*φλόγα τῶν σωμάτων ἐκάστων ἀπορρέουσιν*), as in the *Meno* (*ἀπορροᾶς τινος τῶν ὄντων*). However, the effluvia in the *Timaeus*, but not in the *Meno*, are specifically identified as a type of flame, in line with the Empedoclean four-element theory on which Timaeus bases his account of matter. The *Meno* does not mention any flame emanating from inside the eye itself in perception; this, however, is central to the account at *Timaeus* 45b ff. and is invoked again at 67cd.

Timaeus uses the idea of the parts of the colour ray being well-fitted to sight (*ὅψει σύμμετρα μόρια*). This was the culmination of the definition of sight in the *Meno*, expressed in similar language to the *Timaeus* passage (*χροᾶ ἀπορροή σχημάτων ὅψει σύμμετρος*), even

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<sup>43</sup> Theophrastus, *De Sensibus* 7, with Ierodiakonou (2005b): 23 ff.; Sedley (1992).

<sup>44</sup> See Vlastos (1991): 122 with n. 65; Scott (2006): 44; Ierodiakonou (2005a).

if, as has recently been argued, ὄψις has a different meaning in the two dialogues.<sup>45</sup> The idea that the effluvia must fit with the pores which detect them is ascribed to Empedocles by Theophrastus.<sup>46</sup> However, Plato also uses the idea of effluences which are too big or too small to explain transparency, and black and white colours, while Empedocles seems only to have used size of the effluences to explain which sense organ they penetrated, and had explained black and white in terms of different proportions of water and fire particles in the colour effluences.<sup>47</sup>

There is no mention of the role of πόροι in either passage of the *Timaeus*, since the account is given in terms of the interaction between effluvium and ray of sight. This gives the idea of the ‘fitting’ of effluvium to sight a different sense in the two dialogues, and is a further step away from the model ascribed to Empedocles, which did involve pores.<sup>48</sup>

*Timaeus* also relates the theory of sight to his theory of taste and heat or coldness to the touch (67d5-e2), as operating in a similar way. This indicates another correspondence with the *Meno*, at 76d8-e1, where Socrates says that from his account of colour, Meno will also be able to say φωνήν ὃ ἔστι, καὶ ὁσμὴν καὶ ἄλλα πολλὰ; that is, he will be able to explain the rest of the objects of sense-perception along the same physicalist lines. Similarly, Empedocles’ theory of effluences applied to all the senses, with different-sized effluences fitting the pores of different sense-organs.<sup>49</sup> However, in the Platonic model, fire is the only element which engages with the incoming colour rays, while Empedocles thought that water was also involved. Plato explains the difference between night and day vision in terms of the

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<sup>45</sup> Ierodiakonou (2005a): 221, argues that ὄψις in the *Tim.*, unlike in the *Meno* (where it is used of the visual organs), refers to a body which is the combination of the rays of sight with the daylight into which they flow.

<sup>46</sup> Theophrastus, *De Sensibus* 7; Ierodiakonou (2005b): 24-25; Sedley (1992): 26.

<sup>47</sup> Ierodiakonou (2005b): 24, 27-28.

<sup>48</sup> Hershbell (1974): 159; Sedley (1992): 26, (2004): 103; O’Brien (1970): 157. On what ‘fitting’ the effluvia to ὄψις might involve, see Ierodiakonou (2005a): 221 ff.

<sup>49</sup> Theophrastus, *De Sensibus* 7 and Empedocles frs. B84, B109; Ierodiakonou (2005b): 24-34.

availability or lack of external fire from objects to stimulate the eye's internal fire (*Timaeus* 45b-e). Empedocles, according to Aristotle and Theophrastus, had also explained this difference, but in terms of the mixture of water and fire in the eye.<sup>50</sup>

The theory of sight and colour in the *Timaeus* thus covers several of the same phenomena as Empedocles, and uses a basically similar physical model, but with differences of detail in each explanation. Most importantly, however, Plato emphasises that his account is probable but not admitting of proof (68b-d) and that the gods devised human sight for the primary purpose of doing philosophy (46e-47c). Neither this uncertainty nor this teleological justification of sight can be found in Empedocles.

Plato's unacknowledged use of the Empedoclean model of vision in the *Timaeus*, developed from its first exposition in the *Meno*, thus serves as an example of the way in which, in the *Timaeus*, he both develops their physical theories and dismisses all such theories as inferior to the truths of philosophy.<sup>51</sup> I shall return to Plato's adaptation of the Presocratics in the *Timaeus* in Chapter 3. The term ἀπορροαί appears not only in Plato, but also later in Epicurus;<sup>52</sup> thus the Empedoclean model, as discussed by Plato and others, had a long life.

At *Theaetetus* 152c8-e9, Socrates includes Empedocles as supporting the view that the physical world is in a permanent process of coming-to-be rather than steadily existing.<sup>53</sup> Here, Empedocles is grouped most specifically not with the poets, Homer and Epicharmus, but rather with the σοφοί of the past, among whom Protagoras the sophist is not distinguished from the φυσικοί Heraclitus and Parmenides.<sup>54</sup> Here, as in Aristotle, *Poetics* I, metre is not

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<sup>50</sup> Aristotle, *GA* 779b15-20; Theophrastus, *De sensibus* 8; Ierodiakonou (2005b): 32-33.

<sup>51</sup> On Empedocles' influence on the *Tim.*, see Hershbell (1974); Taylor (1928); Ierodiakonou (2005a): 224 ff.

<sup>52</sup> Garani (2007): 195-8.

<sup>53</sup> The epistemological analysis of perception in this passage complements the physics of perception in the *Tim.* (Sedley 2004: 103).

<sup>54</sup> Plato's categorisation thus forms a precedent for Aristotle's placing of Empedocles in *Poetics* I. Plato considers Homer the greatest tragedian (152e5).

the criterion of classification, although Plato is much less explicit than Aristotle about what might positively link Empedocles and the other σοφοί and separate them from Homer.

Plato's language in the passage seems to have an ironic undertone. Firstly, at 152c8-11, Socrates asks if Protagoras was a πάσσοφός τις, a phrase which combines exaggeration with the casualness of the indefinite article, and only revealed his real ideas to his pupils in secret. His real point, however, as emerges from 152d2 ff., is that Protagoras' doctrine of the relative nature of sense-perceptions (152a-c) poses serious problems, because it implies that nothing remains constant and stable, but that everything is in perpetual flux. To call Empedocles, Parmenides and Heraclitus σοφοί, in light of Plato's frequent use of the adjective elsewhere in the dialogue of 'experts' who are then proven to be wrong, seems to have a distinctly polemical edge.<sup>55</sup> The same seems true of the phrase τῶν ποιητῶν οἱ ἄκροι τῆς ποιήσεως (152e4), of Homer and Epicharmus, with its over-zealous repetition of the ποιη- stem before and after the emphatic ἄκροι. Moreover, the distinction between the σοφοί and ποιηταί here is presented by Socrates as less important than the fact that all of them together, led by Homer<sup>56</sup> and with Parmenides excepted, represent in some form or other the view that everything is in flux. This is thus a deliberately polemical account, with no attempt made to distinguish between the niceties of the different views held by Empedocles and the σοφοί. That the ultimate originator of their ideas is Homer is a further insult, in view of Plato's usual separation of poetry from knowledge.

At *Sophist* 242c8-243b1, Empedocles is not mentioned by name, but it seems clear that Plato is referring to him along with the named Parmenides and unnamed Heraclitus, as would-be authorities on Being and Becoming.<sup>57</sup> If Empedocles' authority has been tainted by

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<sup>55</sup> See *Theaet.* 179d-180, in which Plato continues in a polemical engagement with the ideas of Heraclitus.

<sup>56</sup> 153a1-2; cf. 179e3-5.

<sup>57</sup> This is made clear by the mention of Aphrodite and Strife, Empedocles' two governing forces; cf. Cooper (1997): 264, with note.

association with the poets in the *Theaetetus*, in the *Sophist* he is directly criticised for being too poetical. He is one of those who, in talking about Being, employ a μῦθος and address their audience as if they were children (242c8-9). It is he, presumably, who is to be understood in the reference to the Σικελαί Μοῦσαι (242d7-8)<sup>58</sup> who claim that being is both many and one, and who are the μαλακώτεροι τῶν Μουσῶν,<sup>59</sup> that is, the ‘softer’ or ‘milder’ Muses, in claiming that everything is united by Aphrodite and divided by Νεῖκος, ‘Strife’.<sup>60</sup> Which of the views proposed by these authorities is true, says the Visitor, would be difficult to estimate, and it would also be πλημμελὲς οὕτω μεγάλα κλεινοῖς καὶ παλαιοῖς ἀνδράσιν ἐπιτιμᾶν: the great discoveries of these ancient and famous men should not be censured by himself (243a3-5). The language here is just as hyperbolic as in the *Theaetetus*, and, as in the latter, what follows undermines its sincerity. Indeed, the Visitor then criticises these famous men for treating their audience contemptuously, since they have taken no notice of whether the latter were following them or not. This is in implicit contrast with the method of presentation in the dialogues, such as that conducted by the Visitor which immediately follows, where the interlocutor’s agreement is required at every step.<sup>61</sup> Plato’s principal point here is the polemical one that Empedocles and the others, while attempting to make claims with significant philosophical consequences, have in fact only succeeded in presenting accounts of mythical obscurity and confusion.

In short, the three clearest references to Empedocles in Plato’s dialogues are made in a polemical context which associates him in each case with poetry and its problematic qualities of obscurity of ideas and arguments, and unmerited claims to authority. At the same

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<sup>58</sup> Empedocles addresses his fellow citizens of Acragas in Sicily in B112 DK.

<sup>59</sup> In contrast with the ‘more strained’ (συντονώτεροι) Muses of Heraclitus (242d7-e3).

<sup>60</sup> For νεῖκος in Empedocles, see e.g. fr. 8.19 Wright. Empedocles mentions a single Muse at B4 and B131 DK.

<sup>61</sup> Λίαν τῶν πολλῶν ἡμῶν ὑπεριδόντες ὀλιγώρησαν, 243a7-b1.

time, while Empedocles has all the vices of Homer, he receives no compensating praise for poetic charm; his associations with poetry are purely negative, and the underlying view seems to be that poetry is inappropriate to a philosopher. At the same time, this criticism is not simply a matter of style or presentation. Rather, it also implies that the methods and the subject matter together of Empedocles and other φυσικοί are at fault, because they focus on the physical world of becoming. It is therefore not surprising that in the *Timaeus*, when Plato does, despite all his disdain for the empirical in other dialogues, present a partially physical account of the physical world, he is very careful to emphasise that this account is an εἶκός μῦθος which does not have the same epistemological status as his dialectical accounts of abstract concepts. As such, the *Timaeus* is at one level an answer to the prose and poetry of the Presocratics, but not to any one of them specifically.<sup>62</sup> In Chapter 3 I shall consider how far the *Timaeus* may be considered a ‘poem’, as Cornford claims,<sup>63</sup> and where it stands in relation to Lucretius.

### 1.3 Epicurus and his sources

#### 1.3.1 Epicurus and Democritus

The extent of the debt which Epicurus owed to Democritus has been well studied. In the doxographical tradition from the Hellenistic period onwards, Epicurus and Democritus are often listed together initially, sometimes but not always with an indication of a divergence of opinion on a specific point; while in the Christian tradition, they are usually taken polemically

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<sup>62</sup> For further debate over the extent of Empedocles’ influence on the *Tim.*, see Hershbell (1974): 145-6, and Ch. 3.

<sup>63</sup> Disputed by Hershbell (1974): 147.

together.<sup>64</sup> Epicurus was often attacked on the grounds of being little more than a plagiariser of Democritus, above all in his mechanistic, atomic explanation of the universe. Plutarch and Cicero, both relentless opponents of Epicureanism, accused Epicurus of taking all his central doctrines from Democritus.<sup>65</sup> However, it is possible that both authors exaggerated the contrast between Epicurus' claiming to be completely original and his followers' acknowledgement of his debt to Democritus, as a way of discrediting him further by implying that he was both intellectually dishonest and ungrateful.<sup>66</sup> Similarly, Diogenes Laertius' report that Epicurus called Democritus by the derogatory nickname Δηρόκριτος may be no more than anecdotal, as Diogenes himself claims.<sup>67</sup>

We know from Philodemus' *Περὶ Παρρησίας* that Epicurus wrote a work or works *Against Democritus*, but unfortunately not how he argued.<sup>68</sup> Epicurus is probably referring to Democritus in a passage in *On Nature* XIV in which he praises the αἰτιολογήσαντες or 'seekers after the causes' as much better than their predecessors and successors, but criticises their account of necessity and chance.<sup>69</sup> In the one instance in which he names Democritus, Epicurus seems to be invoking him as an ally against his opponents.<sup>70</sup> This has led Leone to argue that, taken with the evidence of later Epicureans, Epicurus, while prejudiced against

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<sup>64</sup> For the association between the two in ancient sources, see Silvestre (1985): 18; Warren (2002): 24; Morel (2009): 69; Taylor (1999): Test. 44c, 58b, 79b, 80b, 110a, 111, 115a, 119a-b, 121, 123a, 149 with further references, 203a, 204, 205, 213. On connections between Democritus' and Epicurus' theories of vision, see Morel (1996): 292, and 249-355 for a study of Democritus' influence on Epicurean thought in general.

<sup>65</sup> Plutarch, *Non posse* 1100a; Cicero, *ND* I.73 (*quid enim est in physicis Epicuri non a Democrito?*), I. 120; *De Fin.* I.17. On this tactic, see Reinhardt (2005): 170. For an evaluation of the evidence, see Warren (2002): 24-5.

<sup>66</sup> See Plutarch's scathing treatment of Epicurean declarations of allegiance to Democritus (*Adv. Col.* 1108e-f), taken at face value by Huby (1978): 82; Sedley (1976): 134-5. Plutarch cites no work by Epicurus.

<sup>67</sup> DL X.8; Huby (1978): 80.

<sup>68</sup> *Περὶ Παρρησίας* 20.8 (Konstan et al. 1998). Metrodorus, Epicurus' associate, wrote an *Against Democritus*: DL X.24.

<sup>69</sup> *On Nature* XIV, [34, 30] 7-15 Arrighetti; Huby (1978): 84.

<sup>70</sup> *On Nature* XIV, *PHerc* 1148 Col. XXX Leone (1984).

Democritus' doctrines, admired and respected him for having investigated nature and discovered its true principles.<sup>71</sup>

It seems clear that, whether or not Epicurus acknowledged it, Democritus was the 'greatest single' influence on him.<sup>72</sup> Sedley, Silvestre and Warren have argued that the impression conveyed by the ancient sources is that in natural philosophy, the area in which most detail is preserved about Democritus, the latter differed from Epicurus rather in certain details, such as Epicurus' addition of the *clinamen*, than in fundamental principles, such as the system of atoms and void and the denial of teleology.<sup>73</sup> Kahn has also suggested that Epicurus depended upon Democritus for his ethical views.<sup>74</sup>

More recently, Warren has argued that Epicurus made use both of the general moral consequences of Democritus' atomistic, materialistic philosophy,<sup>75</sup> and of some of his specific ethical views, for example, on the importance for a happy life of keeping to moderate desires.<sup>76</sup> Warren reconstructs a chain of influence, based on Diogenes Laertius IX-X (which he admits is not always reliable), from the Eleatics to Democritus, Metrodorus, Anaxarchus, Pyrrho, Epicurus' teacher Nausiphanes, and finally to Epicurus. His argument involves seeing Epicurus as reacting to these intervening figures, especially Nausiphanes, as well as to Democritus' own ideas.<sup>77</sup>

Silvestre has argued that Epicurus' alterations to Democritus' physical theory were attempts, some more successful than others, to counter the criticisms of atomism made by Aristotle. However, she also notes that Epicurus engaged not only with Democritus but also

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<sup>71</sup> Leone (1984): 83-4.

<sup>72</sup> Sedley (1976): 134.

<sup>73</sup> Sedley (1976): 134-5; Silvestre (1985): 17; Warren (2002): 6-7.

<sup>74</sup> Kahn (1985): 3 ff., whose arguments are based on much later sources.

<sup>75</sup> Warren (2002): 29-72.

<sup>76</sup> Warren (2002): 56-8.

<sup>77</sup> Warren (2002): 11 ff.

with other philosophers, most notably Plato, Aristotle and Theophrastus; she views Epicurus rather as an ‘interpreter’ than a straightforward transmitter of Democritus’ ideas.<sup>78</sup> The arguments of both Silvestre and Warren, in other words, lead to a view of Epicurus’ doctrines as a development and reworking of Democritus with the incorporation of other, non-Democritean ideas, especially in the area of ethics.<sup>79</sup>

Scholars such as Leone have resorted to the attitude towards Democritus adopted by later Epicureans, including Lucretius, Philodemus, Diogenes of Oenoanda and Colotes, to shed light on Epicurus’ attitude towards him.<sup>80</sup> This is a natural move, in view of the scarcity of evidence on his own opinions on Democritus, although each of these sources must be taken with caution, to the extent that their writers lived in different circumstances from Epicurus and were writing for different audiences.

Later Epicureans were interested in Democritus, and show consciousness of a debt as well as a desire to criticise. In *On Music*, Philodemus praises Democritus as both φυσιολογώτατος among the ancients and no less πολυπράγμων among researchers.<sup>81</sup> Diogenes of Oenoanda, in the extant fragments of his inscription, mentions Democritus more than any other individual philosopher including Epicurus.<sup>82</sup> Since Diogenes seems to have adhered for the most part to Epicurus’ own views, he should be considered a reasonably reliable source for these, even if he adjusts their length and tone to his audience’s needs and to

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<sup>78</sup> Silvestre (1985), esp. 19-25.

<sup>79</sup> On atomic motion in Democritus and Epicurus, see Reinhardt (2005): 154.

<sup>80</sup> For a review of recent scholarship on Epicurus’ and other Epicureans’ attitudes to Democritus, see Warren (2002): 25-6 with nn. 57-8. Warren concludes: ‘it is clear both that Epicurean atomism ... derived to a great extent from Democritus and that Epicurus was far from happy to be seen as a mere follower of Democritus’.

<sup>81</sup> Philodemus *Mus.* IV Col. 150.29-39 Delattre, who translates φυσιολογώτατος as ‘un éminent spécialiste de la nature’, and οὐδενὸς ἤττον πολυπράγμων as ‘qui ne le cède à personne en curiosité’.

<sup>82</sup> Diogenes’ second most frequently targeted opponents were the Stoics: Smith (1993): 137, 442-3. The inscription probably dates at the latest from the first half of the second century A. D.: Smith (1993): 37-48.

the wall space available to him.<sup>83</sup> Diogenes mainly criticises Democritus regarding the details of atomic theory, but may also include a contrast between Democritus' and Epicurus' conception of εὐδαιμονία.<sup>84</sup> This shows at least the awareness of some later Epicureans of the importance of defining themselves against Democritus, especially since he, unlike the Stoics, was not a contemporary threat to their school.

Diogenes also praises Democritus for identifying the atoms as the basic elements, but qualifies this with the criticism that he was in some respects mistaken.<sup>85</sup> This qualified praise seems to mirror Epicurus' approach to the αἰτιολογήσαντες cited above. In the following fragment, on the other hand, he criticises Democritus for claiming that only atoms truly exist, but qualifies this with the implicit praise that Democritus has erred ἀναξίως ἑαυτοῦ, 'in a way unworthy of himself'.<sup>86</sup> Thus while Philodemus praises Democritus on general terms for his philosophical prowess, Diogenes praises him both for his intellect, which ought not to have made a slip about existence, and specifically for his doctrine of atoms as the basic constituents.

In his polemical *Non posse*, Plutarch claims that Epicurus was so obsessed with fame that he disputed with Democritus over trifles, having stolen his doctrines word for word while denying he had teachers.<sup>87</sup> In the *Adversus Coloten*, Plutarch claims that Epicurus' student Leonteus wrote that Epicurus had honoured Democritus for having reached the truth before him, and that Epicurus' system was called 'Democritean' because Democritus had first happened by chance upon the true principles of nature.<sup>88</sup> Plutarch also claims that

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<sup>83</sup> On Diogenes' orthodoxy, see Smith (1993): 121-142.

<sup>84</sup> Diogenes of Oenoanda in Smith (1993), fr. 1, 6.II.9; 7.II.4, 9; 9.VI.5 (conjecture); 10.V.1, 8, 12; 43.II.1; 54.II.3, III.4; 173.II.17 (the possible discussion of εὐδαιμονία).

<sup>85</sup> Diogenes, fr. 6.2.9-13 Smith; cf. Huby (1978): 84-5; Warren (2002): 25, n. 58.

<sup>86</sup> Fr. 7.2 ff. Smith.

<sup>87</sup> *Non posse* 1100a.

<sup>88</sup> *Adv. Col.* 1108e.

Metrodorus wrote that Epicurus would not have reached σοφία without Democritus leading the way. The aim of these points is to demonstrate that Colotes, also Epicurus' student, in criticising Democritus through his clumsy exegesis of Epicurus' writings, has thereby also criticised Epicurus, Democritus' follower.<sup>89</sup>

The arguments in Plutarch's two works appear to sit uncomfortably together, if he is implying in *Non posse* that Epicurus also denied that Democritus was a καθηγητής of his. However, in both works, Plutarch's emphasis is determined by the rhetorical point he is scoring off Epicurus and Colotes respectively; the argument in *Non posse* is evidently an exaggeration, while that in *Adversus Coloten* is at best highly selective. How accurately Plutarch has paraphrased Leonteus and Metrodorus is unclear; their statements could have been qualified in the context which he omits. Plutarch is thus less helpful a source than he might appear for determining Epicurus' attitude towards Democritus, and no more than a corroborator of other sources concerning the relationship between their philosophies.

The two references to Democritus in the extant fragments of Epicurus, in conclusion, give a glimpse of an attitude towards Democritus which broadly fits with that suggested by Philodemus and Diogenes of Oenoanda: on the one hand, a general respect for him in comparison with other predecessors of Epicurus and a sense that he is 'on our side', and on the other, an appreciation of those parts of his doctrine with which Epicureanism agreed, balanced against a criticism of where his views diverged from Epicurus'. There is, however, no trace in Epicurus' fragments of the praise unqualified by criticism found in Philodemus. Plutarch's accounts are more exaggerated and consequently less clear, but taken together, they also would support the picture of Epicurus' attitude towards Democritus as one of praise tempered by criticism. Philodemus, two centuries after Epicurus, seems to have felt able to praise Democritus more wholeheartedly than Epicurus did.

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<sup>89</sup> *Adv. Col.* 1108d-f.

When considering Lucretius' treatment of Democritus, therefore, the tradition of this ambivalent Epicurean view of him should be borne in mind. At the same time, the evidence does not preclude Lucretius' engaging with or borrowing from Democritus' writings directly while presenting his own interpretation of Epicureanism.

### 1.3.2 Epicurus and Empedocles

While there are clear references to Empedocles in Epicurus and later Epicurean writings, the question remains of how far Lucretius, in assigning what appears to be a key rôle to Empedocles in the *DRN*, was in line with Epicurus' attitude towards the latter. It is beyond the scope of this study to examine this question in detail. I shall, however, briefly consider the non-Lucretian evidence for the place of Empedocles in Epicurus and Epicurean thought, and its bearing on Lucretius' treatment of Empedocles.

Empedocles is mentioned by name once in the extant fragments of Epicurus' *Περὶ Φύσεως*, but only in a criticism of (probably) Plato, who is accused of mixing Empedocles' doctrine with another's. However, Arrighetti argues that the reference to Empedocles indicates that the latter had a broader importance for Book XIV of the *Περὶ Φύσεως*, and that fr. 29, 22 contrasts the Platonic assignment of a *σχῆμα* to the different elements with an Empedoclean view of their being mixed without losing their individual characteristics. If this is plausible, we have the beginnings of a tradition of Epicurean association of Plato and Empedocles and criticism of them together, although, if Arrighetti is right, with the recognition of differences in their doctrines. I shall return to *Περὶ Φύσεως* XIV in Chapter 4.

Epicurus' association of Empedocles and Plato was continued by later Epicureans. Hermarchus, Epicurus' successor, wrote twenty-two letters against Empedocles, although

their content is unclear.<sup>90</sup> Colotes seems to have quoted from Empedocles for the purpose of criticising his theory of the four elements.<sup>91</sup> Diogenes of Oenoanda criticises Empedocles' theories three times in what is extant of his inscription. In fragment 6, he mentions Empedocles' theory that the στοιχεῖα were the four elements, and implies that he will criticise it in more detail.<sup>92</sup> In fragment 41, he appears to be contrasting the Epicureans with the followers of Empedocles and Pythagoras.<sup>93</sup> In fragment 42, which may be a continuation of the same topic as fragment 41,<sup>94</sup> Diogenes criticises the doctrine of metempsychosis, which he claims Empedocles borrowed from Pythagoras.<sup>95</sup> Diogenes could have derived his arguments against Empedocles from Hermarchus, but, as Smith notes, Empedocles, along with Pythagoras and Plato, was, according to Cicero, attacked by Metrodorus and Epicurus as well.<sup>96</sup> While Pythagoras is criticised for espousing the theory of metempsychosis, possibly with the Orphics, in fr. 40, Plato is mentioned in fr. 39 and possibly fr. 38, also in critical terms, for claiming the soul is imperishable. The criticisms of Plato and Empedocles occur in Diogenes' section on the fear of death. Although Diogenes does not seem to have attributed belief in metempsychosis to Plato,<sup>97</sup> he does at least associate Plato and Empedocles as typical targets of the Epicurean view.

Empedocles was thus established in the Epicurean tradition, and probably more in Epicurus' works than is currently available, as a target, both for his views of the soul and for his theory of the four elements. That he is associated in Epicurean thought with Plato may

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<sup>90</sup> Garani (2007): 5; examined in detail by Obbink (1988).

<sup>91</sup> DL X.25; Plutarch, *adv. Col.* 1111f-1113e, esp. 1113b; van der Ben (1978): 198, and 214 n.

<sup>92</sup> 6.II.2, 6.III.1-7 Smith.

<sup>93</sup> 41.3; Smith (1993): 490-1.

<sup>94</sup> Smith (1993): 492.

<sup>95</sup> Fr. 42.I.1, II.8, V.12-3 Smith.

<sup>96</sup> Cicero, *ND* I.33.93; Smith (1993): 492-3.

<sup>97</sup> Smith (1993): 473-4.

have consequences when we come to determine the extent of the latter's influence on Lucretius.<sup>98</sup>

### 1.3.3 Plato, Aristotle and Epicurus

It is well recognised that Epicurus partly developed his philosophy in response to Plato, and, to a debated extent, Aristotle's engagement with Plato.<sup>99</sup> One problem in ascertaining Plato's influence on Epicurus is therefore how far this influence can be separated from that of Aristotle, whose early works were still strongly influenced by Plato. This has a bearing on the question, important for this study, of how far Lucretius can be said to be engaging with the works of Plato rather than Plato as mediated through Aristotle, or even more indirectly, through Epicurus' reading of Aristotle's criticisms of Plato. Before turning to Plato, I shall briefly sketch the probable relationship between Aristotelian and Epicurean thought.

Aristotle's alleged influence on Epicurus, particularly through his fragmentary exoteric dialogues<sup>100</sup> rather than through his esoteric works, which form the bulk of what has come down to us, was studied by Bignone.<sup>101</sup> Bignone considered Epicurus as having polemicised against the exoteric works, particularly Aristotle's early dialogue, the *De Philosophia*, which survives only in fragments cited by secondary sources; he also, however, acknowledged the closeness of the *De Philosophia* to the *Timaeus*.<sup>102</sup> The *De Philosophia*, it

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<sup>98</sup> Kieve (1978): 64, notes that Empedocles, as well as Heraclitus and Anaxagoras, were continually criticised by the Epicureans.

<sup>99</sup> Sedley (1976): 133-4, emphasises that Plato was a 'forerunner' of Epicurus philosophically, and that most of Epicurus' major doctrines involve a polemical reaction against Plato; cf. Indelli (1986): 111-2.

<sup>100</sup> Fragments collected and translated in Barnes (1985) ii.2389-429.

<sup>101</sup> Bignone ([1936] 1973).

<sup>102</sup> Bignone (1936): 383, 393-6, 410; Untersteiner (1963): 21. The Epicurean Polyaeus wrote more than one book of polemic against the *De Philosophia* (Obbink 1996: 38). The *De Philosophia* also criticised the Platonic Forms (Barnes 1985: 2391, citing Syrianus, *Commentarius in Metaphysica* 159.35-160.3).

seems, argues that the world is both uncreated and indestructible, and criticises Plato for thinking that it could have been created.<sup>103</sup> As Effe observes, the work closely linked theology and cosmology, while Aristotle's opposition to atomism in general would make it an appropriate target for the Epicureans.<sup>104</sup>

However, the extent to which Aristotle might have influenced Epicurus directly, rather than indirectly through Theophrastus or doxographies, or whether Epicurus would have even distinguished between Platonic and Aristotelian thought, has been questioned, as has Aristotle's presence among Romans of Cicero's period.

Barnes' survey of the evidence for knowledge of Aristotle in the Hellenistic period and in first century BC Rome has shown the very considerable difficulty of tracing Aristotle's writings, particularly his esoteric treatises, between the death of Theophrastus and the Aristotelian revival at the end of the first century BC.<sup>105</sup> Barnes argues plausibly that, while some of Aristotle's treatises may have been continuously known during the Hellenistic period, they never received the same popularity during this period as Plato's dialogues.<sup>106</sup> He cites as one measure of this the 250 Platonic papyri which have survived from the third century BC to the fifth century AD, in contrast to the nine or so Aristotelian, none of which dates from before the end of the first century AD.<sup>107</sup>

A reference in Philodemus suggests that Epicurus or at least later Epicureans had read some form of Aristotle's *Analytica* and of his physical works; but what exactly this included, and how far this single reference is representative of a wider familiarity, if any, with

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<sup>103</sup> Cicero, *ND* 1.13.33; Bos (1993), esp. 188; further Ch. 4.

<sup>104</sup> Effe (1970): 162-3.

<sup>105</sup> Barnes (1997); cf. Sandbach (1985): 1-2; Hahm (1982): 58.

<sup>106</sup> Barnes (1997): 45. Aristotle's treatises were receiving commentaries by the middle of the first century BC (Cooper 2003: 130-1).

<sup>107</sup> Barnes (1997): 45.

Aristotle, is uncertain.<sup>108</sup> As Sedley has argued, before the early first century BC, ‘no leading Hellenistic school acknowledged Aristotle as a forerunner’, and so there was no incentive for Epicureans to look in Aristotle’s works for support for their theories; while Epicurus’ debt to Aristotle may be rather in his replies to Aristotle’s criticisms of Democritean atomism than in any positive doctrine.<sup>109</sup>

It is generally thought that Aristotle’s exoteric works, including the *De Philosophia*, enjoyed greater popularity than the esoteric works in the Hellenistic period and first century BC. Colotes, Epicurus’ pupil, seems to have attributed Platonic doctrines to Aristotle, Theophrastus and the other Peripatetics. It would be easier to understand such an interpretation of Aristotle if it were made by someone who had only read the *De Philosophia*, which seems to have engaged closely with Plato, and not the treatises.<sup>110</sup> However, the first report of the content of the *De Philosophia* comes from the first century BC, in a number of references and translations by Cicero.<sup>111</sup> Philodemus also mentions the *De Philosophia*; other Italian Epicureans, therefore, may have done so too.<sup>112</sup> Aristotle’s treatises were probably coming into circulation in the middle of the first century, and Cicero may have known a few of his works, such as the *Topica* and *Rhetoric*, first hand; however, he may also have known them primarily via secondary sources such as doxographies and Hellenistic handbooks on rhetoric.<sup>113</sup> Overall, given the fragmentary state of Epicurus’ writings, it is difficult to assess the extent of the influence of the *De Philosophia* and other exoteric works of Aristotle’s on Epicurus.

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<sup>108</sup> Philodemus πρὸς τοὺς σ... (title incomplete), fr. 1.3 Sbordone = fr. [127] Arrighetti; Barnes (1997): 14 with n.61, 45; Sandbach (1985): 4-5. Lord (1986): 140, n. 7, suggests that Epicurus had access to the *Physics* and Aristotle’s works on logic, and perhaps also to the *EN*, *Cael.*, and *MA*.

<sup>109</sup> Sedley (1989): 117-118, with n. 47.

<sup>110</sup> *Adv. Col.* 1114f, 1115a; Baltes and Lakmann (2005): 11; Sandbach (1985): 6.

<sup>111</sup> See Runia (1983): 153; Barnes (1997): 47-8.

<sup>112</sup> Barnes (1997): 48.

<sup>113</sup> Long (1995): 41-58; Hahm (1982): 68-9.

There is no mention, either in Epicurus' or Philodemus' extant works, or in Diogenes Laertius, of Epicurus' having written a specific work against Plato.<sup>114</sup> Epicurus' engagement with Plato can be ascertained to a limited extent, firstly through his own extant fragments, and secondly through other references in Philodemus and later sources. In the fragments, Epicurus does not mention Plato or any specific dialogues by name. However, scholars have seen echoes of specific Platonic passages in Epicurus' fragments,<sup>115</sup> or possible connections between Platonic and Epicurean physical theory. The evidence suggests that had a greater proportion of the Περὶ Φύσεως survived, we would find a considerably wider range of interactions with Plato. I shall turn to one reasonably solid example of engagement with Plato in the Περὶ Φύσεως in Chapter 4.

As for later Epicureans, Diogenes Laertius records that Hermarchus wrote a work *Against Plato*, as well as one *Against Aristotle*.<sup>116</sup> Philodemus mentions Plato in a number of contexts. Firstly, he records that Metrodorus of Lampsacus, the pupil and colleague of Epicurus,<sup>117</sup> wrote a work against Plato's *Euthyphro*, and that either Metrodorus or an anonymous author wrote a work in at least two books against Plato's *Gorgias*.<sup>118</sup> Philodemus cites Plato's *Apology* and *Hippias Minor* in his *Vices*, Book X, and to the *Laws* in his *On Anger*, in each case apparently to illustrate or support a point.<sup>119</sup> Longo Auricchio has argued that Philodemus' *Rhetoric* contains an extended and detailed engagement with the *Gorgias*;

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<sup>114</sup> Delattre (1996): 149-50.

<sup>115</sup> So Gigante (1995): 197, suggests an echo of Rep X.621c-d at Περὶ Φύσεως XXVIII fr.13, col. XIII sup.2-6; cf. Kleve (1978): 46, on Περὶ Φύσεως IX.26.

<sup>116</sup> DL X.25.

<sup>117</sup> See DL X.18-9.

<sup>118</sup> Delattre (1996): 152-3.

<sup>119</sup> Delattre (1996): 159.

however, the fragments are too lacunose to grasp his attitude towards Plato. The same also applies to the few occurrences of Plato's name in the other fragments of Philodemus.<sup>120</sup>

Philodemus also cites the titles of a number of other literary works, including those of Homer, Hesiod, the tragic and comic dramatists, rhetoricians and historians.<sup>121</sup> Delattre accounts for Philodemus' interest in citing titles by name by reference to the attacks on the Epicureans in the first century BC, particularly by the Stoics, for their lack of culture and boorishness. Philodemus' many literary references would therefore emphasise his own education.<sup>122</sup> In addition, Philodemus, in his *Index Academicorum*, shows an interest in Plato's biography.<sup>123</sup> This work also recognises the importance of Plato in the development of Greek mathematics, an aspect of Plato in which neither Epicurus nor Lucretius seems to have been interested.<sup>124</sup>

Indelli, from his survey of Philodemus' references to Plato, concludes that Philodemus nowhere seems particularly hostile, but rather adopts a 'neutral' tone in his Platonic citations. Indelli makes the important point that the context in which Philodemus refers to an excerpt of Plato is in general completely different from the original; in particular, he uses Plato to illustrate his own points or for stylistic beautification. To the extent that Philodemus uses Plato differently from Epicurus, and in a more literary way than the latter, this indicates that later Epicureans did not feel themselves bound to remain absolutely faithful to the methods and polemics of Epicurus, but rather were, within certain variable limits, able to modify their approaches and their use of other authors in a manner appropriate to their own

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<sup>120</sup> Philodemus, *Rh.*, and *PHerc* 425, 1506, 1633, with Longo Auricchio (1995); cf. Delattre (1996): 159; Indelli (1986): 111, who notes that *Rhet.* II.286 fr.VIII.2-7 also mentions Plato's *Apology*.

<sup>121</sup> Delattre (1996): 163-6. For the contents of Philodemus' library, see Gigante (1985).

<sup>122</sup> Delattre (1996): 167.

<sup>123</sup> *Acad. Ind.* (*PHerc* 1021); Gaiser (1983): 53, describes this as 'essentially a compilation of extracts of preceding philosophical historiography'. Cf. Luppe (2008).

<sup>124</sup> *PHerc* 1021, col.Y2-18. On the interpretation, see Simeoni (2003): 117-8.

historical context; in the case of Philodemus, to the Stoic allegations that the Epicureans were uncultured.<sup>125</sup>

As Sedley has shown, the ‘diaspora’ of the Greek philosophical schools from Athens in the late second and first centuries BC to the rest of the Mediterranean contributed to the development of Epicurus’ ideas by different Epicurean communities, such as that to which Philodemus belonged in Naples, to suit new circumstances and new rivals.<sup>126</sup> Philodemus’ gentler, literary treatment of Plato is thus adapted to his times, and, it seems likely, an expression of a personal interest in him.

Finally, Diogenes of Oenoanda probably mentions Plato, in a restoration to the text, along with the Stoics as opponents on the question of the soul’s survival after the body, and again with the Stoics as opponents over the immortality of the soul.<sup>127</sup> This criticism of Plato is particularly interesting in view of the possible influence of the *Phaedo* on the *DRN*, discussed in Section 1.5.2.

## **1.4 Lucretius and his sources**

### **1.4.1 Why Lucretius is likely to have read Plato: External considerations**

Having considered the associations between Plato, on the one hand, and Epicurus, Empedocles and Democritus, Lucretius’ three most commonly acknowledged predecessors, on the other, I shall now turn to the question of why Lucretius is, in view of the literary and philosophical context, more likely than not to have read at least some of the Platonic corpus.

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<sup>125</sup> Indelli (1986), esp. 109, 112; de Lacy (1983): 300, notes that Philodemus in *Mort.* (*PHerc* 1050) refers to Plato without polemic. Philodemus’ testimony on Epicurus is not always decisive (Dionigi 1976: 119).

<sup>126</sup> Sedley (2003a).

<sup>127</sup> Diogenes of Oenoanda, 38.6, 39.III.7.

I shall show how Lucretius is to be located in the same philosophical tradition as Plato, but at a later point. I shall then review some textual parallels between Plato and Lucretius.

#### 1.4.2 Democritus, Empedocles, and Lucretius

The ambivalence of Epicurus' attitude towards Democritus, and the mixture of praise and criticism of the latter in Epicurus' followers, has been noted above. Lucretius, in contrast to Diogenes of Oenoanda, Colotes and probably also Epicurus,<sup>128</sup> mentions Democritus only three times in the *DRN*, each carefully positioned.

At III.370-395, Lucretius criticises the Democritean view that the soul and body atoms are arranged alternately throughout the body; rather, he argues, the soul atoms are scattered more rarely in the body than the body-atoms. Thus, although Lucretius emphatically warns the reader 'in no way' to accept Democritus' view (*nequaquam sumere possis*, 370), the theory which he himself prefers differs rather in degree than kind. At *DRN* V.621-636, Lucretius does not criticise Democritus at all, but rather introduces the latter's explanation of the motion of the heavenly bodies as the first and one of the most viable alternatives (*feri uel cum primis id posse uidetur*, 621), even if he then considers other possibilities.

In both these passages, Lucretius uses the same line to introduce Democritus' name: *Democriti quod sancta uiri sententia ponit*.<sup>129</sup> This might be seen as sarcastic, implying, perhaps, an unfavourable contrast with the true 'sacredness' of Epicurus' doctrine.<sup>130</sup>

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<sup>128</sup> 'Whereas Epicurus in his brief, fully preserved works names no philosophical opponents and Lucretius identifies only four, Diogenes mentions no fewer than eighteen rival philosophers or schools' (Smith 1993: 137).

<sup>129</sup> III.371, V. 622.

<sup>130</sup> Silvestre (1985): 17, argues that Lucretius cites Democritus polemically; *contra* Huby (1978): 84; Warren (2002): 25, n. 58.

However, on the above analysis, neither passage would warrant such a reading. Admittedly, Lucretius urges the reader or addressee not to accept Democritus' view in the earlier passage, and *nequaquam* just precedes the introduction of the latter's *sancta sententia*. However, Democritus receives none of the direct criticism of style and allegations of insanity showered upon Heraclitus,<sup>131</sup> nor is he even said to be wrong, like Anaxagoras (I.845), who is described almost like a beast of prey hunted down by the relentless poet,<sup>132</sup> and whose theory of *homoeomereia* receives a long, rhetorical treatment which ends in a *reductio ad absurdum* in which Anaxagoras' own particles laugh and cry at the absurdity of his theory.<sup>133</sup>

Moreover, the third direct reference to Democritus (III.1039-41) places him between two no less significant figures than Homer, the king of poets (*sceptra potitus*, 1038), and Epicurus himself, and allots Epicurus and Democritus each an equal number of lines. Here, Democritus is presented as having given himself to death with peaceful dignity, in an ideally Epicurean spirit: the 'm'-alliteration in 1040 and the 's' sounds in 1041 heighten the sense of gentle acquiescence, as does the repeated 'ob-' at the beginning of successive feet (followed by the aurally similar 'ip-') in *caput obuius obtulit ipse* at the end of 1041, which suggests a nodding of the head in acceptance of death.<sup>134</sup> It therefore seems more plausible to take the *sancta sententia* attributed to Democritus as seriously meant, especially since the adjective *sanctus* is elsewhere used overwhelmingly of the gods and their shrines, and otherwise only of Empedocles and his followers, and in a single reference to Lucretius' own work.<sup>135</sup>

While Democritus' *sententia* may be *sancta*, he himself is represented by Lucretius as a *uir* and not a god or prophet, unlike Empedocles and Epicurus; however, he is at least a

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<sup>131</sup> I.639-644, 659-692, 704.

<sup>132</sup> I.875-77, *latitandi copia*, neatly echoed by *latitare* at 877 of Anaxagoras' particles; cf. I.404-409.

<sup>133</sup> I.919-20. Tatum (1984): 183, suggests Lucretius refuses to translate *homoeomeria* out of hostility.

<sup>134</sup> Cf. Silvestre (1985): 186.

<sup>135</sup> Of the gods: I.38, 1015; II.434, 1093; V.146, 74, VI.70, 76, 417, 1272; sarcastically at V.74; VI.417, 1272; of Empedocles, I.730, and his followers, 738; of Lucretius' *fata*, V.111.

man of the best Epicurean virtues, and approximately the right approach to physics. Thus Lucretius forms his own unique, indeed remarkably positive estimation of Democritus, through a combination of arguments, verbal nuances, and positioning. In view of the significance throughout the *DRN* of both Epicurus and Empedocles, the only other two philosophers mentioned in a positive light, it would not be surprising to find that Democritus' own works played a more significant rôle elsewhere in the poem too.

Scholars have already identified a number of possible points of contact between Lucretius and Democritus.<sup>136</sup> Aristotle, for instance, records Democritus as having compared fire and soul atoms to motes in a sunbeam.<sup>137</sup> This image recurs in Lucretius, but to prove something different.<sup>138</sup> Stobaeus cites Democritus' remark that the foolish wish to live, although hating life, out of fear of Hades; a similar attitude is elaborated in the satire on death at the end of *DRN* III, especially at 1022-3, which seems close to the Democritean saying.<sup>139</sup> I shall discuss another possible instance in Chapter 4.

Empedocles, as is well recognised, is important for the *DRN*, beyond Lucretius' single named reference to him at I.716-829.<sup>140</sup> Lucretius does not subscribe to all Empedocles' views, especially not his four-elements theory and denial of the void. However, doctrinal objections notwithstanding, Lucretius compares Empedocles' authority favourably with the prophetic Pythia's, in terms almost identical to those which he later employs for his own *fata*.<sup>141</sup>

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<sup>136</sup> Notably in Book II. See Silvestre (1985): 160-83.

<sup>137</sup> Aristotle, *De Anima* 403b25-404a16 (cit. Taylor 1999: *Test.* 106a).

<sup>138</sup> For motes in a sunbeam, used to prove the existence of invisible atoms, see *DRN* II.112-141, with Fowler (2002) *ad loc.*; Schiesaro (1990): 25-30.

<sup>139</sup> Stobaeus III.4.75 = Taylor (1999): D63: ἀνοήμονες τὸ ζῆν ὡς στυγέοντες ζῆν ἐθέλουσιν δεῖματι αἰδέω.

<sup>140</sup> Most recently Garani (2007); cf. Sedley (1998), (2003a); Piazzini (2005): 24-5; Campbell (2000): 149-52; Castner (1987); Edwards (1989).

<sup>141</sup> I.736-39; cf. V.110-12; cf. V.52-54 on Epicurus.

Lucretius also uses similar terms of praise for Empedocles to those he uses for Epicurus.<sup>142</sup> Lucretius depicts Empedocles at I.716-829 as being produced by a personified Sicily (*insula [Empedoclen] triquetris terrarum gessit in oris*), surrounded by the forceful presence of earth (717, 721), water (718-20), fire (722-25), and air (*caelum*, 725). As Snyder has shown, parallels for this sequence can be found in the Presocratics, including in Empedocles.<sup>143</sup> Beyond the ‘hidden tribute’ to Empedocles which Snyder notes, this picture of him arising from his own four elements makes it more plausible that he should have invented a natural philosophical theory based on these elements, if they are, as Lucretius implies, the most obvious sense-phenomena to an inhabitant of Sicily. This further connects Empedocles to Epicurus and Lucretius: like Epicurus, Empedocles constructs his theory, and like Lucretius, he composes his poem, based on his observation of the natural world, even if he has ultimately ‘misread’ the phenomena, as Lucretius makes clear at 740-762.

Epicurus’ guarded praise of Democritus at Περὶ Φύσεως XIV, 34, 30.7-15, is echoed by Lucretius at I.734-41; not, however, of Democritus, but of Empedocles and his followers. This demonstrates the freedom with which Lucretius reworks even the views of the Master, and suggests that Empedocles, as a poet, may have an additional significance to Lucretius which he did not have to the prosaic Epicurus.

### 1.4.3 Epicurus and Lucretius

That Epicurus himself is mentioned only once by name has consequences for our understanding of Lucretius’ approach to his sources, and to his audience. Epicurus’ name occurs for the first and only time towards the end of the third book (III.1042-44). The first

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<sup>142</sup> Empedocles is *praeclarius, sanctum, mirum, carum* (a hapax), with a *diuinum pectus* (I.729-31; cf. III.15, V.1-12, for similarly high praise of Epicurus); his songs ‘cry out’, *uociferantur*, his *praeclara reperta* (I.732), as does Epicurus’ *ratio* at III.14.

<sup>143</sup> Empedocles, fr. 115; Snyder (1972).

thing we are told about him here is that he died (*ipse Epicurus obit*), and the remainder of the section is devoted to presenting him as the guiding light of the poem. He died, we are told, *decurso lumine uitae*, ‘the light of his life outrun’,<sup>144</sup> as if his life were a light for future generations. This idea is continued in the next two lines, where Epicurus is said to have surpassed, not a particular class of people, such as other philosophers, but the entire *genus humanum* in his *ingenium*, as the sun extinguishes the stars.<sup>145</sup> Thus Epicurus’ genius is likened to the most powerful source of light in the world, a fitting encomium for Lucretius’ primary source of inspiration.<sup>146</sup>

Although Epicurus is only named once in the poem, he is introduced unnamed in four other key passages, in the proems to Books I, III, V and VI, as a clearly identifiable character, somewhere between an Homeric hero, a sage and a saviour-god.<sup>147</sup> This is a dramatically effective way of maintaining his presence as Lucretius’, and the reader’s, spiritual guide and provider of intellectual impetus. It also allows Lucretius to focus the reader’s attention on admiration for Epicurus, without being distracted by the need to analyse his arguments, as would be the case if he were mentioned during the technical middle sections of each book. In his omission of Epicurus’ name from all but one line of the poem, Lucretius may also be following Empedocles, who does not, in his fragments, mention Pythagoras by name.<sup>148</sup>

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<sup>144</sup> Rouse and Smith (1992), *ad loc.* translate *decurso* misleadingly as active. For this passive usage of the participle see LS s. v. *decurro* I.A.b.

<sup>145</sup> Rouse and Smith (1992): 270-1, suggest that *decurso lumine* combines the idea of *decurso spatio* and *extincto lumine*, with ‘the conception of the sun...as both lamp and chariot(eer)’; they compare 1043-44 with *Anth. Pal.* 9.24, Leonidas’ epigram on Homer (himself praised at III.1037), where the latter’s superiority to other poets is compared to the chariot of the sun darkening the stars.

<sup>146</sup> See Sedley (1998).

<sup>147</sup> See Conte (1990). For Epicurus’ other identifiable appearances, see I.66 ff., III.1-30, V.1-54, VI.5-34.

<sup>148</sup> Edwards (1989): 109-10.

While Epicurus' importance is left in no doubt by Lucretius, it is nonetheless surprising that Lucretius does not name him until so late in the poem, especially if, as is sometimes claimed, Lucretius was writing for an audience of philosophical novices.<sup>149</sup> However exalted Lucretius' *Graius homo* may be,<sup>150</sup> it seems something of a strain on his audience's expectations to make them wait until line 1042 of the third book before revealing his name. Even more surprisingly, III.1042-4 does not specifically identify Epicurus as the figure praised in the proems, nor give anything more than the most general information about him; we are not even told that he was a philosopher. His description is couched in the imagery of Hellenistic poetry rather than in a recognisably Epicurean diction. It is therefore more plausible to conclude that Lucretius expected his audience to know enough about Epicurean philosophy to have recognised from early on who his hero was; if not, the reference at III.1042-4 would have seemed arbitrary. This is supported by external evidence about the state of Roman awareness of Greek philosophy in the first century BC, to which I now turn.

#### 1.4.4 Lucretius and Cicero

Cicero is an invaluable source on the major currents of Greek philosophy in Rome in Lucretius' time. Firstly, in line with his Academic leanings, he makes wide-ranging use of Plato, not least by translating sections of the *Timaeus* and *Protagoras*, and adapting the Myth of Er in his *Somnium Scipionis*.<sup>151</sup> This interest in Plato was not unusual in the philosophical

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<sup>149</sup> E.g. de Lacy (1948): 19-20; Howe (1951); *contra* Dionigi (1976): 135-6.

<sup>150</sup> *Graius homo* is also an echo of Ennius; Harrison (2002): 9.

<sup>151</sup> On Cicero's translations, see Traglia (1971), and Lévy (2003), who examines Cicero's reworking of the *Tim.* to fit with his own values and ideas, as well as his conceptual misunderstandings of Plato. The *Protagoras* is now largely lost: Powell (1995b): 279. On Cicero's use of Plato, see further Degraff (1940).

context of the first century BC. The *Timaeus* in particular seems to have attracted the attention of both the Stoic Posidonius and the Peripatetic Xenarchus.<sup>152</sup>

From Quintilian onwards, Cicero has often been interpreted as presenting himself as the Roman Plato in his philosophical works.<sup>153</sup> In a letter to Lentulus Spinther, Cicero alludes to the *Laws*, the *Crito* and the *Fifth Letter*. This not only underlines his knowledge of Plato, but also shows that he expected his contemporaries to be familiar with Plato too.<sup>154</sup> Other dialogues which Cicero uses frequently include the *Phaedo*, *Phaedrus*, *Republic* and *Gorgias*.<sup>155</sup> As has been shown, Cicero is sometimes influenced by the doxographical tradition in his interpretation of Plato, but at other times seems to be developing his own response to him; and, like many Latin adapters of Greek originals (such as Lucretius), reads into Plato his own purposes and preferences.<sup>156</sup>

The Epicurean speakers in Cicero's dialogues criticise Plato; Cicero in turn, through his Stoic and Academic speakers, and in his own person, attacks Epicureanism repeatedly from a Platonic stance. His translation of the *Timaeus*, which seems to elide Platonic with Stoic (and therefore implicitly anti-Epicurean) ideas, should perhaps be included among these attacks.<sup>157</sup> In the introduction to the *De Finibus*, he indicates that if he were to translate Plato and Aristotle, and communicate their *diuina ingenia*, he would be doing the Romans a great

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<sup>152</sup> Falcon (2012): 18-19.

<sup>153</sup> Quintilian, *Inst. Or.* 10.1.123: *M. Tullius, qui ubique, etiam in hoc opere [litteris de philosophia] Platonis aemulus exstitit*. See Schmidt (1979): 123-4; Long (1995), esp. 43-4; Powell (1995b). Douglas (1962) challenges the view that Cicero was a *Platonis aemulus* in literary terms, but also stresses Cicero's aim of countering Epicureanism.

<sup>154</sup> *Ad Fam.* 1.9 = Letter 20 in Shackleton Bailey (2001). See §12.13-15 (the adverb *diuinitus*, of Plato, may be a hostile allusion to Lucretius, who uses it at *DRN* I.116, 150, 736; II.180; IV.1278; V.52, 198, 1215); 18.3-12, with Shackleton Bailey (2001) *ad loc.*

<sup>155</sup> Long (1995): 44; Reinhardt (2004): 42.

<sup>156</sup> Long (1995): 46-9, 59-60; Gildenhard (2007): 180-5, *et passim*.

<sup>157</sup> *Ante lucem cum scriberem contra Epicureos* (*ad Att.* XIII.38.10), apparently referring to the *De Natura Deorum* or *Tusc.* (Shackleton Bailey 1999 *ad loc.*); Ruch (1958): 170; Cicero, *Tim.* 1-2, *multa sunt a nobis et in Academicis conscripta contra physicos*: the *physici* presumably include the Epicureans (see Powell 1995b). On Stoicism in Cicero's *Tim.*, see Lévy (2003).

service.<sup>158</sup> In contrast, he implies that the Epicureans' numerous writings in Greek on the same subject as Epicurus serve no useful purpose.<sup>159</sup> Traglia has observed a marked distinction in Cicero's methods of translating Epicurus and Plato: while he varies between literary and literal translation of Plato, he consistently translates Epicurus literally to the point of pedantry. Traglia convincingly explains this as Cicero's way of avoiding criticism for having distorted his opponent's views, while viewing Epicurus as not worthy of literary translation.

It seems odd that, in the introduction to *De Finibus* mentioned above, Cicero, when comparing his own future translations of Plato and Aristotle to how Roman poets translate myths,<sup>160</sup> does not refer to Lucretius' translation of Epicurus, even though the *De Finibus* was composed about a decade after the probable publication of the *DRN*.<sup>161</sup> How much of the *DRN* Cicero had read, and what he thought of Lucretius, has been hotly debated, and conversely, the extent to which Lucretius knew Cicero.<sup>162</sup> Reinhardt, for example, argues that there is 'no actual interaction' between Cicero and Lucretius, and that Cicero would have looked rather to popular Latin prose texts for information on Epicureanism than to the *DRN*. The fact that Lucretius and Cicero sometimes use similar phrases is not enough to show that one definitely influenced the other, or that they were not drawing on a common source.<sup>163</sup>

However, Minyard is surely right to emphasise the importance of even one named reference to Lucretius by Cicero. As scholars have shown, there are a number of echoes of

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<sup>158</sup> Compare Lucretius' praise of Epicurus' *diuina reperta* (*DRN* VI.7).

<sup>159</sup> *De Fin.* I.6-7.

<sup>160</sup> *De Fin.* I.7.1-3; Traglia (1971): 310.

<sup>161</sup> For the date of the *De Fin.*, see Rackham (1951): x.

<sup>162</sup> The *DRN* shares a number of phrases with Cicero's *Aratea*, his early translation of Aratus' *Phaenomena*. This could also be due to their echoing a common source, probably Ennius. See Soubiran (1972) 75-6; Godwin (1991): 73-76; on the dating of the *Aratea*, Ewbank (1978): 23.

<sup>163</sup> 'It has to my knowledge never even been argued that the Epicurean sections in Cicero's *oeuvre* are influenced by Lucretius as far as linguistic detail is concerned' (Reinhardt 2005: 152-3).

the *DRN* in later Cicero which are best explained as deliberate allusions.<sup>164</sup> I shall consider another example of Lucretian influence on Cicero, with consequences for Lucretius' use of Plato, in Chapter 4.

Minyard speculates that Cicero's *De Re Publica* was a direct response to the *DRN*, and that his writings thereafter treated the Epicureanism presented by Lucretius as 'a real enemy' to be 'dismantled in essay after essay'.<sup>165</sup> This claim is difficult to substantiate, given Cicero's lack of explicit references to Lucretius. However, assuming Cicero does allude covertly to Lucretius at various points, even if not as thoroughly as Minyard claims, this would certainly be consistent with the well-recognised tactic which Cicero adopts against other Epicureans. Cicero criticises the Epicureans with hostility; they seem to have offended him as no other philosophical school did, as much for their their lack of culture and bad writing style<sup>166</sup> as for their doctrine of pleasure as the good and atomism.<sup>167</sup> One of his key methods of attack, however, seems to have been, as mentioned above, to attribute an Epicurean view to Democritus and so implicitly treat the Epicureans as mere plagiarisers. Where Cicero does mention contemporary Roman Epicureans, particularly in his letters, his identification is 'indirect and offhand', as though unwilling to acknowledge Epicureanism directly.<sup>168</sup>

As seen from the cases of Plato and Epicurus, casualness or selectivity in the acknowledgement of sources was, in contrast to modern practice, widespread if not the norm

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<sup>164</sup> Piazzzi (2008): 25, n., with King (1971): 58-9 on Cicero's echo of Lucretius' (and possibly Ennius') *Acherusia templa*, *Tusc.* 1.21.48; Tatum (1984): 181, on *inlustrare* at *DRN* I.137 and Cicero, *Acad.* I.3 and *Tusc.* I.5; Hirst (1929) on a reference to Lucretius in the *Pro Milone*; cf. Canter (1936): 39. Peters (1926) concludes that one cannot tell whether Cicero was influenced by Lucretius. *Contra* Peters, passages like *Tusc.* I.22 seem to show a clear Lucretian influence, with their use of *leuibus et rotundis* and *turba* of the atoms (for the former, cf. *DRN* II.458, 466; III.205; for *turba*, I.1113, II.127).

<sup>165</sup> Minyard (1985): 75-6.

<sup>166</sup> Traglia (1971), esp. 330-39. For Cicero on Epicurean writing, see *Tusc.* II.3.7-8, IV.7 (Amafinius), with Schmidt (1979): 125; on Epicurean lack of culture: *Fin.* I.25-6.

<sup>167</sup> *Cael.* 41; *ND* I.65-7.

<sup>168</sup> Castner (1988): xvi.

in ancient philosophy and other types of writing.<sup>169</sup> However, Cicero's effort to marginalise Epicureanism seems deliberate. His failure to acknowledge Lucretius in his philosophical works would be thus consistent with his covertly criticising the *DRN*. One might speculate that he saw Lucretius as a pernicious rival to be erased from his writings and therefore, with any luck, from history.<sup>170</sup>

At the same time, Cicero's references to contemporary Epicureans in Italy are enough to indicate that Epicureanism was well-established by the first century BC, particularly among the Roman élite, even if, as Castner has argued, it was for most of them, unlike for Lucretius, no more than 'an intellectual affectation'. Epicureanism may already have been known in Rome by the second century BC.<sup>171</sup> A fragment of Lucilius mentions, according to a probable restoration of the text, the *eidola atque atomus Epicuri*, in what is apparently a mocking or hostile context; Amafinius, the Roman Epicurean who was probably writing in the late second and early first centuries, is mentioned by Cicero with distaste as having attracted a widespread following.<sup>172</sup> The circle of Philodemus in Campania seems to have had a particular influence upon the Roman *literati*. All this took place within the context of the rise of Epicurean communities in Italy as part of the increasing awareness of Greek philosophy in general in Roman culture during the first century, aided by the aristocratic fashion of travelling to Greece to attend the philosophical schools.<sup>173</sup>

The evidence available on the relationship between Lucretius and Cicero, and on contemporary Epicureanism, is scanty. However, it is enough to support the claim, firstly that Lucretius' audience would at least have recognised the school of philosophy with which his

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<sup>169</sup> Compare Thucydides' reticence about his sources.

<sup>170</sup> Catullus wrote a poem to Cicero, but was never acknowledged by him; this provides a pleasing opportunity for biographical speculation (cf. Colins 1952).

<sup>171</sup> Castner (1988): xii-xv, 44.

<sup>172</sup> Fr. 774K = 753 M; Reinhardt (2005): 155-7. For Amafinius, see Cicero, *Acad.* I.2; IV.6-7.

<sup>173</sup> See Maslowski (1978); Griffin (1997), esp. 3-4, 9; Rawson (1985), esp. 282-5.

poem deals, and secondly, that Lucretius himself was not isolated, but rather known to and aware of his contemporaries.<sup>174</sup>

Given this cultural context, and the extent of Cicero's familiarity with Plato, it is plausible that Lucretius had read something of the dialogues, and that he expected his readers to be aware of Plato too. Cicero's association of Epicureanism with an attack on Platonism and his employment of allusions to Lucretius in this attack support the positioning of the *DRN* as anti-Platonic. Given that Plato was known among the intellectual élite of first-century Rome, if Cicero does allude to Lucretius in a Platonic context, it would not be unimaginable, but certainly strange, for Lucretius to have been arguing against Platonic doctrines while being unaware of doing so. In Chapter 4, I shall return to the idea that Cicero's defence of Plato against the Epicureans was partly motivated by a Lucretian attack on Plato.

#### 1.4.5 Lucretius and other predecessors

Apart from the four Presocratics, Lucretius names two poets, both of whom are important upon a symbolic and cultural level. Homer is imitated by Lucretius at various points without being named, and is twice named by him, once as the foremost poet, and once as in the same tradition as Ennius, as a speaker on the *rerum natura*.<sup>175</sup> Ennius, who appears explicitly in the prologue to Book I, exerts a widespread influence upon the *DRN*.<sup>176</sup> Ennius also wrote a poem, the *Epicharmus*, which seems, judging from the fragments, to have combined Pythagorean and Empedoclean doctrine, and may therefore have formed a precedent for the

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<sup>174</sup> Pace Castner (1988): 37. On the debate over whether any of the *DRN* is to be found among the papyrus fragments at the Villa dei Papiri in Herculaneum, see most recently Obbink (2007).

<sup>175</sup> *DRN* III.18-22, with Rouse and Smith (1992): 190-1; *DRN* I.124-6, III.1036-8; Gale (1994): 111-2 *et passim*; Fowler (2007): 217-21; III.6-8 with Sedley (1998): 58; Clay (1983): 99.

<sup>176</sup> *DRN* I.117-126; Clay (1983): 1999; Gale (1994): 110, 121, 169, 180; and (2001) on Ennius and Empedocles in *DRN* I.112-19; West (1969): 30-3; Gigon (1978b), for a comprehensive survey, although Gigon emphasises how little of Ennius we have to go by.

*DRN*.<sup>177</sup> The phrase *quem Graeci uocant* in the *Epicharmus* may be echoed by Lucretius, as may the prologue to the *Annales*, which shows interest in Epicharmus and Empedocles.<sup>178</sup>

How far a tradition of philosophical poetry in Latin had developed beyond Ennius by the time Lucretius was writing is difficult to say. The brief record of two other poets, Sallustius and Egnatius, who seem to have written poems on natural philosophical subjects and been approximate contemporaries of Lucretius, gives no more than a tantalising glimpse of further possible literary contexts and discussions against which Lucretius' poem might have been shaped.<sup>179</sup>

Lucretius' sparing use of names may partly echo the tradition of philosophical polemic found in both Plato and Epicurus. In addition, however, unlike Epicurus, the *DRN*, as an epic-didactic poem, also belongs within a long tradition of poetic allusiveness in which many references are deliberately but subtly made without acknowledging the source by name, but with the expectation that the reader would recognise the allusion and that this recognition would deepen the understanding or otherwise contribute to the poem's effects. Sometimes the exact reference does not matter, but simply the general recognition that a line contains overtones of another poem. Just as the reader's awareness of the identity of the *Graius homo* increases the phrase's effectiveness, so, arguably, the reader's knowledge of other important figures in the poem, including Empedocles, Democritus, Homer and Ennius, would have heightened the effectiveness of Lucretius' response to their works. As I will discuss below,

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<sup>177</sup> Courtney (1993): 30.

<sup>178</sup> Fr. 39 Courtney (1993), with *DRN* VI.908, *quem ... uocant ... Grai*; *Annales*, lines 140, 357, 459 Skutsch. For further parallels, see Courtney (1993): 32.

<sup>179</sup> Sallustius' *Empedoclea* is mentioned with Lucretius by Cicero, *ad Q. fr.* II.9.4; Sedley (1998): 1-2. Two fragments from Book I of Egnatius' *De Rerum Natura* survive, which seem to be narrative rather than didactic (Courtney 1993: 147-8). Cicero's association of Lucretius and Sallustius suggests they were published at similar times. Egnatius' poem is of uncertain date; Courtney (1993): 148, presumes he followed Lucretius. Cf. Rawson (1985): 285; Godwin (1991): 5-6; Kruschwitz and Schumacher (2005): 100-9.

Lucretius adopts the images and phrases of his predecessors, regardless of their genre, in a way which signals their origin even as it weaves them into a new context.

In addition, the *DRN* is clearly influenced by some entirely unnamed predecessors. It is well established that, although he does not name them, Lucretius alludes to Thucydides,<sup>180</sup> Hellenistic (and possibly Neoteric) poetry,<sup>181</sup> and Roman Comedy.<sup>182</sup> The *DRN* may also show traces of the Hippocratic corpus<sup>183</sup> and the Attic tragedians.<sup>184</sup> Whether Lucretius was reacting to Stoic doctrines, or to other Greek philosophy, such as Aristotle, is much debated.<sup>185</sup> I shall return to Aristotle in Chapter 4. Varro Reatinus, a near-contemporary of Lucretius, may have alluded to Stoic sayings in his Menippean satires.<sup>186</sup> Lucilius may, in his fragment on *uirtus*, provide an early example of the integration of Stoic ideas into a Latin poem; it has been argued that this is a reflection of a contemporary philosophical discussion in his circle.<sup>187</sup> He also seems to parody the Presocratic elements in the context of a legal formula, and give a parodic description of a philosophical symposium set in Athens.<sup>188</sup> Whether or not Lucretius was influenced by Stoicism, Lucilius' adaptation of Greek philosophy to a Roman satirical context is particularly interesting as a poetic precedent for Lucretius, who may be influenced by him in other regards.<sup>189</sup>

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<sup>180</sup> Among the many studies on Thucydides and *DRN* VI.1138-1286, see Clay (1983): 262-6; Sedley (1998): 163-5; Commager (2007).

<sup>181</sup> Kenney (1970) *passim* (especially on I.926-50 and IV.1037-1287), III.1043-44 with Rouse and Smith (1992) n. *ad loc.*; Brown (2007).

<sup>182</sup> Brown (1987): 135-6.

<sup>183</sup> Godwin (1991): 127-8, 150, 169-70, notes connections to the Hippocratic corpus; cf. Campbell (2003): 326-8.

<sup>184</sup> Godwin (1991): 95-6, 123, 147-8; Gale (1994): 40-1; Brown (1997): 207.

<sup>185</sup> For Stoic influence on the *DRN* see Schmidt (1990); Asmis (2007); Fowler (2000b): 140; disputed by Sedley (1998), esp. 74-85; Furley (1966).

<sup>186</sup> Mras (1914): 419.

<sup>187</sup> Fr.1342-54K=1326-1338M; Görler (2004).

<sup>188</sup> Frr. 789-795K=784-790M, 769K=751M; Baier (2001): 43-47.

<sup>189</sup> See O'Hara (1987).

As scholars have shown in the case of both the poets and philosophers, our awareness of the points where Lucretius is alluding to them enhances our appreciation of the poem. This is true as much of authors who are not named, such as Thucydides, as of those who are. At the same time, the extent to which a source is named by Lucretius corresponds only imperfectly with its importance in the poem. Lucretius' treatment of Heraclitus, for instance, although he is named, may be confined to the particular passages which his name introduces; the same may be true of Anaxagoras.<sup>190</sup> Even among Lucretius' major named influences, Epicurus, Democritus and Empedocles, the number of times in which he refers to them explicitly is very small in comparison with their overall presence in the poem. This might suggest that he did not expect his audience to be interested in the sources of his arguments, but simply in their relevance to their own lives. However, if that is so, the same argument would apply to Ennius and Homer, both of whom are only named twice. Thus, given this lack of correspondence between the extent to which Lucretius names a source and its importance in the *DRN*, the fact that Plato is not named does not necessarily imply that he is not important in the poem.

It might also be objected that, even if Lucretius does show knowledge of Plato, this is more likely to come through the doxographical tradition or Epicurus, than from first-hand knowledge of the dialogues. This has also been suggested of Heraclitus and Anaxagoras, criticised by name at *DRN* I.635-704 and 830-920 respectively. However, 'the use of doxography is notoriously consistent with knowledge of the originals, and knowledge of the originals no guarantee of reliability.'<sup>191</sup> If there is good reason to see Platonic influence at work in the *DRN*, an intermediary should not automatically be posited.

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<sup>190</sup> Wardy (1988): 126, sees a wider Anaxagorean presence in the *DRN*.

<sup>191</sup> Reiche (1971): 314. Piazzini (2005): 7-10, 25 ff., surveys the debate over Lucretius' Presocratic sources. Tatum (1984): 178-89, argues that Lucretius' approach to doxography, although broadly Epicurean, contains a number of 'innovations', including selectivity.

Sedley, in his important work on Lucretius, argues that Lucretius' 'sole philosophical source and inspiration from early in book I until late in book VI is Epicurus' great physical treatise, *On nature*', while 'Empedocles is the father of his [poetic] genre'.<sup>192</sup> It has been argued, however, that such a division between poetic influence, in the guise primarily of Empedocles, and philosophical influence, taken exclusively as Epicurus, is unsatisfactory for understanding the *DRN* and in particular Lucretius' use of his predecessors.<sup>193</sup> Garani, for example, has recently demonstrated Lucretius' originality in his adaptation of Empedocles, and argued that the latter influenced Lucretius philosophically as well as poetically, and that it is 'implausible' that Lucretius could have separated the poetic from the philosophical in Empedocles.<sup>194</sup>

Sedley himself has admitted Lucretius' originality, but sees this primarily in terms of his having 'painstakingly assembled and systematically reshaped' fifteen books of Epicurus' *Περὶ Φύσεως*, together with passages from Empedocles and Thucydides in Books I and VI respectively.<sup>195</sup> But this, as Garani has shown and as I hope to show further, is not enough. Lucretius' originality extends further, to the expression of a new, unique view of the world. This is made possible not least through his philosophical-literary adaptation of a number of authors with whose works he was familiar, and among them, of pervasive interest, Plato. The above survey has indicated that the fact that neither Plato nor the hero of the dialogues, Socrates, are mentioned by Lucretius, is far from excluding the possibility that Plato should be an influence on the *DRN*.

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<sup>192</sup> Sedley (1998): 1-34, 93; cf. Castner (1987). Brown (1983): 150, concludes that Lucretius 'certainly' read Empedocles for himself.

<sup>193</sup> Sedley himself allows in a more recent publication (2003c: 10-12) that Empedocles did have some 'philosophical kinship' with, and possibly philosophical influence on, Lucretius' account of how some animal species survived because they were useful to humans.

<sup>194</sup> Garani (2007): 26; cf. Campbell (1999), 'Lucretius sees no great divide between philosophy and poetry'.

<sup>195</sup> Sedley (1998): 203-4.

That the *DRN* should exhibit such a variety of influences is made less surprising in view of its internal literary sophistication, including, *inter alia*, its carefulness of structure, its control of imagery and language, and its adaptation of Greek and Latin poetic tropes.<sup>196</sup> This, as Kenney observes, makes it highly unlikely, if not inconceivable, that the *DRN* was composed in a ‘cultural vacuum’.<sup>197</sup> But it then seems even more unlikely that Lucretius would have read a wide variety of literary sources but no other philosophical sources than Epicurus, or a number of philosophical sources, but not Plato; or even that he should have distinguished between the literary and philosophical in this way. In fact, as shall be examined further below, the literary and philosophical sides resist separation in the *DRN*.<sup>198</sup>

The above considerations increase the likelihood that Lucretius, widely versed in Latin and Greek literature and philosophy, would have been aware of Plato and his place in Hellenistic philosophical debate.

#### 1.4.6 Later authors on Lucretius

Finally, Lucretius was taken seriously, not just as a poet, but also as a teacher of natural philosophy, by several writers later in the first centuries BC and AD. Cornelius Nepos mentions Lucretius and Catullus in the same breath, seemingly ‘linking the reputations of Cornelius, Lucretius, Catullus and Atticus’.<sup>199</sup> Vitruvius, writing only a few decades after the probable date of the *DRN*, mentions Lucretius with Cicero and Varro, in the paragraph after Ennius and Accius, as Latin *scriptores* who have won immortality for their personality as well as their *sententiae* through their writings. Thus *plures post nostram memoriam nascentes cum*

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<sup>196</sup> West (1969) demonstrates Lucretius’ literary sophistication at length.

<sup>197</sup> Kenney (1970): 369.

<sup>198</sup> As argued by Garani (2007): 28 *et passim*, with reference to Empedocles.

<sup>199</sup> Nepos, *Vita Attici* 12.4; Minyard (1985): 74; Traina (1975): 84-5.

*Lucretio uidebuntur uelut coram de rerum naturam disputare*: Lucretius is revered as *the* Roman authority on natural philosophy.<sup>200</sup> Lucretius' influence on Virgil and Ovid, especially Pythagoras' speech in *Metamorphoses* XV, has been well documented.<sup>201</sup> The famous homage to Lucretius at *Georgics* II.490-492, *felix qui potuit rerum cognoscere causas...*, underlines his place in the tradition of natural philosophy, as one who has grasped the 'causes of things'.<sup>202</sup> Horace, on the other hand, engages with Lucretius' Epicurean ethics of seclusion from public life.<sup>203</sup>

In his dialogues and epistles, Seneca frequently engages with Lucretius, echoing and citing him, and even once addressing him directly, to correct a view of his expressed through a simile; Seneca takes Lucretius' 'poetical' utterances as making a serious philosophical point.<sup>204</sup> Moreover, when Seneca thinks of three men as representing the human race, those that occur naturally to him as a fitting triad are *Catonem, Ciceronem, Lucretium*: a weighty, serious and philosophically-minded generation indeed.<sup>205</sup> Quintilian mentions Lucretius with Empedocles and Varro as poets *qui praecepta sapientiae uersibus tradiderunt*. Once again, Lucretius is an authoritative teacher of philosophy, aligned in terms of doctrine as well as poetry with Empedocles, as well as with his contemporary Varro, as in Vitruvius.<sup>206</sup>

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<sup>200</sup> *De Architectura* 9, praef. 17; see Traina (1975): 88-89.

<sup>201</sup> Lucretius and Virgil: Hardie (1986); Gale (2000). Lucretius and Ovid: Wheeler (1995); Hardie (1995): 208 with n.22.

<sup>202</sup> For causes in natural philosophical enquiry, see on the *Phd.* and αἰτίαι in Chapter 3.

<sup>203</sup> As demonstrated by Ferri (1993), esp. 81-131. For further Lucretian echoes in Latin literature, see Hardie (2007).

<sup>204</sup> Seneca, *Epist. Mor.* 110.6-7, cites *DRN* II.55-6 = III.87-8 = VI.35-6, and replies: *sed falsum est, Lucreti, non timemus in luce: omnia nobis fecimus tenebras*. For other quotations of Lucretius in Seneca, see *Epist.* 95.10-12, 106.8; *De Tranquillitate Animi* II.14, II.15, III.6, IX.1 with Schirolli (1981) *ad loc.*; *De Otio* 5.5 and *De Brevitate Vitae* 2.2, 10.6, 12.2, 14.1, 15.4, 20.1 with Williams (2003) *ad loc.*

<sup>205</sup> *Epist. Mor.* 8.12.

<sup>206</sup> *Inst. Or.* I.4.4; cf. III.1.4.

In conclusion, the fact that Cicero knew at least some of Plato's dialogues so thoroughly, the number of contemporary and later references to Lucretius among the educated élite, despite the dearth of evidence from the period, the fact that Lucretius was in other respects very well educated, the smallness of the literary élite in Rome, and the considerable presence of Plato there,<sup>207</sup> cumulatively would make it natural to suppose that Lucretius had read Plato himself. In view of the tradition of Epicurean polemic against Plato, it would be equally natural to suppose that Lucretius would want to counter the latter in his poem. The burden of proof would rest with those who denied such an involvement.

This is not to reject the influence of Epicurus' arguments against Plato on Lucretius. Rather, the model I wish to suggest is one in which Lucretius, within the Epicurean tradition of polemic against Plato begun by Epicurus, responded to Plato in his own way, both using Epicurus' criticisms and, like other Epicureans such as Philodemus, upon his own initiative, developing his own lines of attack. It is true that in several cases, the evidence does not allow us clearly to choose between these two possibilities. However, to the extent that it can be pinned down, Lucretius' treatment of Plato is arguably distinguished from those of other Epicureans, including Epicurus himself, in two ways. Firstly, because he engages with Plato through literary and poetic devices, such as images and verbal allusion, as well as through arguments, and often through a combination of these. This often makes his engagement a question of intuitive contrast rather than of open argument. Secondly, to the extent to which Lucretius, as far as can be judged, uses Plato without reference to a previous attack by Epicurus, he is able to develop his own response to Plato, which in turn depends upon his own original interpretation of Epicureanism. I shall argue that, in engaging with Plato, as with other authors, Lucretius modified and moved beyond Epicurus' arguments to present a synthesis of different ideas placed within the context of his own observations of human life,

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<sup>207</sup> For Plato in Rome and elsewhere in Italy in the first century BC, see Sedley (1997).

the overall effect of which is to create a new poetic voice and an original way of seeing the world.<sup>208</sup>

## 1.5 Textual parallels between Plato and Lucretius

### 1.5.1 The possibility of direct Platonic influence on the *DRN*

The evidence considered so far shows that Plato was well-known in the Epicurean tradition, from Epicurus to the Roman Epicureans of the first century BC, and beyond. Lucretius' contemporaries, Epicurean and non-Epicurean, were reading Plato. Lucretius himself was well-versed in other Greek writing, philosophical and literary, from the Presocratics to Hellenistic poetry. He was perceived by his near predecessors as part of the Greco-Roman philosophical debate. These factors all increase the likelihood that Lucretius would have read at least some of Plato's works for himself.

We should read the *DRN* with the above context in mind, rather than assuming that Lucretius, well-versed in so many Greek works, was not interested in Plato. There are, moreover, many apparent echoes of Platonic images in the *DRN*. It is plausible that some may have been mediated through Epicurus or a broader literary and philosophical tradition. Arguably, however, there are some echoes of Plato in the *DRN* which, given the philosophical and cultural context in which Lucretius was writing, seem most likely to derive from a direct knowledge of the dialogues and to have been intended to recall them to the more educated of Lucretius' readers.

Among recent studies of the various influences on the *DRN*, Gale, for example, has argued that Lucretius engages with Plato's gigantomachy (*Sophist* 246a-b) in *DRN* V, with

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<sup>208</sup> 'New elements in the Epicurean school are more easily discerned in the refutation of opponents than in the formulation of orthodox doctrine' (de Lacy 1948: 13).

‘Plato’s views on poetry and myth’ at *DRN* I.931-50, and with his image of the child (*Laws* II. 659e) at *DRN* II.55-61.<sup>209</sup> She has insightfully compared the plague at the end of *DRN* VI to ‘a Platonic myth, presenting moral or psychological truths in a symbolic form with strong visual and emotional impact’, even though she does not say whether she thinks this parallel was the result of a deliberate imitation by Lucretius.<sup>210</sup>

### 1.5.2 *Ion, Phaedo, Timaeus*

There may also be a Platonic influence in the account of magnets at *DRN* VI.906-1089. In particular, the introduction at 906-916 arguably finds parallels in *Ion* 533c9-533e8 and 535d8-536b5. The idea of rings being suspended from a magnet as an image at *DRN* VI. 910-11 matches *Ion* 533e1-2. The idea of the rings receiving ‘power’ from the magnet appears at VI.915-6 and *Ion* 533d6 and 535e8-9. Both Plato (*Ion* 533d3-4) and Lucretius (VI. 908-909) also discuss the derivation of the magnet’s name; and Lucretius acknowledges that it has a Greek origin. The technical account of the magnet’s force which follows the introduction in *DRN* VI may find parallels in Democritus and Empedocles, as well, perhaps, as *Timaeus* 80b-c.<sup>211</sup> However, Lucretius’ introduction, I suggest, specifically engages with the *Ion*. The magnet in the *Ion* functions as an image for Homer’s influence, ultimately derived from Apollo, on other poets and rhapsodes. By using Platonic imagery in a ‘scientific’ context, devoid of reference to divine forces, Lucretius demythologises the magnet and underlines his distance from Platonic forms of explanation.<sup>212</sup>

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<sup>209</sup> Gale (1994): 44-5, 48-9. Erler (2003) demonstrates the closeness with which Lucretius’ image of the ‘Kind im Menschen’ at *DRN* II.55-8, III.87-90, and VI.35-8 tracks Plato’s. However, he is reluctant to see a direct connection, because the image appears in many authors in antiquity (114).

<sup>210</sup> Gale (1994): 225.

<sup>211</sup> For a survey of influences on Lucretius’ account of magnets, see Bollack (1963), esp. 167-8, 183-4 on Plato, and 179-83 on magnets in Empedocles, Democritus and Epicurus.

<sup>212</sup> Garani (2007): 158-70, focuses exclusively on the possible Empedoclean influence.

De Lacy, in his important study mentioned at the beginning of this chapter, adduced a considerable number of parallels between passages and more general themes in Plato and Lucretius. He focused particularly on the *Phaedo* and *Timaeus*, and argued convincingly that *DRN* III, IV and V contained ‘stretches of sustained polemic’ against Plato.<sup>213</sup> One such instance which he adduces, the description of a man dying limb by limb (*DRN* III.526-530), was compared with Socrates’ gradual death at *Phaedo* 117e-118a as early as Lambinus.<sup>214</sup> *DRN* III is a full-scale attack on the idea of the soul as something immortal, able to survive separation from the body; Socrates’ arguments for the immortality of the soul in the *Phaedo* were influential in antiquity.<sup>215</sup> As de Lacy observes, Lucretius’ use of a Platonic description to demonstrate the soul’s mortality constitutes a ‘striking use of Plato against Plato’.<sup>216</sup>

As mentioned above, Diogenes of Oenoanda seems likely to be criticising Plato’s views of the soul. Assuming that Diogenes is following Epicurean tradition in directly attacking Plato, this lends further weight to the claim that a deliberately anti-Platonic thread runs through *DRN* III. Virgil, too, seems to have been aware of Lucretius’ criticism of the Platonic soul in *DRN* III, if, as has been argued, he uses Lucretian language to refer to the *Phaedo* in *Aeneid* VI.<sup>217</sup>

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<sup>213</sup> De Lacy (1983), citation from 298; cf. de Lacy (1948); Kenney (1971) *ad* 130-5.

<sup>214</sup> Rouse and Smith (1992): 229 n.

<sup>215</sup> The dialogue’s alternative title in antiquity was *On the Soul*. Annas (1992): 10-11, 30-2, shows the importance of the arguments on the soul in the *Phd.* in the Hellenistic Academy and Lyceum. Smith (1993): 489-90, compares Diogenes 39.III.7 with *Phdr.* 245c.

<sup>216</sup> De Lacy (1983): 291-2.

<sup>217</sup> Weber (1995).

### 1.5.3 The myth of the water-carriers in *DRN III* and the *Gorgias*

deinde animi ingratham naturam pascere semper  
atque explere bonis rebus satiareque numquam,  
quod faciunt nobis annorum tempora, circum 1005  
cum redeunt fetusque ferunt uariosque lepores,  
nec tamen explemur uitai fructibus umquam –  
hoc, ut opinor, id est, aeuo florente puellas  
quod memorant laticem pertusum congerere in uas,  
quod tamen expleri nulla ratione potestur. 1010

Then, always to feed the ungrateful nature of the soul and fill it with good things and never satisfy it, as the seasons of the year do for us when they return and bear their produce and varied delights, nor are we ever satisfied by the fruits of life – this, I think, is meant by what they tell of the girls who pour liquid into a leaky vessel, which yet cannot be filled by any means.

At *DRN III*.1003-10, within a list of underworld punishments which are interpreted allegorically as symbols for the torments of the soul on earth, Lucretius interprets the underworld punishment of girls, who pour water into a perforated vessel, as the human activity of ‘continually feeding the ungrateful soul’. It is the soul’s attitude of ungratefulness towards the products of nature which makes it forever unsatisfied with them and wanting more. The *pertusum* nature of the *uas* corresponds to the flaw in the individual’s soul: because the *uas* is perforated, it can never be filled, and because the *animus* is ungrateful, it can never be satisfied. The *uas* can be filled *nulla ratione*, which implies both that there is no way in which it can be filled, and, applied to the soul, that the latter is lacking in the *uera ratio*, the ‘true system’ of Epicurean philosophy, by which alone the right attitude towards what nature offers can be grasped.

This passage emphasises the motif of ‘filling up’. *Explere* is repeated three times (1004, 1007, 1010), first of filling the *animus*, secondly of ‘us’, human beings in general, and thirdly of the *uas* itself. This repetition with a different subject or object of filling each time binds the passage together and verbally reproduces for the reader the repeated, unsuccessful attempts to be ‘filled’ that the passage condemns. *Explere* also provides a link between the

two ideas of ‘filling’ conveyed in the passage, in the water-carriers allegory as the pouring of liquids, and, for the human behaviour to which it corresponds, in terms of the satisfaction of physical desires such as eating, through the verbs *pascere* (1003) and *satiare* (1004). The idea of ‘feeding’ the soul is, in Epicurean terms, somehow literal. At *DRN* I.36, for example, the god Mars ‘feeds (*pascere*) his greedy eyes’ on the sight of Venus. This is physically appropriate, since Lucretius makes sight a physical process involving the literal flowing of visual films into the eyes.<sup>218</sup> It is also typical of Lucretius’ synaesthetic methods of composition to use a concrete sensual term for an abstract idea.

Lucretius’ image arguably bears unique resemblances to Plato’s vessel images at *Gorgias* 493a-d and 493d-494a, which show the superiority of moderation over excessive indulgence in physical pleasures.<sup>219</sup>

At *Gorgias* 492e7-493d3, Socrates uses the conceit of the body as the tomb of the soul to apply a version of the myth of the water-carriers in Hades to the soul in its incarnate form on earth.<sup>220</sup> The part of the soul in which the desires are located is such as to be persuadable, *πιθανόν*, and changeable (493a3-7); therefore some unnamed ‘witty man’ has called it a *πίθος*, literally a ‘large wine jar’.<sup>221</sup> The ignorant, *ἀνοήτοι*, that is, those who live insatiably and without self-control, are called the ‘uninitiated’, *ἀμύητοι* (439a7). The part of the soul where the desires are located is, in the ignorant, ‘undisciplined and not well-sealed, like a jar full of holes’ (*τετρημένος*), because of its ‘inability to be filled’ (*ἀπληστία*, 493b2-3). The *ἀμύητοι* would be the most miserable in Hades, because they would carry water to *the* pierced jar (*εἰς τὸν τετρημένον πίθον*) in a leaky sieve (*κόσκινον*, 493b5-7). The use of the definite article for the *πίθος* here, together with the unexplained introduction not

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<sup>218</sup> IV.26-468.

<sup>219</sup> Cf. 494d-e.

<sup>220</sup> *Gorg.* 492e10-11, attributed to Euripides’ *Phrixus* or *Polyidos* (Dodds 1959, *ad loc.*).

<sup>221</sup> LSJ s. v. *πίθος*. On the interpretation of *πιθανόν τε καὶ πειστικόν*, see Dodds (1959) *ad loc.*

just of pouring something into the πίθος but specifically carrying water to it (φοροῖεν ὕδωρ, 493b5-6), suggests that allusion is being made to an image which would have been familiar to Plato's audience. Presumably this is the image of water-carriers pouring water into a pierced or broken πίθος in an underworld scene, which appears on vases dating from the archaic period onwards.<sup>222</sup>

The sieve is like the soul of the ignorant, because it is also leaky, since it cannot 'keep things in (στέγειν), on account of its ἀπιστία and forgetfulness (493b7-c3). Socrates does not say what the sieve of the soul ought to retain; but since the leaky-souled are the ἀνοήτοι, or 'without understanding', he presumably means knowledge.<sup>223</sup> Socrates glosses Hades as τὸ ἀιδέξ, indicating that it is to be understood allegorically, as a parallel with the invisibility of the soul in the human being. Similarly, Socrates' conclusion to his myth is not about the underworld but about this world: the easily satisfied, orderly life is better than that which is lived 'insatiably and without restraint' (ἀπλήστως καὶ ἀκολάστως, 493c5-6). The fate of the water-carriers in Hades also anticipates the underworld myth about the punishment of the unjust at 523a-527a. As Socrates there emphasises, the way we act in this world should be considered in terms of its effects both here and in the afterlife (526be).

In his second metaphor at 493d5-494a5, Socrates describes how two men each have several jars (πίθοι) which they wish to fill with wine, honey, milk and such things (493e1-2). In both cases, the 'streams' (νάματα) of these are difficult to obtain (493e2-4, e6-7). It seems clear that the streams of liquids, as interpreted by Callicles (494a6-b2), symbolise physical pleasures. Out of the two men, the first has jars which are ὑγιεῖς καὶ πλήρεις (493e1), both sanitary and full (and therefore watertight). Once they have been, with difficulty, filled up, he

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<sup>222</sup> Keuls (1974): 35. The expression εἰς τὸν τετρημένον πίθον ἀντλεῖν was a 'proverbial metaphor for futile toil' in the Classical age (*ibid.* 25).

<sup>223</sup> A similar idea appears *Rep.* 621a2-8, of the dead souls who have to drink water from the river of Forgetfulness, οὐ τὸ ὕδωρ ἀγγεῖον οὐδὲν στέγειν: note the same vocabulary of the 'vessel' and 'holding water'.

no longer continues to pour anything into them, nor takes any more notice of them, but is in a state of ἡσυχία as far as they are concerned (493e4-6). This image represents the life of the κοσμίος man, in contrast to that of the ἀκόλαστος (494a2-3). The latter has ‘vessels’ which are ‘perforated and unsound [or ‘cracked’]’, ἀγγεῖα τετρημένα καὶ σαθρά (493e7-8). He is compelled to fill them constantly in order not to be in pain (493e8-494a1). The situations of the two men symbolise the life of the ideal philosopher, as advocated by Socrates, and the pleasure-seeking life advocated by Callicles. As such, they contrast the Platonically ‘correct’ attitude to physical pleasures with a drastically ‘incorrect’ attitude.

Epicurus, who was probably reacting against Platonic and Aristotelian ideas in his theory of pleasures,<sup>224</sup> does not use the image of the soul as a vessel to be filled with pleasures, but does use more general images of filling up of the experience of pleasure; in this metaphor he seems to be following Plato, but without Plato’s hierarchy of intellectual pleasures as superior to physical ones.<sup>225</sup> Diogenes of Oenoanda may have compared excessive wealth to the overflowing of a vessel.<sup>226</sup> However, there is no parallel in any source between Epicurus and Lucretius for the latter’s use of the soul-vessel image, particularly not in the context of an allegorisation of the water-carriers myth.<sup>227</sup> Indeed, there is no reason why there should be, since the image is a mythical one used in a mythical context, of the sort to capture Lucretius’ imagination more than Epicurus’.

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<sup>224</sup> LSed ii.121. For more detailed discussion of Epicurean pleasure, see de Lacy (1969); Scott (1989); Striker (1996); Smith (1998): 159; Nikolsky (2001); sources and analysis in LSed i.112-125, ii. 114-129.

<sup>225</sup> See *ad Men.* 128; *KD* 10; *VS* 59. The soul as vessel does not appear in any other Epicurean works, nor in any non-Epicurean works until after Lucretius; nor does the body as vessel, although it may have appeared in earlier Stoic writings: Görler (1997): 205-7.

<sup>226</sup> Fr. 108, with Smith (1993): 121-142.

<sup>227</sup> Cf. Reinhardt (2004): 41-42. Plutarch, in *Non posse* 1088E, uses the image of the soul as sieve to attack Epicurus’ view of pleasure. However, Plutarch was writing at least a century after Lucretius, and his image is a polemical *reductio ad absurdum* of the soul-vessel image in the *Gorg.*

Some scholars have identified the parallel between Plato's two images of vessels and Lucretius' water-carriers, but are reluctant to see a direct link.<sup>228</sup> However, the correspondences between them indicate otherwise. Both Lucretius' image of the water-carriers and Plato's at *Gorgias* 493a-d are set in the context of allegories which apply underworld myths to human life. Both are of water-carriers who pour water endlessly into a perforated vessel which can never be filled. Both imply that this task of water-pouring is a punishment. Both Plato, in his two images, and Lucretius in his, repeatedly use the vocabulary of 'filling up'.

Most strikingly, Plato and Lucretius both use the image of water-carriers in the underworld as a metaphor for the individual's inability to satisfy the desires of his soul (*animus/ψυχή*). This instance of Lucretius' *uas* image is the one in which its correspondence to the soul is most clearly stated.<sup>229</sup> This also applies to Plato's second use of the vessel image (493d-494a); Lucretius combines Plato's two vessel images. Lucretius' idea at III. 1003-1007 of the living individual who fills his soul with the delights of nature and fails to satisfy it is similar to Plato's image of the many jars filled with different foodstuffs (494d-e), which retain their contents in the case of the disciplined life, but lose them in the case of the undisciplined one. At 1008-1010, Lucretius links this motif with that of Plato's soul-vessel image and the specific details of the water-carriers myth.

In addition to the Platonic echoes, *DRN* III.1003-1010 also alludes to Epicurean ideas of pleasure. It is the soul's ungratefulness (*ingrata natura*) towards the products of nature which makes it forever unsatisfied with them and wanting more (1003-1004). This reflects Epicurus' castigation of τὸ ἀχάριστον, corresponding to the Latin *ingratum*, of the 'ingratitude of the soul', which 'makes the living creature limitlessly greedy for variations in

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<sup>228</sup> Görler (1997): 197-8, assumes Lucretius was influenced by Plato 'through the intermediary of a diatribe, possibly more than one'; cf. Keuls (1974): 31, 106.

<sup>229</sup> Cf. Reinhardt (2004): 41-2.

its way of life'.<sup>230</sup> The term ἀχάριστον conveys moral disapproval of the soul's greed, with the implication that if the individual were grateful, he would limit his desires.<sup>231</sup> Lucretius' filling of the vessel is an allegory for the feeding of the soul with *bonae res*. This phrase could translate Epicurus' ἀγαθά, which he uses of pleasure and appreciating life.<sup>232</sup>

Through his vivid image of the soul as a vessel to be filled with natural goods, Lucretius provides the reader with a Platonically influenced way of imaginatively grasping his interpretation of a Platonically influenced Epicurean doctrine, within the context of a Lucretian satire on human psychological troubles. While Plato's myth reflects on the state of the soul in this life and in the underworld, Lucretius emphasises that the myth of the water-carriers is solely an allegory for life on earth. To this extent, he demythologises Plato, as appropriate for an Epicurean poet who believes that the soul is mortal.

De Lacy and more recently Reinhardt have argued that Lucretius uses the image of the vessel of the soul to allude to Plato within the context of a wider engagement with Plato in *DRN* III. As de Lacy argues, there seems to be a parallel between Lucretius' allegory of the underworld and Plato's underworld of judgement at the end of the *Gorgias*, both of which are used to persuade the reader to adopt the way of life advocated by the author against the lifestyle of the wretched mass of humanity. It is particularly striking that, out of all the figures in the underworld, both the *Gorgias* and *DRN* focus on the trio of Tantalus, Sisyphus and Tityos, in addition to the water-carriers.<sup>233</sup> Reinhardt has further argued that the end of *DRN* III should be seen as a commentary on the *Gorgias*, in the tradition of Epicurean 'anti-

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<sup>230</sup> *VS* 69; cf. *VS* 14, 35, 75. Arrighetti (1973): 154-5, translates δαίματα more narrowly as 'food'; this would be the immediate sense with λίχνον, but 'way of life' is also appropriate, since Epicurus' point covers all pleasures. For δαίματα as 'diet', see *DL* X.131.

<sup>231</sup> Cf. *DRN* III.933-949. Arrighetti (1973): 570 compares III.1003, and Horace, *Sat.* I.2.8.

<sup>232</sup> E.g. *VS* 17, 45, 53; *ad Men.* 122.9.

<sup>233</sup> See De Lacy (1983): 300. Lucretius may not be alluding to the Danaids as such; see Keuls (1974): 43-45.

commentaries' against Plato and other opponents.<sup>234</sup> Garani has examined Lucretius' use of the metaphor of 'filling or emptying the atomic container' as a way of establishing 'the cardinal atomic principle that everything is void and atoms in motion'. She argues that Lucretius' use of the language of filling up of our bodily and psychic needs, at *DRN* III. 1003-1010 and elsewhere, 'creatively appropriates' Plato's metaphor from *Gorgias* 493a-494c into Lucretius' 'atomic context'.<sup>235</sup>

There is more to be done on the relationship between the use of the vessel-of-pleasure image in Plato, Epicurus and Lucretius, and the implications of this for Lucretius' other *uas* images.<sup>236</sup> In particular, the extent to which Lucretius' attitude to pleasure reflects either Epicurus' or Plato's needs further examination.<sup>237</sup> Nonetheless, the above examples suffice to show that, on a close reading, Lucretius is probably engaging directly with Plato considerably more than is sometimes suspected; and in a way which is appropriate to the unusual nature of the writings of both authors, which use literary techniques to imaginatively explore philosophical ideas.

## 1.6. Conclusion

A common assumption among scholars is that Lucretius is only echoing Plato indirectly through the medium of Epicurus, or in some cases through the doxographical tradition.<sup>238</sup>

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<sup>234</sup> Reinhardt (2004): 39-46.

<sup>235</sup> Garani (2007): 187-194. Garani also (263, n. 126) links *DRN* III.870-3 with *Phlb.* 55c, but is loathe to acknowledge a direct connection. Plato speaks of filling the vessel of the soul at *Protag.* 314a1-b4; on the connections of this to *DRN* VI.17 ff., see Görler (1997): 195-6, n. 3.

<sup>236</sup> I hope to explore this in a future article. In addition to the passages mentioned by Garani (see previous note), the soul-*uas* metaphor is implicit at III.870-5; the body-*uas* metaphor occurs at III. 440-2, 554-5, 793.

<sup>237</sup> Görler (1997): 201, argues that Lucretius' *uas* image and his 'sad and dismal tone' at III.931-64 indicates that he has a more negative view of pleasure than Epicurus.

<sup>238</sup> See in particular Solmsen (1951), (1953); Bignone (1973); Sedley (1998): 155; Erler (2003).

This chapter has analysed the circumstantial evidence for the likelihood that Lucretius knew at least some of Plato's works and could have used them in the *DRN*. Judging by this, Lucretius' choice of Plato as a target would certainly have been in the spirit of Epicurus and his school, and would also have been relevant to the concerns of his educated contemporaries.

And in fact, as discussed in Section 1.5, there is good evidence, often underrated by scholars, for detecting in certain Lucretian images a deliberate engagement with Plato, as well as for seeing Plato as one of the main foes of Lucretius' evangelistic Epicureanism. While Empedocles' philosophical poetry is undoubtedly a key influence on the *DRN*, this does not detract from the influence of Plato's dialogues on the poem as well. Plato's influence is to be distinguished from that of Empedocles and others by the subtlety and sophistication of his imagery. In Chapter 2, I shall examine in more detail how Plato's literary self-consciousness, and the way in which he plays off philosophy against rhetoric and poetry, allows him to develop his own philosophical literature: a form of writing which incorporates rhetoric, argument and poetry but can be identified with none of these.

It is a general contention of this study that it is particularly in the images, rather than in the arguments, that Lucretius' debt to authors other than Epicurus is best to be discerned. This reflects the heavy dependence of the *DRN* on the association of images, linguistic play and allusion, at least as much as on argumentative cogency, for its effectiveness. In Chapters 3 and 4, I shall consider how the *Timaeus* and the *DRN* exploit poetic imagery and language to engage with their philosophical opponents over questions about φύσις or *natura*. Building on the evidence presented in this chapter, I shall argue that Lucretius shows an awareness of Plato in the *Timaeus* as a key opponent of Epicurean anti-teleological materialism, and polemically reworks his image of the craftsman of the universe.



## Chapter 2. Teaching and Writing in Plato

... tamquam quidquam aliud sit sapiens quam generis humani paedagogus.<sup>1</sup>

### 2.1 Introduction. Plato and teaching

Plato's dialogues provide detailed theoretical reflections on their own purpose. Such reflections are of particular interest to a study concerned with the possibilities of combining philosophy and literature. In this chapter, I shall consider the question raised by the dialogues of how far they themselves successfully teach or persuade their reader, and what further purposes they may have. While the *DRN* raises similar questions, Lucretius spends much less time reflecting on them. I shall therefore confine myself to demonstrating his teaching techniques by analysing his arguments in Chapter 4.<sup>2</sup>

In Part I of this chapter, I will consider how the criticism of writing and other non-philosophical λόγοι in the *Phaedrus* may shed light on the relationship between teaching, persuasion and writing in Plato's dialogues, and how this influences our interpretation of their purpose. I shall then turn, in Part II, to a concrete illustration of this in the image of the hunt for knowledge (*Rep.* 432b7-433a3), in which Plato depicts a paradigm teaching scenario. I shall also consider what distinguishes the Platonic model of oral teaching from what can be achieved by his written dialogues. Chapters 3 and 4 will then present a comparative analysis of what Plato and Lucretius hoped to teach their readers, and look further at the presentation of their arguments.

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<sup>1</sup> Seneca, *Epistle* 14.89.13.

<sup>2</sup> For teaching in the *DRN* and the poem's purpose, see Wiltshire (1974); Townend (1978); Mitsis (1993); Volk (2002); Marković (2008). Lucretius' hunting image at *DRN* I.398-417 suggests a parallel, although probably not a direct connection, with *Rep.* 432.

## Part I. The *Phaedrus*

### 2.1 Teaching and writing in the *Phaedrus*

#### 2.2.1 Teaching and persuasion in Plato

The *Phaedrus* is, notoriously, a written work which criticises writing; a work of poetry and rhetoric which makes both of these inferior to the ‘living’ λόγος of the philosopher; and a work of imaginative literature<sup>3</sup> which claims that only philosophical dialectic can teach and be worthy of serious study. For these and other reasons, it has attracted a vast amount of critical attention, especially in the last half-century.<sup>4</sup> Building on previous scholarship, I shall focus on two related aspects of the *Phaedrus* which I believe will benefit from another look, and which are material to the wider concerns of this chapter, above all to the view of the *Phaedrus* and similar dialogues as philosophical literature. These are, firstly, the issue of Platonic philosophy as a form of education and how it relates to the written dialogue, and, secondly, the suggestion that the *Phaedrus* is itself an ἄγαλμα: an image of ideal Beauty inspired by Plato’s philosophical contemplation. My approach will be to piece together remarks on philosophical education and writing in the *Phaedrus* and related dialogues, and consider how far they harmonise with the way the *Phaedrus* is constructed.

To understand the approach to different types of λόγοι adopted in the *Phaedrus*, it is helpful to begin with a glance at the treatment of rhetoric and poetry in contrast to philosophy in two dialogues where they feature prominently, the *Gorgias* and *Republic* respectively. In his *Encomium of Helen*, the sophist Gorgias had characterised all λόγοι as persuading and

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<sup>3</sup> Ausland (2010): 4, ‘an intermixture of poetry and imaginative prose inspires the dialogue throughout.’

<sup>4</sup> Recent studies of the *Phdr.* include: Nussbaum (1982), (1986): 200-233; Cook (1985); Griswold (1986); Ferrari (1987); Rowe (1988); Heitsch (1993); Morgan (2000): 210-241; Schenker (2006); Belfiore (2006). On the argumentation, see Bett (2001); Robinson (2001).

delighting a great crowd, πολλὸς ὄχλος.<sup>5</sup> In the *Gorgias*, Plato takes these two points and turns them to rhetoric's disadvantage. Socrates lists the major genres of poetry and music,<sup>6</sup> as well as rhetoric, as practices which aim to gratify souls (ψυχαί) gathered in crowds (ἀθρόαις ἅμα χαρίζεσθαι) by giving them pleasure (ἡδονή) without considering what is best (τὸ βέλτιστον).<sup>7</sup> Socrates identifies poetry with rhetoric by imagining it stripped of its melody, rhythm and metre (μέτρον).<sup>8</sup> This alludes to Gorgias' declaration in the *Helen* that all poetry is λόγος ἔχων μέτρον (*Helen* 9), and anticipates the grouping together of λόγοι 'with and without metre' in the *Phaedrus*.

While the historical Gorgias revelled in the ability of his λόγος to persuade large numbers of people, in the *Gorgias*, rhetorical and poetic λόγοι are criticised for being directed at crowds and persuading in the wrong way, that is, without teaching. Socrates turns the Platonic Gorgias' definition of rhetoric as the ability to λέγειν καὶ πείθειν τὰ πλήθη into a point against rhetoric by arguing that the orator is not a teacher (διδασκαλικός) but only a persuader (πιστικὸς μόνον) about just and unjust things (περὶ τὸ δίκαιόν τε καὶ ἄδικον).<sup>9</sup> Teaching imparts knowledge (ἐπιστήμη), whereas rhetorical persuasion only instils in its audience 'conviction without knowing' (πιστεύειν ἄνευ τοῦ εἰδέναι).<sup>10</sup> Justice and injustice

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<sup>5</sup> *Helen* 13-14, εἷς λόγος πολλὸν ὄχλον ἔτερψε καὶ ἔπεισε τέχνη γραφεῖς, οὐκ ἀληθεία λεχθεῖς. Hence, perhaps, the ὄχλος at *Phdr.* 277e2; cf. *Rep.* 494a8.

<sup>6</sup> 501e-503a.

<sup>7</sup> 500e-502e. The quotation is from 501d4-5. Cf. 501d4, e2, e11.

<sup>8</sup> Stripping away the metre leaves poetry as a ῥητορικὴ δημηγορία, 'rhetorical popular harangue' (502c5-d2). See Emlyn-Jones (2004): 389, for Plato's 'vision of the theatre as the core of the licence affecting popular democratic culture'; Emlyn-Jones compares *Leg.* 701a, which satirises theatre crowds as a θεατροκρατία.

<sup>9</sup> 452e1-8.

<sup>10</sup> 454e3-8.

are μεγάλα πράγματα, which cannot be taught to a crowd of people in the ‘short time’ for which orators are permitted to speak.<sup>11</sup>

Thus teaching is more difficult than persuasion, because it imparts knowledge. It therefore takes longer than persuasion. The knowledge which teaching imparts is about justice and injustice, ethical qualities of the highest importance for human conduct and the condition of the soul. It is more valuable than persuasion, since it teaches what is true and therefore makes people better. In contrast to teaching, rhetoric and poetry merely please the crowd without any thought as to whether this pleasure will benefit them. In the *Phaedrus*, as we shall see, the effects which poetry and rhetoric can have when they are written are not distinguished from those they have when they are spoken. At the same time, a written work cannot teach, because the activity of philosophical dialectic between teacher and disciple alone can achieve this.

The dialogues consistently indicate a distaste for crowds or the mass of people, both in their role as the uneducated, ignorant rabble, as a symbol of the democratic system which Plato seems to have so disliked, and as a body susceptible to persuasive but corrupt λόγοι.<sup>12</sup> At *Republic* VI.493e2-494a8, for example, Socrates and Adeimantus agree that the many are unable to comprehend the Beautiful or other abstracts (or Forms) in themselves, rather than the πολλά καλά. In other words, the πολλοί,<sup>13</sup> appropriately, remain at the level of πολλά, particular instantiations in this world of the ideal Forms, and can never proceed to the Forms themselves. This is why they can never be philosophers, and reproach those who do philosophy. In other words, they can never know the truth about justice and so forth, but can

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<sup>11</sup> *Gorg.* 455a1-6; the argument begins at 454e9. Cf. Emlyn-Jones (2004): 402, n. 40; *Phdr.* 272d5. Gorgias previously accepted that people who have learned (μεμαθηκότες) – and thus know – are ‘persuaded’ as much as those who are ‘convinced’ of something without knowledge (454e1-2).

<sup>12</sup> E.g. *Gorg.* 474a-b; *Crito* 44c-d with *Rep.* 495b5-6. At *Phdr.* 256c3-4, sexual intercourse, to be avoided by the ideal philosophical lover and his boy, is the choice ‘deemed happy by the many’ (ὑπὸ τῶν πολλῶν μακαριστή); this underlines the many’s ignorance. Plato uses οἱ πολλοί, οἱ ἄφρονες, and οὐκ εἰδότες as near-synonyms (Emlyn-Jones 2004: 390).

<sup>13</sup> 493d5.

only hold beliefs about it.<sup>14</sup> This underlines Socrates' previous point, that the sophists, that is, the practitioners of rhetoric whom we meet again in the *Phaedrus*,<sup>15</sup> are bad teachers for the would-be philosopher, because they only teach τὰ τῶν πολλῶν δόγματα, which they ignorantly call σοφία.<sup>16</sup>

In *Republic X*, poetry is criticised for being, like painting, an imitation of the perceptible world (itself an imitation of reality), and therefore incapable of imparting knowledge.<sup>17</sup> Poetry gratifies and strengthens the irrational, appetitive part of the soul, ultimately destroying the superior rational part, by imitating irrational characters, who are easier to imitate than rational characters.<sup>18</sup> In other words, it imparts to the souls of its audience a pleasure without knowledge, which is positively harmful to them in the terms of Platonic psychology. Mimetic poetry is also charged in *Republic X* with even being able to corrupt good people, by strengthening the irrational part of their soul when the rational part is relaxed in enjoyment.<sup>19</sup> However, Plato does allow that there is one sole way in which this corruption can be avoided: through knowledge of what such poetry is really like, as a φάρμακον or 'antidote' to counteract its effects.<sup>20</sup> As with all knowledge, the implication is that knowledge of poetry will only be gained through philosophical enquiry. Thus, within their different argumentative frameworks and in relation to Socrates' different interlocutors, both the *Gorgias* and *Republic* present philosophy alone as being able to impart knowledge,

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<sup>14</sup> The distinction between ἐπιστήμη and δόξα is expounded at *Rep.* V.474d-480a.

<sup>15</sup> Rhetoric and rhetoricians are only mentioned explicitly four times in the *Rep.* (348b4, 396e10, 536c7, 548e5). Only the first clearly refers to the rhetorician.

<sup>16</sup> 492a-493d, esp. 493a8-9. 'The theme of a new rhetoric...is conspicuously absent from the *Rep.*, where no mention is made of rhetorical training for the guardians, though much is made of the young philosopher's inability to resist the influence of public assemblies (492b ff.)' (Warman 1983: 49).

<sup>17</sup> *Rep.* 595a-608b; cf. the first discussion of poetry as imitative at *Rep.* 392d-398b.

<sup>18</sup> 604a-605c.

<sup>19</sup> 605c5-7.

<sup>20</sup> 595b6-7; cf. 605c6-7, on the 'few rare' people who will not be corrupted by poetry; 606a7-8, on the idea that poetry affects the best part of people inasmuch as it is οὐχ ἰκανῶς πεπαιδευμένον λόγῳ οὐδ' ἔθει.

and rhetoric and poetry in contrast as merely catering to the ignorant crowd, persuading or conditioning them by feeding them pleasurable λόγοι without knowledge.

The *Phaedrus* encourages the reader to contrast the ideal of a philosophical λόγος against the rhetorical compositions of Socrates' contemporaries, like Gorgias, and Plato's own, such as Isocrates.<sup>21</sup> At the end of the dialogue, Socrates also criticises written λόγοι (274b6-279c8), as opposed to the 'living' philosophical λόγος. However, while Socrates focuses on rhetorical and written λόγοι, it becomes apparent over the course of the dialogue that at least some of his criticisms apply equally to all λόγοι other than those of the philosopher, or the 'man who knows' (ὁ εἰδώς). This is a variation on the common tendency of the dialogues to undermine all claimants to σοφία, and perceived rivals to φιλοσοφία, by contrasting them with Platonic philosophical ideals.<sup>22</sup> In this case, as we shall see, the key distinction turns on what it means to have knowledge and to be able to produce λόγοι which will pass that knowledge on, which Plato claims are unique characteristics of the philosopher.

While the second half of the *Phaedrus* (257b7-279c8) contains an extended criticism of rhetoric as practised by Plato's predecessors and contemporaries, it is indicated as early as 258d4-11 that the ultimate question to which the discussion will be directed is how to compose λόγοι finely (καλῶς) or not. The same question applies whether the composition is one dealing with public affairs (πολιτικόν) or with private ones (ιδιωτικόν), and whether it is in metre like a poet's or without metre like a layman's.<sup>23</sup> Socrates implies that he is an

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<sup>21</sup> The extent of Isocrates' influence on the *Phdr.*, especially at 278e8-279b2, has been much debated. See Thompson (1868): 170-83; Howland (1937); de Vries (1953), (1971); Burger (1980): 115-126; Erler (1992); Goggin and Long (1993); Nightingale (1995): 138-142; McAdon (2004). On the rivalry between various rhetoricians and teachers, see Coulter (1967). Perkins (1984); Benoit (1991), give a broader comparison of their views. Isocrates too seems not to have named his opponents (Thompson 1868: 173-5).

<sup>22</sup> Goldhill (2002): 81, notes Plato's attempts to 'establish philosophy as the authoritative educational and intellectual discipline', while other disciplines are 'ruthlessly criticised'. For Plato's attacks on claimants to σοφία, see Ch. 3; Kurke (2006). For contemporary meanings of σοφία, see Dunbar (1996): 61.

<sup>23</sup> Ἐν μέτρῳ ὡς ποιητῆς ἢ ἄνευ μέτρου ὡς ἰδιώτης (258d10-11).

ιδιότης, both in terms of the ‘private’ subject matter of his speeches, and because they are ‘without metre’. This apparent modesty serves to distance his own λόγος from that of the professional writers, not to the latter’s credit, as we shall see. At 258d4-5, Socrates phrases the question in terms of speaking and writing (λέγειν τε καὶ γράφειν), while at d7, he only speaks of writing. However, at 259e2, he returns to the former phrasing. This indicates that he is not, at this stage, criticising compositions for the fact that they are written *per se*, but views the composition of λόγοι of any genre, whether written or spoken, as the same process.<sup>24</sup>

Scholars translate the term λόγος in a wide variety of ways, to take account of its different senses in Greek in general and Plato in particular. These include ‘calculation’, ‘explanation’, ‘argument’, ‘account’, ‘story’, ‘speech’, ‘discussion’, ‘subject matter’, and so on.<sup>25</sup> It is surely not for want of alternatives, however, that Plato uses λόγος in the *Phaedrus* of philosophy,<sup>26</sup> rhetoric,<sup>27</sup> and tragic poetry,<sup>28</sup> as well as of arguments to persuade Phaedrus.<sup>29</sup> Rather, in doing this, he appropriates the historical Gorgias’ categorisation of astronomical,<sup>30</sup> agonistic and philosophical discourses as λόγοι in the *Helen* (13). By writing himself into his opponent’s discourse, Plato is able to rework his categories and present the rhetorical and poetic λόγοι as inferior to the philosophical λόγος, by showing how the former fail to live up to the exacting standards required of the latter. At the same time, it allows him to present rhetoric and poetry, and all other λόγοι than those of the philosopher, as worthless

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<sup>24</sup> Pace Rabbås (2010), who argues that Plato’s criticisms of λόγοι apply only to rhetoric.

<sup>25</sup> LSJ, s. v. λόγος.

<sup>26</sup> 259d6.

<sup>27</sup> E.g. 261b7, 267a8

<sup>28</sup> At 268c5-d2, Socrates defines tragedy as the σύστασις πρέπουσα, ‘suitable arrangement’ of λόγοι in an harmonious whole.

<sup>29</sup> 260e2, e4, 261a1, and implicitly at 261a4.

<sup>30</sup> The μετεωρολόγοι seem to be those interested in enquiry into nature, like the Presocratics; see Ch. 3.

in comparison. This literary criticism of Gorgias' categorisation of concepts is a form of serious parody. In Chapter 3, I shall discuss how Plato uses similar tactics against the natural philosophers, another group of opponents. In Chapter 4, I shall consider how Lucretius too uses intertextual allusion and appropriation to undermine his opponents' writing.

Καλός, too, has a range of meanings, from physically 'beautiful' to 'fine or good' (in quality) to morally 'noble' or 'honourable'.<sup>31</sup> As we will see, Plato exploits the ambiguity between moral goodness and beauty in his treatment of the καλόν in the *Phaedrus*.

### 2.2.2 Teaching through dialectic in the *Phaedrus*

The distinction between philosophical and non-philosophical λόγοι in the *Phaedrus* depends upon the identification of the philosophical λόγος with the 'art of dialectic' (διαλεκτική τέχνη) as defined in the dialogue, and the arguments and hints to the effect that no other type of λόγος can do what dialectic can. I shall first outline the relevant features of the διαλεκτική τέχνη in the dialogue, and then consider how they are contrasted with rhetoric, poetry and writing.

In the discussion of rhetoric in the second half of the *Phaedrus*, Socrates distinguishes between the persuasion practised by someone who has knowledge and the persuasion by someone who does not. At 260e4-7, he introduces the argument that when rhetoric involves persuasion without comprehension of the truth (ἄνευ τοῦ ἀληθείας ἤφθαι), it is an ἄτεχνος τριβή. This, it emerges, is because persuading with art, according to a τέχνη ῥητορική, requires knowledge of similarities about the things over which people disagree, namely justice, goodness and suchlike.<sup>32</sup> The only way to gain such knowledge is through the

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<sup>31</sup> LSJ, s. v. καλός.

<sup>32</sup> 262a5-7, 263a2-c5.

process of ‘collections and divisions’, that is, gathering up examples of particular things which instantiate qualities such as justice and goodness, and then dividing them up into sub-categories which show the relationship between these qualities.<sup>33</sup>

Socrates practises collecting and dividing in this way, so that he can speak and think,<sup>34</sup> thereby gaining knowledge about justice, goodness and so on, which he can apply in his λόγοι. Those who can divide and collect in this way are called the διαλεκτικοί (266c1). At 266b7-c5, Socrates asks whether the λόγων τέχνη, as it is called by Thrasymachus and other rhetoricians, and which Socrates claimed at 260e3-7 was not a τέχνη at all, is what they use to become σοφοί at speaking and to make others so too. In the context of the discussion preceding it, Socrates implies that the λόγων τέχνη should be identified with dialectic.<sup>35</sup> Hence his incredulity at the thought that anything καλόν can be grasped with τέχνη although not involving dialectic (266d1-2).

Phaedrus initially rejects this identification. Distinguishing between the category (εἶδος) of dialectic and rhetoric, he insists that there are things written in books about the λόγων τέχνη, which Socrates’ account has left out (266d5-6). However, Socrates persuades him that these books have not taught him what he thought (268a8-c9). Rather, such books list the technical terms for different parts of a speech, but do not teach the ῥητορικὴ τέχνη, since the latter requires the use of dialectic to define what rhetoric is, and then saying every part of the speech persuasively (πιθανῶς) and ordering the whole (τὸ ὅλον συνίστασθαι).<sup>36</sup>

What Phaedrus seems to miss, however, is that ordering a speech in such a way as to make every part persuasive is precisely what dialectic does, as demonstrated at 262b-266b.

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<sup>33</sup> 263b6-9, 265c8-266b1.

<sup>34</sup> 266b3-5, ἵνα οἶός τε ᾧ λέγειν τε καὶ φρονεῖν.

<sup>35</sup> In the *Phdr.*, Plato uses διαλέγεσθαι both of the method of collections and divisions, as with διαλεκτικοί above, and of philosophical exchange between interlocutors (259a1, a2, a7). White (1993): xi-xii, discusses the problem of identifying these two uses, and the treatment of the method of collections and divisions in the *Sophist*; see further Robinson (1953).

<sup>36</sup> 269a5-c5.

Socrates, therefore, guides him to think about the question from another perspective: that the ῥητορικὴ τέχνη, or λόγων τέχνη,<sup>37</sup> involves talk about nature (φύσις).<sup>38</sup> What Socrates means by this cryptic remark is made clearer at 270b4-9. Just as medicine, which aims to cure the body, requires determining the body's nature, so the ῥητορικὴ τέχνη requires determining the nature of the soul. This is because the purpose of the ῥητορικὴ τέχνη is to 'hand down whatever persuasion and virtue one wishes to the soul (of the listeners) by applying λόγοι and lawful habits'.<sup>39</sup> It is clear that the idea of rhetoric with which Socrates is operating has been shifting away from the simple ability to persuade any audience of anything, towards nothing less than a philosophical education of the soul through λόγοι: a psychological 'healing' and a moral improvement, whether simply through persuasion or also through argument.<sup>40</sup> This is what the beautiful boy received from his philosophic lover in the *Palinode*.<sup>41</sup> The implication is that the practitioners of dialectic and the rhetorical τέχνη based on or equivalent to it are philosophers.

Socrates does not explicitly identify the ῥητορικὴ τέχνη or λόγων τέχνη and the διαλεκτικὴ τέχνη. However, there seems to be little fundamental difference between them.<sup>42</sup> Until the writers of rhetorical manuals (τέχνη) write and speak in such a way as to reveal the nature of the soul – that is, using dialectic – they will never write with τέχνη. Until the student is able to grasp the nature of the soul and of the persuasion which works on different

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<sup>37</sup> These two terms are used interchangeably at 270a7-b2.

<sup>38</sup> 269e4-270a8.

<sup>39</sup> Λόγους τε καὶ ἐπιτηδεύσεις νομίμους [προσφέρων] πειθῶ ἢν ἂν βούλη καὶ ἀρετὴν παραδώσειν. Λόγοι could probably be translated as 'speeches' and 'arguments'; Rowe (1988): 113, has 'words', which is appropriately unspecific.

<sup>40</sup> Lebeck (1972): 273-6, discusses the language of medicine in the *Palinode*. On the connection of medical language in the *Phdr.* with rhetoric and dialectic, see Cambiano (1966).

<sup>41</sup> 255b3.

<sup>42</sup> Werner (2010): 42, argues that dialectic is the closest possible approximation of the ῥητορικὴ τέχνη, and that the only type of speech in which an orator could know his subject would be a speech about the Forms.

types of people, recognise in practice these different types, and apply the right types and parts of λόγοι at the right time – until he is an expert in dialectic – he will not himself have become ῥητορικός.<sup>43</sup> The λόγων τέχνη is the mastery of λόγοι; but the best practice regarding all λόγοι requires knowledge of one’s subject and the soul. This in turn requires the practice of the dialectic λόγος. Thus the dialectic λόγος is the key to the mastery of all other λόγοι, written or spoken.<sup>44</sup>

Notable in Socrates’ argument that being τεχνικὸς λόγων requires dialectic is the way in which he gradually shifts the argument away from the λόγος aiming to persuade the crowd to the λόγος aiming to teach the individual. In his summary at 277b5-c6, Socrates claims that the λόγων γένος, practised by someone who knows the truth and is able to collect and divide dialectically, will be usable for teaching (διδάξαι) or persuading (πειῖσαι). However, the point of his attack on the professional rhetoricians is above all that they cannot teach others to be persuasive speakers. He also briefly makes the argument, reminiscent of the *Gorgias*, that a rhetorician without knowledge of ἀγαθὸν καὶ κακόν will run the risk of persuading a whole city to do evil instead of good (260c6-d1). Although this point is not made explicitly again, it matters, because Socrates’ demonstration that the true λόγων τέχνη is different from that which the rhetoricians claim to teach is based on the argument that only the λόγων τέχνη involves knowledge.<sup>45</sup>

The assumption implicit at 260c6-d1 is arguably that someone who has knowledge of ἀγαθὸν καὶ κακόν will, to the best of his ability, try to persuade or teach his listeners the truth. In this way, through making the mastery of the λόγων τέχνη dependent upon knowledge and implying that the speaker with knowledge will communicate the truth rather than lies, Plato

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<sup>43</sup> 271a4-272b2. Cf. 273e1-3.

<sup>44</sup> Cf. 272b1.

<sup>45</sup> Even at 269d2-6, where Socrates seems to admit that one can be an ἀγωνιστὴς τέλειος of rhetoric without having acquired the τέχνη, the ‘performer’ is still required to have ἐπιστήμη in addition to natural ability and practice; but this is difficult, if ἐπιστήμη is only acquired via dialectic.

associates the λόγων τέχνη more closely with morality. The moral direction which he thereby gives to the production of λόγοι as a τέχνη is reinforced at 273e5-274a2. The real aim of the λόγων τέχνη is not to please (χαρίζεσθαι) other humans, one's 'fellow slaves' (ὁμοδούλοι), but rather the gods, both in speaking and in all one's actions, as far as is within one's power (εἰς δύναμιν).<sup>46</sup> Pleasing men, if one does it at all, should only be a 'secondary purpose' (πάρεργον).

The characterisation of the gods as ἀγαθοί τε καὶ ἐξ ἀγαθῶν, together with the description of the philosophical life in the *Palinode* as a form of ὁμοίωσις θεῶν (253b1-c2), suggests that pleasing them would involve the philosopher's making both himself and his students as virtuous as possible, in order to bring all their souls into as close contact as possible with the gods and, above all, the realm of divine Goodness, Justice and so forth.<sup>47</sup> That this point is made both in the *Palinode* and in the dialectical discussion of rhetoric which follows reinforces the identification of the *Palinode*'s practice of philosophy with the later practice of dialectic. The moral value of practising philosophy is reinforced at 274a6-b1: Socrates responds to Phaedrus' doubt about the human possibility of acquiring the λόγων τέχνη by saying that whatever a man experiences when attempting καλά ventures will itself be καλόν. In other words, the pursuit of knowledge, even if one does not attain it, is itself a worthy occupation for human life.<sup>48</sup>

Similarly, Socrates' declaration at 274a2 that the 'way round' towards the mastery of the λόγων τέχνη is a long one, μακρὰ ἢ περίοδος, is couched in the language of the circular orbit of the soul around the realm of Being in the *Palinode*, implying that human conduct is a

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<sup>46</sup> Cf. Yunis (2005): 105.

<sup>47</sup> On the idea of ὁμοίωσις θεῶν, developed in the *Tim.*, see Sedley (1997). I shall use the somewhat archaic convention of translating the abstract objects of Being (τὰ ὄντα) with capitals to distinguish them from perceptible objects; in the *Phdr.*, unlike the *Rep.*, they are not called 'Forms'.

<sup>48</sup> Similarly, at *Meno* 81d3-e1 and 86b6-c2, Socrates emphasises that the belief that knowledge is possible makes people more energetic, braver, and keener to search: ἐργατικοί τε καὶ ζητητικοί, and βελτίους καὶ ἀνδρικώτεροι.

preparation for the afterlife.<sup>49</sup> The idea that this path is taken *μεγάλων ἔνεκα* is reminiscent of *Gorgias* 455a1-6, where, as we saw above, justice and injustice are *μεγάλα πράγματα*, and also of Socrates' remark at *Phaedo* 114c8, on the prospect of an afterlife, that 'the prize (of a good afterlife) is fine and the hope is great' (*καλὸν τὸ ἄθλον καὶ ἡ ἐλπίς μεγάλη*). These considerations tie the argument about the *λόγων τέχνη* closely to the myth of the Palinode, and imply that the *λόγων τέχνη* is in fact nothing other than the practice of philosophy. The connection between the philosophical education of the Palinode and the *διαλεκτικὴ τέχνη* is underlined at 261a4-5. Socrates wants to persuade Phaedrus that unless he philosophises sufficiently (*ικανῶς*), he will not be *ικανός* at speaking about anything; but it turns out that by philosophising, Socrates means dividing and ordering his speech according to the methods of dialectic.<sup>50</sup>

The rest of the dialogue looks more directly at the question of how most to 'please the god' *λόγων περί*, either in speaking or acting (274b9-10). Thus what Socrates is describing in the last part of the dialogue is the ideal use of *λόγοι* for making people's souls better and so more divine, rather than, say, merely controlling them. It is for this reason that the ideas of persuasion without knowledge and the mass audience essentially disappear from the critique of writing which follows (274b9-278b4). Rather, the focus is on the process of teaching and learning knowledge between one teacher and one pupil at a time.<sup>51</sup> In this and other respects, this process reflects the account of the philosopher's education of his boy in the Palinode,<sup>52</sup> as well as the best features of the *διαλεκτικὴ τέχνη*.

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<sup>49</sup> Cf. Morgan (2000): 230-1.

<sup>50</sup> As shown at 261a7-266c1.

<sup>51</sup> As implied at 276e6.

<sup>52</sup> 249d-257a. Cf. Rowe (1988): 212, *ad* 276c3-5, 'We can hardly miss the resemblance between the relationship...between teacher and pupil and that described in Socrates' second speech, between the ideal lover and his boy.'

The teaching and learning process is described in terms of the transfer of knowledge through the ζῶν καὶ ἔμψυχος λόγος from the man who knows (εἰδώς) to the learner (μανθάνων), and the metaphor of this λόγος as ‘written with knowledge’ in the learner’s soul.<sup>53</sup> The living λόγος, like dialectic, knows (ἐπιστήμων) to whom it should and should not address itself.<sup>54</sup> Unlike the written λόγος, it can ‘defend itself’ (276a6) against the questioning of its audience. Socrates’ repeated responses to Phaedrus’ objections and questions in the preceding discussion provide an advance illustration of this.<sup>55</sup>

The point at 275d4-276a9 that the ‘living’ λόγος can respond to questioning suggests that Plato has not forgotten Socrates’ insistence at *Republic* 348a7-b4 on the importance of questioning and agreement between interlocutors in enquiry, rather than attempting to decide a point by opposing speeches.<sup>56</sup> In a similar way, at 276e4-277a4, the serious pursuit (σπουδή) of the man who knows will not be to write, but to use the διαλεκτικὴ τέχνη to sow λόγοι with knowledge (μετ’ ἐπιστήμης) in a soul receptive to such education. These points are reinforced at 278a2-b2: that which is clear, complete and worthy of seriousness (ἄξιον σπουδῆς) is only to be found in things which are taught (διδασκόμενα), spoken for the sake of learning (μαθήσεως χάριν), and written in the soul. According to these statements, the διαλεκτικὴ τέχνη alone can teach, or pass on knowledge from one soul to another. The metaphors of the λόγος of the man who knows as ζῶν καὶ ἔμψυχος, and as a seed, are appropriate, because the grasp of knowledge by dialectic entails the ability to teach it; it is in this sense that the λόγος is living in the individual who can pass it on.<sup>57</sup>

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<sup>53</sup> 276a5-7.

<sup>54</sup> Cf. 272a4.

<sup>55</sup> E.g. 259e7-260a7, 269c6-d8, 272b5-c4, 275b3-c2.

<sup>56</sup> 263d-264e.

<sup>57</sup> In contrast, the rhetorician who does not know the difference between good and bad will reap a bad harvest from the seed which he sowed (260c10-d1).

The *Phaedrus*, therefore, presents ἐπιστήμη as teachable through dialectic by the man who has acquired it through dialectic. In the second half of the dialogue, the subjects which the διαλεκτικὴ τέχνη investigates and teaches are fundamentally the same as those which are grasped by memory through recollection in the Palinode: τὰ ὄντα, those things which are both absolutely true and more real than the things of the material world. Thus in the Palinode, the gods are nourished on ‘true things’ (τάληθῆ) and ‘Being’ (τὸ ὄν), as well as ‘intelligence and unadulterated knowledge’ (νοῦς καὶ ἐπιστήμη ἀκηράτος). Such knowledge is about ‘that which truly (really) is’ (ἐν τῷ ὃ ἐστὶν ὄν ὄντως), including δικαιοσύνη and σωφροσύνη, Justice and Moderation themselves.<sup>58</sup>

In the second half of the dialogue, τὰ ὄντα and the ἀλήθεια ἐκάστου are subjects which the expert in the λόγων τέχνη must know in order to persuade successfully.<sup>59</sup> At 263a1-b9, Socrates argues that the ὄνομα δικαίου ἢ ἀγαθοῦ is something people are more likely to disagree over than (concrete) nouns such as ‘iron’ or ‘silver’.<sup>60</sup> While Socrates does not indicate to what categories these two pairs of examples belong, the Palinode shows that the ideal Justice, of which just things on earth are each a ‘likeness’ (ὁμοίωμα),<sup>61</sup> is one of the occupants of the realm of Being, as is the κάλλος, which has the senses both of moral fineness and beauty.<sup>62</sup> We can assume that, like Moderation, the ideal Goodness and other moral qualities must also be part of this realm within the Platonic mythological ontology.<sup>63</sup>

The souls travelling around the realm of Being in the Palinode are in confusion because they are struggling to catch sight of τὰ ὄντα.<sup>64</sup> This gives an implicit mythical

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<sup>58</sup> 247d1-e3.

<sup>59</sup> 262a6-b8.

<sup>60</sup> Similarly, at *Meno* 95b-96b, ἀρετή is a subject which confuses everyone.

<sup>61</sup> 250a6-b3.

<sup>62</sup> 250c8-d1.

<sup>63</sup> *Rep.* 508a-511d gives the Form of the Good a particularly important role.

<sup>64</sup> 248a1-5.

justification of the confusion about particular instances of justice and so forth on earth. The confusion, and the incarnate soul's consequent need for recollection, derive from its imperfect sight of the realm of Being in its disembodied state.<sup>65</sup> When Socrates, therefore, speaking of dialectical teaching, says that clearness and completeness only exist in things taught, spoken and written in the soul *περὶ δικαίων τε καὶ καλῶν καὶ ἀγαθῶν* (278a3-4), and when he says that the philosopher has *δικαίων τε καὶ καλῶν καὶ ἀγαθῶν ἐπιστήμαι* (276c3), he implies that knowledge about particular good and just things is in some way dependent on knowledge of the Good and Just themselves. A clearer account of this dependency is given in the *Republic*.<sup>66</sup>

It has been recognised that the account of *ἀνάμνησις* in the *Phaedrus* constitutes a development of that in the *Meno*, although exactly how is debated.<sup>67</sup> Learning is defined as recollection of what the soul knew before it was embodied at *Meno* 81b1-d2. Socrates demonstrates what he means by the process of recollection by guiding a previously ignorant slave-boy through a series of well-ordered questions about a geometrical problem (82a-85e). At the end of this demonstration (85c9-12), Socrates remarks that the *ἀληθεῖς δόξαι* of the slave-boy have been stirred up in him like a dream, but that if he were asked the same questions *πολλάκις καὶ πολλαχῆ*, he would gain accurate knowledge of the matters about which he now has beliefs. Socrates deduces from his demonstration that the 'truth about the things that are' (*ἡ ἀλήθεια τῶν ὄντων*) is in the soul; and if this is so, that the *ψυχή* is immortal (86b1-2). At 97e-98a, Socrates distinguishes true opinions (*ἀληθεῖς δόξαι*) from knowledge by the claim that knowledge, which he identifies with the result of recollection, is

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<sup>65</sup> As underlined at 2501-4.

<sup>66</sup> *Rep.* 506e ff. A similar phrase occurs at *Phdr.* 272d4-5; cf. 260a1-4; *Gorg.* 455a1-6. Rowe (1988): 211, translates *ἐπιστήμαι* at *Phdr.* 276c3 as 'pieces of knowledge' as opposed to the whole of knowledge or wisdom, because no statement made by the dialectician is 'clear and definitive, but only ... a seed which will bear fruit in due time.' But contrast 278a2-5 on the clarity of taught *λόγοι*.

<sup>67</sup> The account of recollection is at 81a-86c. See Allen (1959); Kahn (2006); Scott (1995). 'Anamnesis is concerned only with the attainment of hard philosophical knowledge, which most of us never reach' (Scott 1987: 346).

what opinions become when they are ‘tied down’ with an αἰτίας λογισμός, an ‘account of the cause (or ‘reason’)’; this would happen through the repeated questioning by which recollection has been characterised.<sup>68</sup>

That Plato had the account of recollection from the *Meno* in mind in the *Phaedrus* is suggested by the recurrence of λογισμός at 249c1, in a passage giving a condensed outline of how the philosopher is able to contemplate Being (τὸ ὄν ὄντως) or see the truth (ἡ ἀλήθεια) through ἀνάμνησις.<sup>69</sup> This involves progressing from many perceptions (ἐκ πολλῶν αἰσθήσεων) ‘towards one thing brought together by reasoning’ (εἰς ἓν λογισμῷ συναιρούμενον).<sup>70</sup> Thus the mental faculty involved in philosophical activity, or recollection, is the memory (μνήμη).<sup>71</sup> The objects of recollection in the *Phaedrus* are specified as the ultimate true things and occupants of the realm of Being (249c1-4), as they are not in the *Meno*.

The *Meno* presents a practical illustration of recollection of geometrical principles followed by a theoretical discussion as to whether ἀρετή can be taught. In the *Phaedrus*, the description of recollection in the Palinode and of dialectic in the second half of the dialogue are presented as complementary accounts of the same process. Thus, to the extent that it is possible for the practitioner of dialectic to teach knowledge about virtues such as justice and goodness, this gives a positive response, based on a development of recollection in the *Meno*, to the question raised there and in the *Protagoras* of whether ἀρετή can be taught.<sup>72</sup>

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<sup>68</sup> On λογισμός, see further Scott (1987): 362.

<sup>69</sup> 249b5-c8.

<sup>70</sup> On the interpretation of the difficult sentence at 249b6-c4, see Scott (1987): 359-363.

<sup>71</sup> 249c5, cf. 250a5.

<sup>72</sup> I follow the generally accepted view that the *Phdr.* is later than both of these; see Kahn (2006). Sedley (2004): 1-2, puts the *Meno* as ‘straddl[ing] the divide’ between the early and middle dialogues, while *Phdr.* is firmly among the latter.

In the *Phaedrus*, Plato is careful to set limits to the knowledge which it is possible for humans to reach. The philosopher is not wise (σοφός), since only the gods are wise, but is a ‘lover of wisdom’.<sup>73</sup> This reinforces the contrast between Socrates and Lysias, who allegedly possessed σοφία (236b7). Socrates’ humility with regard to σοφία, a recurrent theme in the dialogues, functions here to emphasise the continuity of the dialectical search for knowledge, and the moral need to continue pursuing wisdom throughout one’s life.<sup>74</sup> It also underlines the point that perfect σοφία cannot be achieved by any human being, or even, perhaps, any disembodied soul.<sup>75</sup> The limitations on the extent of human knowledge are further emphasised by the use of phrases indicating that this knowledge is only attainable ‘as far as it is within one’s power’,<sup>76</sup> and of the requirement only to be ‘sufficient’ or ‘adequate’ (ικανός), rather than perfect, in philosophising or teaching.<sup>77</sup>

At 270c10, however, Socrates presents himself as voicing the ἀληθῆς λόγος about how to approach the ‘essential nature’ (φύσις) of one’s subject. This implies that he does have some knowledge of what he is discussing. Similarly, his claim not to share in any τέχνη τοῦ λέγειν at 262d5-6 and 264b6 is ambiguous. It is misleading in so far as he has demonstrated by his speeches and conversation with Phaedrus that he is skilled in making λόγοι which are both persuasive and morally compelling. It is true to the extent that Socrates is aware of his own limitations as a human being; it also functions to contrast his self-awareness with the sophists’ ignorant claims to knowledge.<sup>78</sup> It may also be a recognition of his inability to

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<sup>73</sup> 278d1-9; cf. 229e5-6.

<sup>74</sup> See further Part II.

<sup>75</sup> See 248a1-5 above. For the classic statement of Socratic ignorance, see *Apology* 21-23b. *Sym.* 204b1-5 puts the philosopher between the σοφός and the ignorant.

<sup>76</sup> 252d1-5; 253a4-5, b5-7; 261a4-5; 273e8; 277a3-4.

<sup>77</sup> 250a1-b5, 261a3-5, 276c7-9.

<sup>78</sup> Albert (1992), argues that the philosopher according to the *Phdr.* can have some knowledge, just not the perfect knowledge of the gods.

educate promising young men like Alcibiades as well as he might have liked.<sup>79</sup> Plato's emphasis on the limitations of his λόγων τέχνη thus underlines the difference between this reality and the divine ideal.

In the *Phaedrus*, therefore, philosophy (or recollection or dialectic) can be used either for learning for oneself, or for teaching others what one has already learnt by making them go through the dialectic process in a manner appropriate to each individual, within the limits that apply to any incarnate soul.<sup>80</sup> Socrates himself is an example of a philosopher who has, within human limitations, mastered the λόγων τέχνη and therefore knows how to apply it to teach his students. So, for example, *Phaedrus* requires repeated reminding from Socrates about the conclusions to be drawn from the argument (277b4). This illustrates the principle of πολλάκις καὶ πολλαχῆ repetition, which was used in the *Meno* of inducing recollection. The idea of philosophical dialectic as a form of self-teaching is no less important; as the *Palinode* implies, the contemplation of the Forms is something which each individual soul can only do for itself. This distinguishes Platonic philosophy from its rival, rhetoric, which was paradigmatically employed to teach or persuade others in a public context. It also provides an interesting link with Lucretius, with his solitary visions inspired by Epicurus' writing, and his encouragement to Memmius to pursue the enquiry beyond the *uestigia* of the *DRN*.<sup>81</sup>

Socrates reveals his ἐπιστήμαι not just in his demonstration to *Phaedrus* of the methods of dialectic, but also in various comments which he makes along the way.<sup>82</sup> These

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<sup>79</sup> *Sym.* 216a-c.

<sup>80</sup> Rowe (1988): 211, sees the practice of dialectic to pursue knowledge and to teach as two aspects of the same ongoing process of discovery. Sedley (2004) argues that the final definition of knowledge can never be reached within a Platonic dialogue, because it is up to each reader to 'give birth' to it himself (see p. 5, 8 ff.). Since the *Theaet.* is devoted to a technical discussion of ἐπιστήμη, Sedley focuses more on philosophical than literary elements in explaining the purpose and function of a Platonic dialogue, unlike this study, which follows the literary lead of the *Phdr.*

<sup>81</sup> *DRN* III.1-30; I.398-417. The theme of solitary contemplation in Plato and Lucretius deserves further consideration than can be given here.

<sup>82</sup> *Pace* Yunis (2005): 109.

reflect his understanding both of how to teach and the purpose of teaching, as well as of what moral goodness consists in.

One example of this is the treatment of the motif of the slavish and vulgar versus the free and noble at various points in the conversation. This motif is introduced by Phaedrus at 236c1-3, where he warns Socrates not to run the risk of making a φορτικὸν πρᾶγμα, a ‘vulgar affair’, like those of the comic poets; presumably he is thinking of the quarrels between slaves and other low-class characters in Aristophanes and the like.<sup>83</sup> Phaedrus’ appreciation of the vulgarity of comedy indicates that he is open to argument which appeals to his sense of propriety. This attitude is one which Plato seems likely to have endorsed, given the dislike of vulgarity and the slavish apparent in other dialogues.<sup>84</sup> Socrates exploits Phaedrus’ sense of propriety at 243c1-d1, where he criticises Lysias’ speech and the first of his own for being the kind of things which would have been produced by people who had been brought up among sailors and had never seen any ‘liberal (un-slavish) love’ (ἐλεύθερος ἔρωος). As such, the speeches would be repugnant to someone of a ‘noble (or ‘well-bred’) and gentle character’ (γεννάδας καὶ πρᾶος ἦθος). Thus Socrates, in introducing his Palinode, enlists Phaedrus’ sympathies by appealing to his sense of propriety, and also encourages him, and the reader, to be open to the moral standards which this speech will promote.

Whether Phaedrus is as receptive to the portrayal of the ἐλεύθερος ἔρωος as Socrates would like is another matter. Certainly, before the Palinode begins, his main reaction to Socrates’ criticism of the earlier speeches is not so much moral approval as pleasure at the thought that Socrates will be giving another speech, which will in turn compel Lysias to do the same (243d8-e1). However, Phaedrus at least appreciates that the Palinode is finer

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<sup>83</sup> Griswold (1986) interprets the *Phdr.* as a whole as a ‘species of comedy’ (8). For comedy in Plato, see further Brock (1990).

<sup>84</sup> For Socrates’ (and presumably Plato’s) disapproval of the coarse humour of comedy (βωμολοχία) and the shameful of laughter at πονηρά, see *Rep.* 606c2-9. On low-minded slaves: *Sym.* 210d1-3.

(καλλίων) than Lysias' speech (257b7-c4). Moreover, at 258e1-5, he reveals his appreciation that the ἡδοναί of discussing λόγοι are superior to the slavish (ἀνδραποδώδεις) pleasures of the body.<sup>85</sup> This shows that he has the instincts necessary to be susceptible to persuasion by virtuous λόγοι. Socrates again exploits this at 259a1-d8, where he contrasts slaves (ἀνδράποδα), as well as the πολλοί, who sleep at midday, with philosophical (free) men who do not sleep but spend their time in discussion (διαλεγόμενοι). Socrates' encouragement to Phaedrus to persevere with the discussion is thus given in terms with which the latter can sympathise, but which also shape his understanding of what it means to be free and unslavish, and identify it with the behaviour of the philosopher. In the Palinode, Socrates describes the happy philosophical lover and beloved as passing a blessed life on earth, through being self-controlled and ordered, 'having enslaved that by which evil was engendered in the soul, and freed that by which virtue was engendered'.<sup>86</sup> Thus being free requires being virtuous, just as it requires talking instead of sleeping in the heat.

By the end of the dialogue, Socrates has reached the point where he can secure Phaedrus' agreement that the man who has knowledge περὶ δικαίων τε καὶ καλῶν καὶ ἀγαθῶν and is able to teach it to others – in other words, the philosopher – is the sort of man whom they would pray they might become (278b2-4). Thus Socrates has transferred to Phaedrus the true opinion, even if one discussion is not enough to give him knowledge, that the noble, free and virtuous character which he admires is actually best embodied in the philosopher.

In guiding Phaedrus to a higher estimation of the philosophical character, Socrates is putting into practice the description of the behaviour of the idealised philosophical lover in the Palinode. Each philosophical lover honours the god whom he followed in heaven by imitating him as far as he can (εἰς τὸ δυνατόν), and, as far as he can (ὅση ἐκάστῳ δύναμις),

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<sup>85</sup> The contrast between philosophical pleasures, and those of ambition and of the body, is given theoretical grounding at *Rep.* 583c-586b.

<sup>86</sup> 256a8-b3.

persuading and training his beloved to do so too.<sup>87</sup> The verb ῥυθμίζω, ‘training’, ‘ordering’ or more literally ‘bringing into rhythm’, suggests that part of the process of inducing the beloved to imitate the god happens at the pre-philosophical level of conditioning of the character; in Socrates’ case, by making beautiful λόγοι to charm Phaedrus. Hence why it is important that the beloved should have both the λόγος and company (ὀμιλία) of the philosophical lover (255b3). The closeness of the parallel between the lover’s imitating the god and persuading his beloved to do the same shows the value of both enquiry and teaching in the life of the philosopher. Enquiry is the care of one’s own soul, and teaching, the care of other souls; both are appropriate to someone who acts without jealousy or an ‘ill-will inappropriate to a free man’ (ἀνελευθέρως δυσμενεία).<sup>88</sup> The use of ἀνελευθέρως implies by opposition that it is part of the virtue of the philosopher that he will impart his knowledge to other souls. That Socrates does precisely this, in the *Phaedrus* and other dialogues, demonstrates his commitment to the philosophical ideal which he describes; this is reinforced by the ἐλεύθερος character of his own speech.<sup>89</sup>

The serious task of the man with knowledge is to sow his λόγοι into a suitable soul (276e4-277a4). These λόγοι will have a σπέρμα, which will be immortal and which will make all those in whom it is planted εὐδαιμονεῖν εἰς ὅσον ἀνθρώπῳ δυνατόν. In the language of the *Palinode*, that the soul should achieve εὐδαιμονία both on earth and in the afterlife is the fundamental aim of philosophy.<sup>90</sup> As the *Palinode* tells us, the fate of the soul after the death of the human depends on how justly (δικαίως) it has lived in its incarnate form.<sup>91</sup> The

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<sup>87</sup> 252d1-5, 253b5-7.

<sup>88</sup> 253b7-8.

<sup>89</sup> Cf. *Sym.* 212b24, on the idea that Socrates, having been persuaded by Diotima, wants to persuade others. For Diotima as Socrates’ teacher, see *Sym.* 201d; 207a5, c6.

<sup>90</sup> 256d8-e1. The value of philosophy to young men is introduced in Socrates’ first speech, 239b2-6. For a review of scholarship on εὐδαιμονία in Greek philosophy, and its meaning: Jost and Shiner (2002): xxi-xxiv; on εὐδαιμονία and virtue in Plato: Annas (2002).

<sup>91</sup> 248e3 ff.

point of all this is that the philosopher's training of his disciples is directed at making their souls more virtuous, both through arguments which lead them to knowledge of justice and goodness, and through pre-philosophical 'rhythmising' which instils good attitudes and habits, in order to make them εὐδαίμονες both in life and the afterlife.<sup>92</sup>

Even if the Palinode envisages the ideal relationship between the philosopher and one beloved as lasting for life (256a7-b3), the section on the philosopher's planting seeds of knowledge in an appropriate soul at the end of the dialogue does not require that he will focus all his attentions on one soul. Indeed, the opposite is implied later, when Socrates distinguishes the different types of λόγοι which the philosopher will direct at different educable souls.<sup>93</sup> Socrates' appreciation of a large number of beautiful young interlocutors is evident in other dialogues. Moreover, the Palinode states that, in the less ideal relationship in which sexual intercourse occurs, there will be a point at which this activity ceases, after which the lover and beloved will remain friends (φίλω), but no longer in an erotic relationship.<sup>94</sup> This leaves open the possibility that either partner might take another beloved. In this way, underlying the ἔρως which a modern audience may identify as a precursor of modern, idealised romantic love<sup>95</sup> is a philosophical notion of ἔρως which, whatever its other features, would not require lifelong sexual fidelity. In Socrates' irresistible peroration, the lover and beloved share permanent pledges which prevent them from becoming enemies (256d1-3). However, this should be read in part as an agonistic counter to Lysias' non-lover's promise of friendship for life to his boy (234a5-7). Socrates' description of the lover and beloved's shared afterlife need not be taken too literally (256d3-e2).

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<sup>92</sup> Cf. *Sym.* 204e3-7 (the possession of τὰγαθά is εὐδαιμονία).

<sup>93</sup> 277c2-3, ποικίλη μὲν ποικίλους ψυχῆ καὶ παναρμονίους διδοὺς λόγους, ἀπλοῦς δὲ ἀπλῆ; 278a7-b1, εἴ τινες τούτου ἔκγονοί τε καὶ ἀδελφοί ἅμα ἐν ἄλλαισιν ἄλλων ψυχαῖς.

<sup>94</sup> 256d1, διὰ τε τοῦ ἔρωτος καὶ ἔξω.

<sup>95</sup> So Nussbaum (1986): 200-234; cf. Thomas Mann's Platonic account of the artist's passion in *Der Tod in Venedig*.

### 2.3 The criticism of writing

The discussion so far has shown how Plato's positive conception of philosophical teaching and enquiry unfolds in the *Phaedrus*, and how it is linked to other dialogues on similar themes. I shall now show briefly how writing is criticised in the *Phaedrus* by explicit and implicit contrast to the philosophical λόγος. In the sections which follow, I shall consider how far, despite Socrates' criticisms, the dialogue hints at a more positive view of some writing.

It emerges over the course of the *Phaedrus* that writing is vulnerable to many of the same criticisms as are made of rhetoric and poetry. Indeed, as we have seen, several of Socrates' criticisms are made equally of rhetoric and other non-philosophical λόγοι, regardless of whether they are written or spoken. Moreover, it is Lysias' rhetorical speech which is used as the paradigm case of a written work; the other examples are speeches written by other logographers, laws set down by statesmen, and rhetorical τέχνη.<sup>96</sup>

The idea that such writings are as much composed for a mass audience as dramatic poetry is implied by Socrates' remark that a writer of speeches or laws whose works are preserved for posterity 'leaves the theatre a happy poet'.<sup>97</sup> The significance of the audience is reinforced by Phaedrus' characterisation of conventional rhetoric at 268a3-4 as having a power which is very forceful (ἐρρωμένη), at least in gatherings of crowds (ἐν γε δὴ πλῆθους συνόδοις). The qualification implies what Socrates will go on to argue, that conventional rhetoric is only effective in crowds and not in private conversations. The use of ἐρρωμένη

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<sup>96</sup> Lysias' speech is thus used at 277d6; see further 257c-258d, 261b-c, 266d-269c.

<sup>97</sup> 258b2-3. Plato plays upon the wider sense of ποιητής as any 'maker', and its narrower sense as 'poet'; cf. *Sym.* 205b8-c9; *Phdr.* 234e6.

suggests a compulsion working on the irrational, pleasure-seeking part of the soul, as in the *Gorgias* and *Republic*, rather than the rational part.<sup>98</sup>

The end of the *Phaedrus* (274b-279c) contains a criticism of written works which might seem to depend specifically upon their being written rather than spoken. In the myth of Theuth (274c5-275b4), the wise Thamus tells the clever Theuth that writing will not improve the memory of the souls of those who read, but instead will make them forgetful. They will no longer practise recollection within themselves (ἐνδοθεν αὐτοὺς ὑφ' αὐτῶν ἀναμνησκομένους), due to their trust in writing made by external marks (διὰ πίστιν γραφῆς ἔξωθεν ὑπ' ἀλλοτρίων τύπων).<sup>99</sup> Thus writing does not provide, as Theuth claims, μνήμη and σοφία, but only ὑπόμνησις, a 'reminding' to someone who already knows (ὁ εἰδώς).<sup>100</sup> As made clear at the end of the *Phaedrus*, σοφία means the wisdom which philosophers pursue through dialectic.<sup>101</sup> Since the gods, as the *Palinode* tells us, have a constant sight of the objects of Being, it follows that they alone have complete ἐπιστήμη (247d1); it is this in which their σοφία consists. The sight of the ἀληθείας πεδίων, which provides knowledge, is something which the souls of humans, in their chariots around the perimeter of the über-heaven, can only occasionally reach.<sup>102</sup>

Those who have read their γράμματα will appear to have wisdom, but will not have it, because they will have heard many things<sup>103</sup> without teaching (ἄνευ διδαχῆς). The word

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<sup>98</sup> Cf. *Phdr.* 267d1; de Romilly (1975), on the irrational power of rhetoric in *Gorgias* and Plato; *Rep.* 536c1-7. Morrow (1953): 236, describes the Greek view of rhetorical persuasion as 'getting a person to do something you want him to do, by the use of almost any means short of physical compulsion'.

<sup>99</sup> 275a3-5.

<sup>100</sup> 274e6, 275a5-6, 275c5-d2. I shall not go into the idea of writing as a φάρμακον, and the significance of this word in the dialogue, although it supports the point that writing cannot impart knowledge. See Derrida (1981). Scarborough (1991) discusses the different meanings and functions of the φάρμακον in ancient medicine and magic, including as a poison, a mind-altering or healing drug, and an aphrodisiac.

<sup>101</sup> 278d3-6.

<sup>102</sup> 248a1-c8.

<sup>103</sup> They will be πολυήκοοι, sc. by hearing someone reading out loud, or doing so themselves.

πίστις at 275a3 is important: the readers anticipated by Thamus will have trust or confidence in writing, as if it were an orator who had persuaded them by its rhetoric, but without getting them to know anything. Thus, in line with the rest of the dialogue, the myth of Theuth identifies teaching with the imparting of knowledge to the recipient of a λόγος. Writing cannot impart knowledge in this way, because, in terms of the Palinode, it cannot teach its readers how to recollect and use their own memories. It is in this sense that there is no knowledge ‘in’ writing: writing cannot pass knowledge on from one person to another.

Socrates then states that writing cannot speak for itself, just as animals in a painting cannot make a noise (275d4-e5). Writing therefore cannot answer someone who asks questions of it because he wishes to learn (μαθεῖν), since it always indicates (σημαίνει) the same thing; σημαίνει suggests a dumb impotence. Writing does not ‘know’ (ἐπίσταται) how to address those whom it should and should not. When it is attacked, it cannot help itself (βοηθῆσαι αὐτῷ), but needs the help of its ‘father’. Moreover, since it is publicly circulated, it is not directed at a specific individual or type of soul.<sup>104</sup>

The idea that writing cannot ‘help itself’ alludes to 272c3, where Lysias’ absence resulted in his failure to give βοήθεια to his speech. Phaedrus’ inability to defend Lysias underlines the point that he has not learnt from the speech, because it is a piece of writing (272c5-6).<sup>105</sup> The implication of these criticisms is therefore that writing cannot teach. Specifically, it cannot teach its reader how to do philosophical dialectic, because it cannot respond to its reader’s questions, and thereby show him how to respond to similar questions from future opponents. In so far as writing is not directed at a particular type of soul but at an indiscriminate audience, its inability to teach is the same as that of rhetoric and poetry.

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<sup>104</sup> 271c10-272b2, 273d8-e1; cf. 277b8-c3.

<sup>105</sup> 263d-264e. In the *Sym.*, Phaedrus gives a Lysias-like speech (178a-180b).

The analogy between the written λόγος and painting is reminiscent of the analogy between painting and poetry in *Republic X*. The idea that writing is, like painting, imitative and therefore ontologically inferior, is expressed more directly by Phaedrus at 276a8-9, where he describes the written λόγος as an image (εἶδωλον) of the ‘living and ensouled’ dialectical λόγος. The alternative meaning of εἶδωλον, ‘phantom’, heightens the vividness of the contrast between writing and dialectic, implying that the written λόγος is less real or truthful and so less valuable than the dialectical λόγος. The inferior value of the written λόγος is underlined by the idea that it is an illegitimate offspring of its creator, whereas the dialectical λόγος is γνήσιος (276a1-2).

The contrast between written and philosophical λόγοι is continued at 276b1-d8, where Socrates likens the λόγοι of the εἰδώς man to seeds (σπέρματα). The producer of the legitimate λόγος can sow the ‘seeds’ of his knowledge either in writing or directly in the soul of the learner.<sup>106</sup> However, he will not sow his ἐπιστήμαι seriously (σπουδῆ) in writing, ‘in black water through a reed, with λόγοι which are unable to help themselves by a λόγος, unable to teach the truth sufficiently’.<sup>107</sup> The description of writing as sowing with a reed in black water emphasises that writing is a physical process; this implicitly contrasts it with the process of sowing knowledge in the soul, which is closer to the immaterial realm of Being. This reinforces the presentation of the written λόγος as further from reality and truth, and therefore less valuable.

This passage therefore reiterates and clarifies the points made at 275d8-e5. Writing one’s ἐπιστήμαι down is unsatisfactory in that the λόγοι in which they are written down will be unable to defend themselves, and so to teach others to defend them, with the λόγος of

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<sup>106</sup> 276c7-9, 276e4-277a4.

<sup>107</sup> 276c7-9.

dialectical argument. Written λόγοι cannot teach the truth ἰκανῶς: they are not sufficient to pass on knowledge to a reader.

Summing up the arguments of the second half of the dialogue, Socrates first repeats the definition of what it means to compose λόγοι with τέχνη (277b5-c6), and then, in close proximity to this, makes the implicitly contrasting point that there is no great firmness (βεβαιότης) or clarity (σαφήνεια) in writing.<sup>108</sup> By βεβαιότης and σαφήνεια, as his earlier remarks at 275c5-2 make clear, he means the consistency with which individuals are able to defend their λόγοι and the depth of their grasp of their ideas; in other words, the extent of their knowledge.

In fact, Socrates continues, not knowing about matters of justice, injustice, good and bad, whether waking or dreaming (ὑπάρ τε καὶ ὄναρ) is shameful, regardless of whether the mass of the people (ὁ πᾶς ὄχλος) praises such writings. The suggestion that the ὄχλος approves of written works is virtually an automatic stain on their value, given Plato's usual scorn of the many. It also underlines the implicit criticism at 275d9-e3 that written works are available to everyone, even if the subject is not appropriate for all readers, presumably through their inability to respond to it correctly. This again associates written works, at least by those who are ignorant about justice and goodness, with the indiscriminate audience for which Plato elsewhere criticises rhetoric and poetry.

The phrase ὑπάρ τε καὶ ὄναρ suggests a contrast between the diurnal clarity of the spoken word and the phantom unclarity of the written word.<sup>109</sup> It reinforces the image previously developed of writing as an εἶδωλον of the philosophical λόγος. This image is reminiscent of the end of the *Meno*, where any statesman who is capable of making someone else a statesman – in other words, passing on his virtue by teaching – is described as being, in

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<sup>108</sup> 277d6-e3.

<sup>109</sup> For a different interpretation, see Rowe (1988): 213-214.

relation to virtue, the only real thing among shadows (παρὰ σκιὰς ἀληθὲς πρᾶγμα), like Tiresias among the dead.<sup>110</sup> This supports the view that the real contrast in the *Phaedrus* is between λόγοι which can teach and have knowledge, against those which cannot teach and are composed by those who are ignorant. Socrates, however, does not say at 275d9-e3 how the situation would change if the written λόγοι were composed by someone with knowledge.

At 277e5-278a1, elaborating on his criticism of writers who value their own works too highly, Socrates says that the appropriate attitude is rather to think that there is much play (παιδιὰ πολλή) in the written word, and that no λόγος has ever yet been written which is worthy of great seriousness, either in metre or without metre.<sup>111</sup> The same applies to any λόγος, including spoken ones like those of the rhapsodes,<sup>112</sup> which are spoken without questioning or teaching for the sake of persuasion (ἄνευ ἀνακρίσεως καὶ διδαχῆς πειθοῦς ἔνεκα); that is, which are unphilosophical. In this way, he returns to the criticism introduced in the myth of Theuth that writing persuades but does not teach, but conclusively extends it to include all λόγοι which persuade without teaching; in other words, all λόγοι except those spoken for the purpose of teaching by the man with knowledge.

From the analysis so far, it appears that only the dialectical λόγος of the philosopher can pass on knowledge of τὰ ὄντα to students. Writing cannot teach, because it cannot engage in question-and-answer exchanges responding to the souls of individual pupils or types of souls, and guiding each soul specifically in the right direction at its own pace. The actual writing of Plato's rival claimants to teach, the professional rhetoricians, is inferior due to its being written by people ignorant of the truths obtained through philosophy. However, as I

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<sup>110</sup> *Odyssey* X.494-495, *Meno* 100a2-7.

<sup>111</sup> Οὐδεὶς πώποτε λόγος ἐν μέτρῳ οὐδ' ἄνευ μέτρου μεγάλης ἄξιον σπουδῆς. For a similar idea at *Leg.* 886c1-2, see Ch. 4.

<sup>112</sup> Surely an allusion to the hapless protagonist of the *Ion*.

shall now argue, Plato has included a few get-out clauses which might allow the *Phaedrus* itself to form a solution, εἰς ὅσον ἀνθρώπῳ δυνατόν, to the problems it poses.

## 2.4 The *Phaedrus* as a solution to its own problems

### 2.4.1 The writer who has knowledge

While the writers of prose and verse whom Phaedrus admires do not have knowledge, this does not mean that those who do possess the limited knowledge available to humans should not write about it. This is shown by three passages in the discussion of writing introduced by the myth of Theuth. At 276b1-e3, Socrates says that while the εἰδῶς man will only seriously sow his ἐπιστήμαι in souls, he will also sometimes write them down. At 277e9-278a1, out of all non-dialectical λόγοι, either written or spoken, the best are a ‘reminding for those who know’ (εἰδόντων ὑπόμνησις). I shall return to these points in the next section.

At 278b7-e2, the writers of all kinds of λόγοι are divided into those who do and do not have things which are of greater value (τιμιώτερα) than their writings. In the context of this passage, which opposes speechwriters, represented by Lysias, poets, represented by Homer, and legislators,<sup>113</sup> represented by Solon, to the philosopher, τιμιώτερα seems to mean the knowledge of the truth with which the philosopher composes, his ability to ‘help’ his writings and at the same time to show that things which are written down are of little value (φαῦλα), and his serious engagement with things other than writing.<sup>114</sup> Similarly, at 250b2, τιμία is used of δικαιοσύνη, σωφροσύνη, and other things which are valuable for souls and

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<sup>113</sup> The writers of what they call laws in political words or speeches: ὅστις ἐν πολιτικοῖς λόγοις νόμους ὀνομάζων συγγράμματα ἔγραψεν (278c3-4).

<sup>114</sup> The translation of ἐσπούδακεν as ‘seriously engaged’ is Rowe’s (1988): 131. Heitsch (1989) argues that Plato’s contrast of writing with τιμιώτερα works undermines Isocrates’ conception of φιλοσοφία.

objects of its knowledge. Given that 278c4-d1 is a recapitulation of earlier discussion,<sup>115</sup> it would follow that the philosopher, identified here with the εἰδώς, is seriously engaged with the two pursuits of dialectic: enquiry into the truth, or recollection, and teaching. These pursuits, to the extent that they bring souls in closer contact with Being, are τιμώτερον than writing; however, this will not prevent the philosopher from writing, under certain circumstances.

In fact, the *Phaedrus* goes so far as to imply, in a manner both playful and, in modern eyes, hubristic,<sup>116</sup> that the philosopher – such as Plato, the author of the whole conversation – will in fact be able to compose better λόγοι of all kinds than anyone else. Socrates argues at 273d2-274a5 that the εἰδώς individual is the one best able to discover what is probable (εἰκός), and thereby to compose the most persuasive λόγοι.<sup>117</sup> In other words, the man with knowledge, or the philosopher, will be the best rhetorician. Socrates shows his theoretical understanding of how a speech ought to be composed in his analogy between a speech and an animal with a body, head and limbs, in which each part is ‘written to be appropriate both to the others and to the whole’.<sup>118</sup> Phaedrus echoes his language in saying that tragedy should be the ‘appropriate arrangement of [passages]<sup>119</sup> organised together with each other and the whole’.<sup>120</sup>

That Phaedrus says this does not of itself imply that the philosopher, or the composer of the *Phaedrus*, is an expert in tragedy, any more than he is an expert in medicine, to which

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<sup>115</sup> See 275d4-e5.

<sup>116</sup> On Plato’s ambition, see the Περὶ ὕψους, whose author, like other ancient critics, sees Plato as engaged in rivalry with Homer (§13.3-4); Hunter (2012): 9, 19, 38-108. For Plato’s hubris, compare Popper (1995): 152-156, on the *Rep.*: ‘the philosopher king is Plato himself, and the *Republic* is Plato’s own claim for kingly power’.

<sup>117</sup> On the ‘appalling’ implications of an all-powerful persuasion, see Morrow (1953): 237. On possible connections between Plato’s εἰκός and the *Rhetorica ad Alexandrum*, see Reinhardt (2010).

<sup>118</sup> 264c2-5, ...μέσα καὶ ἄκρα πρέποντα ἀλλήλοις καὶ τῷ ὅλῳ γεγραμμένα. Cf. *Rep.* 420cd.

<sup>119</sup> Τούτων at 268d4 refers to ῥήσεις (268c6), ‘speeches’ or ‘passages’ of a play.

<sup>120</sup> 268d3-5, ... ἢ τούτων σύστασις πρέπουσα ἀλλήλοις τε καὶ τῷ ὅλῳ συνισταμένη.

the art of rhetoric is also analogised.<sup>121</sup> However, there are a number of hints, both within and outside the Palinode, that this speech, which is after all a piece of writing, is the product of the εἰδώς man, and is in some way a piece of ideal poetry and ideal rhetoric; or rather, I would argue, of ideal philosophical literature, which combines and transcends these.

In the Palinode (247c3-6), Socrates says rhetorically that no earthly poet (ποιητής) has ever yet ‘hymned’ (ὑμνησε) the ὑπερουράνιος τόπος nor ever will hymn it (ὑμνήσει) in a worthy manner (κατ’ ἀξίαν).<sup>122</sup> Nonetheless, Socrates then purports to describe it, because one must dare to speak the truth (ἀληθείς). This implies that he is taking over the role of poet, but with a greater authority, as someone who knows the truth. At 265b2-c3 and in the analysis which follows, the Palinode is described as a ‘not completely unpersuasive speech’ (οὐ παντάπασιν ἀπίθανος λόγος) and a ‘mythical hymn’ (μυθικός τις ὕμνος), which divided love and madness up into ordered categories. This underlines the hint at 247c3-4 that the Palinode is a form of poetry; as a persuasive λόγος, it is also rhetoric.

At 262c9-d6, Socrates says that his two speeches can furnish an example or model (παράδειγμα) of ‘how the man who knows the truth (εἰδώς τὸ ἀληθές) can deceive his listeners by playing in his speeches’.<sup>123</sup> He therefore implies, wittingly or unwittingly, that he himself had enough knowledge to compose his speeches appropriately. This echoes his claim to knowledge of his subject at 247c4-6.

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<sup>121</sup> 268a8-c4, 269a2-3.

<sup>122</sup> Rowe (1988) *ad loc.* takes κατ’ ἀξίαν with both verbs. For the extravagance of the claim, cf. *Sym.* 177c2-3.

<sup>123</sup> At 262d1, τὸ λόγῳ could conceivably refer to Lysias’ speech and Socrates’ two speeches, taken collectively, since all three of these are used by Socrates at 262c5-7 as examples of speaking with τέχνη. However, that only Socrates’ two speeches are really composed by the εἰδώς, is shown by 264e4-8, where Socrates abandons Lysias’ speech, which could provide παραδείγματα, though not ones to be imitated. Thus Lysias’ speech is not a παράδειγμα of the εἰδώς, since the latter kind should be imitated. See Rowe (1988): 197.

Socrates' confident stance here contrasts with his earlier denials of knowledge, including knowledge of the τέχνη of speaking.<sup>124</sup> The Socrates of the *Phaedrus* thus shifts between the ignorant Socrates of the early dialogues and a more sophisticated Socrates who, although he does not have the σχολή to rationalise myths (229e2-4), still allows the philosopher time for the παιδιὰ of writing (276d1-8) – although it is nowhere suggested that Plato's Socrates ever wrote anything down. This slippage in Socrates' character, between the familiar ironist and the unfamiliar practitioner of writing, prompts another interpretation of the *Phaedrus*. Arguably, Socrates' reflections on writing and emphasis on the need for knowledge in the composer of the most persuasive speeches should be taken as suggestions on how to read the dialogue.

The Palinode gave pleasure to the φιλόμουσος Phaedrus,<sup>125</sup> at whom it was targeted. It employed 'poetical vocabulary' (ὀνόματα ποιητικά) in order to please Phaedrus; poetry in Plato is almost defined in terms of its pleasure-giving qualities.<sup>126</sup> The pleasure-giving beauty of the Palinode is also emphasised.<sup>127</sup> In comparing the writing of the philosopher to the beautiful (καλοί) gardens of Adonis (276b4), Socrates implies that the *Phaedrus* itself is καλός in the same aesthetic sense. Phaedrus too appreciates that writing philosophical stories is a παγκάλη παιδιὰ.

Most of the Palinode was composed in play,<sup>128</sup> but it contained two categories or dialectical forms (εἰδῆ) which anyone wishing to teach (διδάσκειν) should employ, and by which it was able to express what was clear and in agreement with itself (τὸ σαφές καὶ τὸ αὐτὸ αὐτῷ ὁμολογούμενον), unlike the speeches of ignorant writers criticised at the end of the

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<sup>124</sup> 235c7-8, 236d5, 262d5-6.

<sup>125</sup> 265c4 with 243b9, 243e4-6, 257a5-6, 259b5.

<sup>126</sup> See *Rep.* 607c4-e2.

<sup>127</sup> 257a3-4, c2.

<sup>128</sup> 266c8-9, παιδιᾷ πεπαῖσθαι, literally 'played in play'.

dialogue. These εἰδῆ are the two principles of collection and division (265c8-d7), that is, the method of dialectic.

The implication of Socrates' dialectical analysis of the *Palinode* is that it is a paradigm of philosophical persuasion, combining the pleasure and charm of a pious and playful ὕμνος to the gods with the persuasiveness of the rhetorical λόγος. It fuses these forms together in a new whole which involves philosophical principles of ordering. Unaided by its composer, the speech is unable to teach these principles to its audience. However, as a παράδειγμα composed by an εἰδώς man (such as Plato), it can, when used as part of his lesson, form an illustration of dialectical principles. As a hymn which is also an encomium of ἔρωσ, composed by a philosopher with knowledge, the *Palinode* would, perhaps, have been allowed into the ideal city of the *Republic*, which permits hymns to the gods and eulogies of good men.<sup>129</sup>

Beyond the *Palinode*, the rest of the *Phaedrus* also self-consciously incorporates elements from rhetoric and poetry.<sup>130</sup> It is also partly composed in the form of a dialectical discussion. At the same time, the *Palinode* incorporates philosophical doctrine and even a relatively technical argument for the immortality of the soul,<sup>131</sup> while the dialectical discussion includes poetical imagery, characterisation of the speakers, and a playful elegance. What Socrates apparently fails to discuss is the effects which might be achieved by Platonic writing, that is, the combination of dialectical with rhetorical and poetic writing. Arguably, however, there are several hints in the *Phaedrus* as to the place which it and similar dialogues might occupy in the philosopher's life. These are mediated particularly through the theme of

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<sup>129</sup> 607a3-4, ὅσον μόνον ὕμνους θεοῖς καὶ ἐγκώμια τοῖς ἀγαθοῖς ποιήσεως παραδεκτέον εἰς πόλιν.

<sup>130</sup> Nightingale (1995): 2-12, sees in Socrates' move to ἔπη a mixing of poetic with rhetorical genres. Among numerous recent studies, see e.g. Griswold (1986); Smith (1986); Bacon (2001); Pender (2007a).

<sup>131</sup> 245c6-246a2.

imitation, copies and images. This theme, which occurs frequently in Plato, is used self-referentially in the *Phaedrus*, in a more positive way than in the *Republic*.

#### 2.4.2 Writing as an ὑπόμνημα

|     |   |       |
|-----|---|-------|
| ΣΩ. | ... ἀλλὰ τοὺς μὲν ἐν γράμμασι κήπους, ὡς                    | 276d1 |
|     | ἔοικε, παιδιᾶς χάριν σπερεῖ τε καὶ γράψει, ὅταν [δὲ] γράφῃ, |       |
|     | ἑαυτῷ τε ὑπομνήματα θησαυρίζομενος, εἰς τὸ λήθης γῆρας      |       |
|     | ἐὰν ἴκηται, καὶ παντὶ τῷ ταῦτὸν ἴχνος μετιόντι, ἡσθή-       | d5    |
|     | σεταί τε αὐτοὺς θεωρῶν φυομένους ἀπαλούς· ὅταν δὲ           |       |
|     | ἄλλοι παιδιᾶς ἄλλαις χρῶνται, συμποσίοις τε ἄρδοντες αὐ-    |       |
|     | τοὺς ἑτέροις τε ὅσα τούτων ἀδελφά, τότε ἑκεῖνος, ὡς ἔοικεν, |       |
|     | ἀντὶ τούτων οἷς λέγω παίζων διάξει.                         |       |
|     | ΦΑΙ. Παγκάλην λέγεις παρὰ φαύλην παιδιάν, ᾧ Σώ-             | e1    |
|     | κρατες, τοῦ ἐν λόγοις δυναμένου παίζειν, δικαιοσύνης τε καὶ |       |
|     | ἄλλων ὧν λέγεις πέρι μυθολογοῦντα.                          | e7    |

Soc.: ... But as for his gardens in writing, as is probable, he will sow them and write them, whenever he does write, for the sake of entertainment, storing them up as reminders for himself, if he should ever come to the old age of forgetfulness, and for everyone else following the same track, and he will be pleased seeing them growing tender. And whenever others enjoy other forms of entertainment, drenching themselves in drinking parties and everything that goes along with them, then he, as is probable, will pass the time playing with the things I speak of, instead of the others.

Phaedr.: A most beautiful entertainment you speak of, Socrates, instead of a vulgar one, for the man able to play in words, making stories about justice and the other things of which you speak.<sup>132</sup>

Socrates here describes the attitude of the man who has δικαίων τε καὶ καλῶν καὶ ἀγαθῶν ἐπιστήμαι; that is, the man who knows, to be identified with the philosopher. Such a man's works are a form of ὑπομνήματα, both for himself, when he has reached the 'age of forgetfulness' (τὸ λήθης γῆρας), and for others following the same ἴχνος. He can write down his ἐπιστήμαι in them, even if, according to the previous discussion, his written works cannot pass these ἐπιστήμαι on to another person, since writing cannot answer a particular reader's questions and so 'tie down' his beliefs with a reasoned explanation. The philosopher writes to give himself pleasure and as a παγκάλῃ παιδιᾷ, an entertainment both beautiful (in the sense of writing attractive works) and fine (in the sense of morally superior), unlike the φαύλη

<sup>132</sup> Translation loosely based on Rowe (1988).

entertainment of other people, involving the pleasures of the body, such as drinking.<sup>133</sup> According to Phaedrus, the play of the man with knowledge will be in composing myths (μυθολογῶν) about δικαιοσύνη and other such things, such as, presumably, Moderation and Beauty, whose ideal forms exist in the realm of Being. I shall now consider how these points may be elucidated by other passages in the *Phaedrus* and elsewhere.

The beauty and pleasure of philosophical λόγοι is alluded to repeatedly in the *Phaedrus*. Socrates and Phaedrus are both characterised as lovers of boys and of λόγοι, including written ones.<sup>134</sup> The voice of the Muses of philosophy, Socrates tells Phaedrus, is καλλίστη.<sup>135</sup> As discussed above, the Palinode is described by Socrates as a beautiful hymn made in play (265c1). This description is given a new spin at 276d2 and 276e1-3, where Socrates and Phaedrus agree that the man who knows will ‘tell stories’ (μυθολογεῖν) about justice and the others in his beautiful<sup>136</sup> gardens of letters, as a παιδιά. Thus the motifs of play, beauty and telling μῦθοι about the objects of Being link 276d1-e3 with earlier comments on the Palinode, as well as with Socrates’ λόγοι and philosophical λόγοι more generally.

I argued above that Plato is an εἰδῶς composer of philosophical λόγοι. In this light, lines 276d1-e3 can be interpreted as a meta-textual reflection by Plato on the Palinode, the καλὴ παιδιά of an εἰδῶς man, and by extension on the *Phaedrus* as a whole.<sup>137</sup> By having Socrates comment on the *Phaedrus* as a piece of writing, Plato compels the reader to go back and re-examine his earlier remarks on philosophy, inspiration, and earthly instantiations of beauty, to see how far they may also be self-referential.

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<sup>133</sup> In the context of symposia, ὅσα τούτων ἀδελφά at 276d7 suggests sexual pleasures.

<sup>134</sup> See *Phdr.* 230d3-e1, 236b5, 249a1-2, 258e1-5, 261a3. Ferrari (1987): 223-4, with n. 7, p.278, overstates the ‘disanalogy’ in the comparison, by underplaying the value of writing to Plato. Cf. Burger (1980): 74.

<sup>135</sup> 259d3-7. Cf. *Sym.* 173c2-5.

<sup>136</sup> As implied by the analogy with the κήποι καλοί of Adonis, 276b3-6.

<sup>137</sup> For a discussion of the boundaries between author and narrator(s), see Currie (2010): 65-85.

At 277e9-278a1, out of all non-dialectical λόγοι, which are either written or spoken ἄνευ ἀνακρίσεως καὶ διδαχῆς πειθοῦς ἔνεκα, those which are ‘truly the best’ are εἰδότην ὑπόμνησις, ‘a form of reminding for those who know’. The phrase τῷ ὄντι τοὺς βελτίστους suggests an ontological and moral superiority, which implies that the best writings, as well as being a reminding for an εἰδώς man, are also written by one. In other words, they are the products of philosophy, to be used by philosophers. This interpretation brings this passage into line with 276d1-e7.

The most stringent criticism of writing as a reminder appears in the myth of Theuth. At 275a5, writing is not a φάρμακον for memory (μνήμη), but only for ὑπόμνησις. It does not produce μνήμη in the souls of those who read it, but λήθη, since they depend on someone else’s words rather than remembering for themselves; and because they are ἄνευ διδαχῆς, they will not have knowledge about what they have read (275a2-b2). This is reinforced by 277e9-278a1, in that it implies that written compositions are all unable to teach. The verbal parallels between the myth of Theuth and 276d1-e7 seem deliberately designed to provoke comparisons between the two passages.

This comparison raises a puzzle: why the philosopher should use his writings as ὑπομνήματα to remind him about his ἐπιστήμαι when he is in the λήθη of old age, while students are discouraged from using writing precisely because, as a form of ὑπόμνησις, it produces λήθη rather than memory in their souls. It seems that the λήθη of the students is actively produced by the ‘reminding’ function of writing, while the λήθη of the old man comes from natural causes. However, it is unclear exactly how the ὑπομνήματα are supposed to function for the philosopher.

The souls of both the older and the younger person, since they are in human form,<sup>138</sup> saw Being when they were in their disembodied state. On the most charitable reading, it

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<sup>138</sup> 249b3-5.

might be thought that the older man, who had gone through the process of dialectic and secured his ἐπιστήμαι with a λογισμός, even if he then forgot them, would be reminded of them through his writings more than other people, both since they were his and since they might remind him how to argue for himself again. Alternatively, one might think that, in the λήθη of old age, the man could not return to knowledge at all, but only to the true belief provided by his written ὑπομνήματα.<sup>139</sup> There is, however, no explicit evidence in favour of either interpretation.

The problem is exacerbated by the remark at 276d4 that the philosopher's writings will be stored up as ὑπομνήματα not only for himself but for παντὶ τῷ ταῦτόν ἔχνος μετιόντι. This is the third occurrence of a cognate of ἔχνος in the *Phaedrus*, and they are arguably all philosophically significant.

At *Phaedrus* 252e5-253a5, ἰχνεύοντες is used of each soul's internalised pursuit, through recollection, to find its own appropriate 'god'.<sup>140</sup> At 266b6-7, Socrates declares that he will 'pursue' (διώκω) anyone who can 'look to the one and the many', that is, practise dialectic, 'behind on his tracks like those of a god' (κατόπισθε μετ' ἔχνιον ὥστε θεοῖο).<sup>141</sup> This is an adaptation of Homeric phraseology,<sup>142</sup> but the association of διώκω and ἔχνιον is Plato's. This is appropriate in view of the importance of the theme of the hunt for the truth in the dialogues.<sup>143</sup> The Homeric phrase has connotations of the 'lover of wisdom' who pursues his

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<sup>139</sup> In the *Sym.*, customs, pleasures, pains, and even pieces of knowledge (ἐπιστήμαι) pass in and out of the same human during one lifetime (207e5-208a7). For the reconciliation of this passage with the immortality of the soul, not mentioned in the *Sym.*, see Dover (1980): 149.

<sup>140</sup> Pender (2007b): 43-4, emphasises the part of erotic desire in this pursuit.

<sup>141</sup> Cf. 271e1, ἐπακολουθεῖν, of following the practical application of one's knowledge of the soul and λόγοι with regard to actual people; *Sym.* 210a4, 210a6-7, of Diotima's leading Socrates in the pursuit of knowledge.

<sup>142</sup> De Vries (1969): 218. Cf. Schefer (2003): 176, on this phrase and the divine associations of philosophy.

<sup>143</sup> Cf. on *Rep.* 432 in Part II.

beloved as a way to reach divine beauty. It equally suggests the continuity of the pedagogical process, with Socrates here in the role of enthusiastic learner.

The use of ἔχνοϛ at 276d4 thus suggests that those ‘following along the same track’ are disciples of the philosopher. However, Socrates does not say how the philosopher’s ὑπομνήματα should benefit his disciples, or of what exactly they should remind them.

A hint as to how the philosopher’s writings might function as reminders in the context of philosophical teaching is given at 267d5-6. Here, Phaedrus defines the ἐπάνοδος<sup>144</sup> of a speech as ‘reminding (ὑπομνήσαι) the audience in a summary at the end of each point about what has been said’. This reminding is not the recollecting for oneself by one’s own memory which is the hallmark of dialectic, but rather the repetition of beliefs for the audience to accept in a rhetorical speech. However, that this function of reminding of what has already been said has a place in dialectic teaching is implied by 277b4, where Phaedrus asks Socrates to ‘remind’ him (ὑπόμνησον) of the conclusions to their previous argument. In so reminding him, in the form of a summary (277b5-c6), Socrates does not teach Phaedrus anything new, but recalls the things which he has previously taught Phaedrus through their dialectical interchange. The significance of this incident is supported by the fact that ὑπομνήσκω and cognates only occur eight times in the *Phaedrus*, almost exclusively in situations involving the process of dialectic or recollection.<sup>145</sup>

On one reading, therefore, the writings of the philosopher could function as ὑπομνήματα in the sense that they provided summaries or conclusions of things of which the philosopher, with or without his pupils, had gained knowledge through the ‘living’ practice of dialectic. If the scope of writing’s reminding ability were extended to include arguments themselves, then it could remind the philosopher and his student not just of the conclusions

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<sup>144</sup> Rowe (1988) *ad loc.* translates this as ‘recapitulation’.

<sup>145</sup> The exception to this is at 241a5 (ὑπομμνήσκων), of the boy ‘reminding’ his ex-lover of his promises. The other occurrences of the term are at 249c7, 267d5, 275a5, 275d1, 276d3, 277b4, and 278a1.

reached, but the path of reasoning by which they were reached. In this way, the writing of the philosopher would still differ from that of writers without knowledge, since his writings alone would include arguments accepted by the participants and leading to a reasoned conclusion.<sup>146</sup> Plato's dialogues contain many such arguments.

Related to this is the idea that dialogues like the *Phaedrus* contain a *μίμησις* of philosophical teaching. In form, the dialogues look like dramas, and may even have been performed.<sup>147</sup> This compositional feature prompts the reader to compare them to the tragic and comic forms of *μίμησις* criticised in *Republic* III and X.<sup>148</sup> Plato, characteristically for his time, 'assume[s] that the representation of persons...exerts an emotional effect on its consumers...that tends to assimilate them to the characters represented'. Thus one function of Platonic *μίμησις* would be to provide images of virtuous characters pursuing philosophy correctly, which readers may sympathise with and, in so doing, become like them.<sup>149</sup> In other words, Plato uses the emotional capabilities of drama in the service of a philosophical, virtuous conditioning of the reader's character. Philosophising like Socrates requires in a sense becoming Socrates; through participating imaginatively in the dialogue's discussion, readers can become actively involved in the problems which it poses, and stimulated to reflect on the unsatisfactory or incomplete solutions offered by its characters.<sup>150</sup>

However, no one dialogue, or even one philosophical conversation, is enough to implant knowledge into the soul of a student. Thus, at *Phaedrus* 276b3-d1, Socrates contrasts

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<sup>146</sup> *Parmenides* 127c3-128e4, where Zeno defends his book against Socrates, alludes to the criticisms of writing in the *Phdr.* It is unclear how far we are to accept Zeno's defence, or whether he is too attached to his book; see Ferrari (2004): 201, n. 25; Zuckert (1998): 880-884.

<sup>147</sup> Charalabopoulos (2012): 19-21.

<sup>148</sup> Ausland (1997) discusses the dialogues' mediation between serious philosophy and dramatic play.

<sup>149</sup> Blondell (2002): 80-81; on the persuasive power and moral attractiveness of Socrates more generally, 16-20, 26-31, 43, 50-92. See Nehamas (1998): 2, 6-15, on Socrates as a model for philosophical living.

<sup>150</sup> Blondell (2002): 310.

the eight days needed to grow flowers in the gardens of Adonis, analogous to the time required for a written composition, with the eight months needed for seed to bear fruit, analogous to the process of teaching, seen as implanting knowledge in the soul.<sup>151</sup> At 273e4-5, the ability to be τεχνικὸς λόγων can only be obtained after much hard study (πολλὴ πραγματεία); for which, presumably, neither one dialogue nor one conversation would suffice. Similarly, Phaedrus will not gain knowledge, although he might acquire some true beliefs, from a single afternoon's teaching. This is stated more explicitly in the *Meno*, as discussed above, where Socrates says that it would be necessary for the slave-boy to be asked a multitude of questions πολλάκις καὶ πολλαχῆ in order to convert his beliefs into knowledge (85c9-12).

Unlike a single dialogue, however, the Platonic dialogues taken as a whole do approach many of the same questions πολλάκις καὶ πολλαχῆ. As such, they could be read together as part of the continuous process of dialectic enquiry and teaching which, as the *Phaedrus* suggests, is bound in any case to be incomplete in human life, because of the soul's remoteness from Being and corruption by the body.<sup>152</sup> If the dialogues are inconsistent with one another, as is often alleged, this is because, like the Palinode (265b6-8), each of them grasps at some truth but also strays off course, not least because of the limited extent to which it is possible to reach the truth in human form, and the only partial correctness of examples and images taken from the perceptible world.<sup>153</sup> If Plato viewed thought as a silent dialogue, as mentioned at *Theaetetus* 189e-190a, then his written dialogues, which are representations of spoken dialogues, could be seen, conversely, as expressions of his thoughts, and invitations to engage with it.

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<sup>151</sup> Cf. *Gorg.* 455a1-6. In the *Theaet.*, Socrates argues that orators (ρήτορες) and lawyers will not be able to teach the jury the truth about a crime πρὸς ὕδωρ μικρόν, 'within the short [duration allowed by] the water-clock', but only to πείσαι, 'persuade' them (201a-b).

<sup>152</sup> On the soul's embodied state, see *Phdr.* 250c1-6; *Rep.* 611b-d.

<sup>153</sup> On piecing together 'crucial concepts' from different dialogues, see Frede (1996): 29-30.

On this interpretation, one could read the dialogues collectively as both a series of ‘thought experiments’ and attempts to function like the ‘living λόγος’.<sup>154</sup> They encourage the reader to engage in dialectic by raising questions to which only partial, imperfect solutions are offered, which in their turn raise further questions. Studying them together takes time; studying and discussing them with other people, provided that they are philosophically inclined, can perhaps lead to as much tied-down knowledge as would have been possible through studying with Plato or Socrates themselves.<sup>155</sup>

### 2.4.3 The καλός boy as an ἄγαλμα of the ideal κάλλος

The *Phaedrus*, however, arguably has another purpose in addition to those mentioned so far. This is hinted at in the *Palinode*. At 249c7, in his account of recollection (ἀνάμνησις) of the objects of Being by the incarnate soul of the philosopher, Socrates says that such a man must use ὑπομνήματα to ‘initiate’ himself in the ‘mysteries’, that is, to approach knowledge of the divine Things That Are. It is unclear grammatically what ὑπομνήματα refers to, whether to the divine Beings themselves (249c5-6), which would be the nearest plural object, or to the πολλαί αισθήσεις (249b7-c2) which lead to their recollection. At 249b5-c1, ἀνάμνησις of those things which the soul saw in the realm of Being is characterised as the progression to one (Form) from many αισθήσεις. This suggests that it is the many αισθήσεις which are the ὑπομνήματα used by the philosopher in recollection of Being.

This reading is supported by what follows. The truth is what the philosopher recollects (ἀναμνησκόμενος) by memory, whenever he sees beauty on earth (249d5-6).

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<sup>154</sup> Compare Burnyeat (2005): 163, on the *Tim.* as a ‘thought experiment’.

<sup>155</sup> Cf. Blondell (2002): 39-42, ‘all ideas aired in Plato’s dialogues are ... left open to discussion or revision by their author as well as his readers’. Contrast Rowe (2007): Plato ‘had a purpose in writing’ (9), which was ‘to change our whole view of the world and ourselves, in a particular and determinate way’ (12).

This is the best of the divine madresses (ἐνθουσιάζεις, 249e1-4). Recollection (ἀναμνησκεισθαι) is from those things on earth, of those things in heaven (250a1-2). The souls who still have memory of the things which they saw in heaven, when they see a likeness (ὁμοίωμα) of one of them on earth, are amazed. A similar point is made at 250a1-b5, where only few of the incarnate souls are said to have sufficient memory (μνήμη) to recollect (ἀναμνησκεισθαι) the things they saw in their disembodied state ‘from the things here on earth’ (ἐκ τῶνδε). In the process of recollection, the philosopher recollects from particular things to the objects of Being. Into this scheme, the ὑπομνήματα fit better as the things on earth reminding the philosopher than as the objects of Being themselves.

As in the *Symposium*, the beautiful boy of the *Phaedrus* functions as a ὑπόμνημα for the philosopher. At 250d3-e1, Socrates declares that it is not possible that a τοιοῦτον...ἐναργὲς εἶδωλον of Wisdom (φρόνησις) should be visible to the sight, in contrast to Beauty. This implies that beauty too is present to the sight in the form of εἶδωλα; in other words, the beloved is an ‘image’ in relation to Beauty itself.<sup>156</sup> Unlike the philosophical lover, the lover who is not ‘newly initiated’, that is, whose soul has not recently seen the realm of Being or is otherwise corrupted, when he sees beauty in a boy, does not easily remember true Beauty, but surrenders to the bodily pleasure of intercourse.<sup>157</sup> The one whose soul has recently seen Beauty, in contrast, when he sees a face or ‘form of a body’ (σώματος ἰδέα) that imitates Beauty well (κάλλος εἶ μεμιμημένον), would like to sacrifice to his beloved ‘as if to a statue of a god’ (ὡς ἀγάλματι καὶ θεῷ).<sup>158</sup> The use of ἀγάλματι, especially in close

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<sup>156</sup> Cf. *Phdr.* 251a6, 252d7, on the beloved as a ‘statue’, or visual ‘image’; Ferrari (1987): 171.

<sup>157</sup> 250e1-251a1; cf. 250b5-c6.

<sup>158</sup> 251a1-7. Rowe (1988) *ad loc.* suggests that the hendiadys of ἀγάλματι καὶ θεῷ is ‘a more accurate description of the religious act’; that is, presumably, of the act of worshipping the beloved *qua* image of Beauty, and of worshipping Beauty through the image of the beloved. The translation ‘statue and god’ seems supported by 252d5-e1, discussed above.

conjunction with θεῶν, underlines the divine nature of the beauty which the boy is imitating, since an ἄγαλμα was, *inter alia*, a gift to please the gods.<sup>159</sup>

Recollection occurs again during the description of the lover's reaction to the sight of his beloved. This is presented in terms of the reactions of the three parts of his soul, within the conceit of the soul-chariot image, whose psychology can be better understood by comparison with the tripartite soul of the *Republic*.<sup>160</sup> Of the charioteer, the good horse and the bad horse, it is the charioteer, representing the rational part of the soul, whose μνήμη is 'carried towards the nature of Beauty' (254b5-6) when it sees the beautiful boy. It is thus the reasoning, philosophical part of the soul alone that is involved in the process of recollection, not the appetitive or spirited part.<sup>161</sup> The whole soul can take its own kinds of pleasure in a beautiful boy; but only the reasoning part of the soul can appreciate his beauty *qua* image of ideal Beauty.<sup>162</sup> The beautiful boy therefore functions as something through which, by recollection of what it saw when it was disembodied, the soul of the philosopher can rationally attain to and become possessed by ideal Beauty. In so far as the beautiful boy reminds the philosopher of Beauty, he is an ὑπόμνημα for the philosopher.

The beautiful boy is thus an image or ἄγαλμα of Beauty, and, as such, a beautiful ὑπόμνημα for the philosopher, that is, for the man who alone uses the ὑπομνήματα of perceptible objects rightly (ὀρθῶς, 249c7) as particular instances from which to proceed by recollection to memory of τὰ ὄντα.<sup>163</sup> The boy is beautiful through imitating ideal Beauty;

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<sup>159</sup> LSJ, s.v. ἄγαλμα 2. There is a similar juxtaposition at 252d5-e1 (below).

<sup>160</sup> *Rep.* 435b ff.

<sup>161</sup> Similarly, in the ὑπερουράνιος τόπος, only the charioteer, and not his horses, catches sight of the objects of Being (248a2-6).

<sup>162</sup> Given that this is a myth and account of what the soul is like rather than what it is (246a3-6), we should perhaps not ask how Plato accounts for the attraction of the lower parts of the soul to the beautiful boy, despite their lack of connection with the Beauty which he imitates.

<sup>163</sup> The wrong way to use such particular sensations would be to appreciate them as ends in themselves or as the reality; cf. *Rep.* 475d.

this is appreciated by the rational part of the philosophical soul, whose pleasure, it would follow, is superior to that of the soul's lower, earthier parts.<sup>164</sup> The philosopher is different from the non-philosopher: beauty affects his soul in a different way, making him look for the ideal through the beautiful boy rather than giving himself up to (inferior) pleasure and having intercourse with him (250e4-5).<sup>165</sup>

#### 2.4.4 Philosophical writing as an image of the Forms

I would now like to argue that the *Phaedrus* itself is designed, and hints that it is designed, as an image of true Beauty, an ἄγαλμα analogous to the beautiful boy. From this image, I shall endeavour to tease out the characteristics of Platonic philosophical literature.

It is implied in the *Phaedrus* that the beautiful boy can function as a ὑπόμνημα for the philosopher. The writings of the philosopher can also, as has been discussed, function as ὑπομνήματα for himself, his pupils, and others interested in philosophy, to the extent that they are able to engage their readers in dialectical discussion and stimulate them to think further about philosophical questions. In addition, however, the *Phaedrus* is a καλός dialogue, like the καλός boy in the Palinode, and, indeed, a dialogue preoccupied with its own beauty, which overlaps in a complex way with the beauty of philosophy and ideal Beauty. The *Phaedrus* is also an image, just as the boy in the Palinode is treated by his lover as an ἄγαλμα both of a god and of the ideal κάλλος. We have seen above that Plato uses εἶδωλον of perceptible images of the objects of Being (250d3-e1); writing, arguably, is one of these.<sup>166</sup>

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<sup>164</sup> Cf. *Rep.* 585e-586b.

<sup>165</sup> Cf. also 252d5-e1, where the boy's soul rather than body prompts the philosopher to treat him as an ἄγαλμα of the god (rather than an abstract form) of whom he reminds the philosopher. This is anticipated by 230b7-8, where Socrates and Phaedrus notice the ἀγάλματα of the nymphs and the god Achelous.

<sup>166</sup> Writing is an εἶδωλον of the philosopher's spoken word at 276a9; cf. *Rep.* 599b6-7 (below).

The scene in which the *Phaedrus* is set is itself populated by beautiful things. The *locus amoenus* where Phaedrus and Socrates sit down is described by Phaedrus as καλός, evidently with the meaning of ‘beautiful to the senses’.<sup>167</sup> The attractiveness of the place is strongly emphasised: it is beautiful;<sup>168</sup> lovely and pleasant;<sup>169</sup> and pretty.<sup>170</sup> The sensuous elements of the scene are highlighted: the area is shady and sweet-smelling, and the air echoes to the shrill chorus of cicadas.<sup>171</sup> At 230b5-6, a ‘most delightful’ spring of cool water flows under a plane tree: ἢ τε αὖ πηγή χαριεστάτη ὑπὸ τῆς πλατάνου ῥεῖ μάλα ψυχροῦ ὕδατος, ὥστε γε τῷ ποδὶ τεκμήρασθαι.<sup>172</sup> In describing the spring as χαριεστάτη, in the elegant word order, with πηγή χαριεστάτη and ψυχροῦ ὕδατος enclosing the πλατάνος, and in the coolness discerned by the physical touch of the foot, Plato makes both the words he uses and the scene he describes beautiful to the reader’s ear and imagination.

Phaedrus’ surprised reaction to Socrates’ aesthetic outburst (230c6-d2) suggests that Socrates is more sensitive to natural beauty than Phaedrus; he is also more observant of topographical details.<sup>173</sup> Socrates, as Phaedrus says, is ἀτοπώτατος (230c6), partly because he does not usually visit the countryside. However, his perception of the beauty of the landscape, as well as his ability to make καλοὶ λόγοι, implies that he is also more sensitive than Phaedrus to all instantiations of beauty. Attention to natural beauty is a rare feature in

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<sup>167</sup> 230b2-c5. Meyer (1956): 270, notes the stylistic intensification of emotion in the passage. Pender (2007b): 3-8, thinks it is characteristic of ‘a seduction scene of the type familiar in Greek myth and poetry’; she links this with Socrates’ reference to Sappho and Anacreon (below). Compare the *locus amoenus* at *Hipp.* 73-81, 208-11; I suspect that Plato had these verses in mind when writing the *Phdr.* For a different interpretation, see Planinc (2003): 77-8.

<sup>168</sup> Καλή γε ἡ καταγωγή, 230b2; τὸ σύσκιον πάγκαλον, b4; παγκάλως, c4.

<sup>169</sup> Τὸ εὔπνουν τοῦ τόπου ὡς ἀγαπητὸν καὶ σφόδρα ἡδύ, 230c2.

<sup>170</sup> Πάντων δὲ κομψότατον τὸ τῆς πόας, 230c3.

<sup>171</sup> 230b4, σύσκιον; b5, εὐωδέστατον; c2-3, θερινόν τε καὶ λιγυρὸν ὑπηχεῖ τῷ τῶν τεττίγων χορῷ. On the function of the cicada-chorus, see Ferrari (1987): 1-2, 25 ff., 57-59.

<sup>172</sup> Schefer (2003): 185, 191-2, who sees in the description of the place a reflection of ‘Orphic eschatology’. Cf. the beauty of the Isles of the Blest in *Olympian* 2.68-77. The plane tree was identified with Dionysus in cult (Dorter 1971: 282).

<sup>173</sup> Cf. their earlier interchange, 229c1-4. For Socratic ἀτοπία, cf. *Sym.* 215a2, 221d2; further Ch. 3.

the dialogues; its appearance here serves to highlight the unusually poetic mood of the *Phaedrus*.

If we read 230c6-d2 with the Palinode, the implication is that Socrates is better at recognising all beautiful particulars because he has some philosophical knowledge of ideal Beauty.<sup>174</sup> But this implies that Plato, the author of the dialogue, and the one to whom Socrates' remarks on the writings of the philosopher most obviously pertain, is good at recognising beauty. That Plato has a philosophical knowledge of Beauty follows from the implication, discussed above, that he is εἰδώς. Just as Socrates in the *Phaedrus* has an eye for all kinds of beauty, so, at *Symposium* 210a-211b, Socrates' paradigm philosopher recognises individual beautiful bodies, along with beautiful souls, customs, laws and types of knowledge, on his progress towards ideal Beauty. The recognition of beauty is thus, in these two dialogues, an important characteristic of the philosopher. Given the beauty with which they themselves are crafted, and the beauty of the images which they present, the dialogues, through their remarks about the philosopher's appreciation of beauty, direct us to identify Plato as such a man: the composer of beautiful λόγοι with knowledge.

The significance of ἄγαλμα in the *Phaedrus* is supported by three connected occurrences of the word within a short space in the *Symposium*. At *Symposium* 215b2-3, Socrates, in Alcibiades' portrayal of him as the ideal philosopher, is likened to a statue of Silenus which contains ἀγάλματα θεῶν. At 216e5-217a2, Alcibiades repeats that Socrates can be 'opened up' to reveal ἀγάλματα θεῶν καὶ χρυσᾶ καὶ πάγκαλα καὶ θαυμαστά; shortly above, he has said that Socrates, when opened up, is full of σωφροσύνη. Finally, at 222a1-6, Alcibiades describes Socrates' λόγοι as θειοτάτοι καὶ πλεῖστα ἀγάλματ' ἀρετῆς ἐν αὐτοῖς ἔχοντες. In all cases, the ἀγάλματα are godlike or of the gods; they are variously beautiful,

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<sup>174</sup> Cf. Ferrari (1987): 16-20; Griswold (1986): 34-6.

golden, and marvellous. One might also compare *Meno* 97d6-e5: true opinions, like the ἀγάλματα of Daedalus, are worth much when tied down, because they are πάνυ καλά.

If Socrates' λόγοι can be ἀγάλματα of virtue, then a Platonic dialogue can also be an ἄγαλμα; in the case of the *Phaedrus*, of Beauty. In this connection, it is important that, in the *Symposium* and *Phaedrus*, Plato uses precisely the word ἄγαλμα, and, in these two dialogues, always associates it closely with the divine. In doing so, he is arguably following in a tradition, evidenced in Pindar and the *Homeric Hymn to Demeter*, of presenting a poem as an offering for a god. Pindar seems to use the word ἄγαλμα for his own hymn, which thereby becomes a 'kind of negotiable commodity...which generates χάρις', the 'network of give and take' between humans and gods. Similarly, at *Iliad* I.472-474, Apollo takes pleasure in the paeans of the Achaean youths.<sup>175</sup> If the aim of all speeches and actions should be to give χάρις to the gods, a philosophical composition like the *Phaedrus* would certainly fulfil this aim.

The ultimate implication of the treatment of beauty in the *Phaedrus*, therefore, is that the dialogue itself is a beautiful image of ideal Beauty, composed by a philosopher with ἐπιστήμη of that Beauty.<sup>176</sup> I shall now consider what significance the image has for the interpretation of the dialogue as a work of philosophical literature.

Firstly, an ἄγαλμα is the work of a craftsman. Plato hints at the effort and skill needed to compose the *Phaedrus* and dialogues like it. At 228a1, Phaedrus refers to Lysias' writings as 'those which he composed over much time at his leisure' (ἃ ἐν πολλῷ χρόνῳ κατὰ σχολὴν συνέθηκε). Lysias needed leisure and much time to compose his work; συνέθηκε suggests the composition or construction of a work of art. At the end of the dialogue (278d8-e1), Socrates echoes these words: anyone who does not have anything more valuable than

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<sup>175</sup> Pindar, *Nemean* 3.13, 8.16, with the discussion of hymns as offerings to the gods in Pulleyn (1997): 49-55.

<sup>176</sup> Cf. Morgan (2000): 233, 'the orator [i.e. Socrates in his speeches] creates a source of experience for his audience; he represents the Forms for them'.

‘those things which he composed or wrote over time, turning them upside-down, sticking (pieces) together and taking (pieces) out’,<sup>177</sup> should be called a poet, speech-writer or legislator, but not a philosopher. While Phaedrus simply says that such works take time, Socrates further suggests that they require effort, attention to detail, and, in short, the obsessiveness of the artist. The grandiose tricolon of στρέφω, κολλῶν, ἀφαιρῶν insinuates that the writer, or at least the non-philosophical writer, could find better things to do with his σχολή. The physical effort and care conveyed by the three verbs also, however, fits in well with the idea of the dialogue as an ἄγαλμα, in the sense of a work which requires τέχνη to construct.

However, one only need pay attention to the *Phaedrus* to infer that Plato has expended not a little effort on στρέφω, κολλῶν, ἀφαιρῶν; writing, like philosophical discussion, requires σχολή.<sup>178</sup> It is no surprise that the care with which Plato’s dialogues were composed was well recognised in antiquity.<sup>179</sup> Plato’s description of philosophical writing as a παιδιά (276d1-e3) is also ambiguous, given that, in other dialogues, the practice of philosophy, as well as philosophical education, is described as a παιδιά, as are other serious activities, such as legislation, and the whole of Timaeus’ speech on φύσις.<sup>180</sup> That the *Phaedrus* is a παιδιά, therefore, need not undermine its role in philosophical recollection. At the same time, it is appropriate that an imitative ἄγαλμα, written or otherwise, should be an amusement, as all works of art are, and perhaps all objects in the perceptible world. Even in

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<sup>177</sup> ...ὧν συνέθηκεν ἢ ἔγραψεν ἄνω κάτω στρέφω ἐν χρόνῳ, κολλῶν τε καὶ ἀφαιρῶν.

<sup>178</sup> On the σχολή required for philosophy, see *Theaet.* 175e1; *Plt.* 272b9. For the σχολή needed for writing dialogues, see *Theaet.* 143a1-4; for σχολή in legislating, *Leg.* 858b2-8; cf. *Tim.* 24a1 (of examining historical sources), 38e2 (of the stars), 89c8 (of tending to diseases).

<sup>179</sup> Dionysius of Halicarnassus, *de compositione verborum*, XXV, Roberts (1910): 264-7; referred to in Hackforth (1952): 165-6, n. 2.

<sup>180</sup> *Leg.* 685a, with Warman (1983): 51. On the παιδιά of the *Tim.*, see Ch. 3. For philosophical enquiry as playing, see *Rep.* 536c1-5. A recent examination of Platonic παιδιά and σχολή is Hunnicutt (1990). At *Rep.* 396d3-e1, the virtuous man will only imitate unworthy people παιδιᾶς χάριν; cf. *Phdr.* 276d2.

the *Republic*, Socrates allows that imitation of bad people, as practised in tragedy, is at least acceptable when it is done παιδιᾶς χάριν;<sup>181</sup> in the *Laws*, humans themselves are the playthings, or ἀγάλματα, of the gods.<sup>182</sup>

Moreover, the ἄγαλμα of the *Phaedrus*, like a statue, is the creation of an artist. At *Phaedrus* 275d5, the animals in a painting are described as its ‘offspring’ (ἔκγονα). This anticipates the ‘seed’ of knowledge which the philosopher can sow either in writing or in the soul of his disciple. In the *Symposium*, where the image of being mentally pregnant is most fully developed, the poets can beget φρόνησις and other ἀρετή in their writing, even if this is a lesser achievement than other types of intellectual productivity (209a1-5).

Beyond τέχνη, the *Phaedrus* is also, like poetry, the work of divine inspiration. However, unlike the poets, Plato’s inspiration, as he carefully implies, is not some unknown god but the divine, rationally graspable, objects of Being, such as σοφία and φρόνησις, which are themselves beautiful and inspire ἔρωσ.<sup>183</sup> The *Phaedrus* is beautiful because Plato, with his skill in the διαλεκτικὴ τέχνη, has recollected ideal Beauty (τὸ κάλλος) and, inspired by it, has been stimulated to write καλοὶ λόγοι, that is, dialogues which are imitations of the Being of the beautiful and morally fine.<sup>184</sup> In this way, inspiration and τέχνη come together in the creation of philosophical literature, in a way that was denied to (unphilosophical) poetry in the *Palinode*.<sup>185</sup> As an ἄγαλμα imitating divine Beauty, the *Phaedrus* is also an offering to the gods, to give them, as well as any philosophically inclined humans, a benign, πάγκαλη

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<sup>181</sup> *Rep.* 396d3-e1.

<sup>182</sup> For ἀγάλματα in the *Leg.*, see Kurke (2010). Compare Shakespeare’s assessment of actors: ‘The best in this kind are but shadows; and the worst are no worse, if imagination amend them’ (*A Midsummer Night’s Dream*, 5.1.211-212).

<sup>183</sup> *Phdr.* 250d3-6.

<sup>184</sup> Burger (1980): 96, sees Plato’s μυθολόγημα as a ‘paradigm for the written word’. Ideal Beauty has both an aesthetic and a moral aspect: it is more λαμπρόν than justice, moderation and other τίμια (250b1-6, cf. 250d2-3); at the same time, it is located with the moral quality of σωφροσύνη (254b6-7). Collection and division is also καλόν: 263b6-c2.

<sup>185</sup> 245a1-8; cf. 248e1-2, where the poet, unlike the philosopher or ‘lover of the beautiful’, is only ranked sixth in the hierarchy of lives.

pleasure.<sup>186</sup> It is thus appropriate that the *Palinode*, like a work of Pindar's, should be described as a ὕμνος.<sup>187</sup> In short, Plato's philosophical writing has value because it is καλός in both a moral and aesthetic sense; and these senses are inseparable at the level of the ideal κάλλος itself.

Finally, the analogy between the *Phaedrus* and the beautiful boy implies that the *Phaedrus* too, as a beautiful particular recalling ideal Beauty, can stir up longing for that Beauty in the reader. Thus, in addition to its dialectic and moral functions, dialogues like the *Phaedrus* can form part of the philosophical life by providing us with an image of Beauty to contemplate, at the same time as they provide us with the dialectical tools necessary to progress to Beauty itself, as well as with the moral example of the pedagogical relationship between Socrates and Phaedrus for us to imitate in our own characters. Ultimately, the *Phaedrus* even suggests that the aims of philosophical literature and philosophical dialectic are the same: the contemplation, intellectual and aesthetic, of the Forms.

## 2.5 Conclusion to Part I

The *Phaedrus* and other Platonic dialogues give the role of the teacher, primarily in the person of Socrates, a higher status than it has perhaps ever had in the Western tradition before or since, with the possible exceptions of Epicurus and Jesus.<sup>188</sup> This is because Plato requires no less of his teachers than that they should possess the intellectual capacity to gain knowledge of Being, and the strength of will to gain virtue of soul, and, in addition, should

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<sup>186</sup> 273e9-274a2; cf. 250c7.

<sup>187</sup> Cf. Pulleyn (1997): 49.

<sup>188</sup> For comparisons between Socrates and Confucius, who also valued education through character, see Wong (1998); Cai (1999); Chandler (2003).

apply their knowledge of souls to educate appropriate students by training their character and teaching them to argue.

Despite his apparent belief in the existence of absolute truth, and despite his idealisation of Socrates, Plato does not present his own writings as the final answer, but as the beginning rather than the end of philosophical enquiry. His is not a philosophy for ideological slaves, but for free peers. His emphasis on the suitability of the pupil's soul for philosophical education to be successful, and on the limitations on knowledge in the incarnate soul, are tacit acknowledgements that the skill and charisma of the teacher, and even the correctness of doctrines or methods, are not enough to ensure that any pupil will be successfully taught.

However, dialogues like the *Phaedrus* are not philosophy, either in the sense of dialectic or in the modern analytic sense. Rather, they are philosophical literature: founded on certain conceptions of morality and metaphysics, they play with these conceptions. Through allusion, wit, elegant language, characterisation, formal harmony, narrative, and other literary features, they stimulate the reader to think both argumentatively and imaginatively, rationally and creatively, at the same time. At least as much as our intellect, they educate our aesthetic and moral sense: our pleasure in the literary qualities mentioned, our appreciation of the calm but bewitching character of Socrates, and our sense of balance, proportion, and how to act μετρίως. Dialogues like the *Phaedrus* educate in ways less characteristic of academic philosophy than of a work of literature, carefully produced in σχολή.



Ἄλλ', ἦν δ' ἐγώ, ἄκουε εἴ τι ἄρα λέγω. ὁ γὰρ ἐξ ἀρχῆς 433a  
 ἐθέμεθα δεῖν ποιεῖν διὰ παντός, ὅτε τὴν πόλιν κατακίζομεν,  
 τοῦτό ἐστιν, ὡς ἐμοὶ δοκεῖ, ἦτοι τούτου τι εἶδος ἢ δικαιοσύνη.

Then, Glaucon, we must station ourselves like hunters surrounding a wood and focus our understanding, so that justice doesn't escape us and, disappearing, become invisible, for it is clear that it is here somewhere. So look and try eagerly to catch sight of it, and if you happen to see it before I do, tell me.

I wish I could, he said, but you will use me more appropriately if you use me as a follower who can see things when you point them out to him.

Follow, then, I said, and join me in a prayer.

I'll do that, he said, just so long as you lead.

I certainly will, I said, though the place seems to be difficult to penetrate and full of shadows. It is certainly dark and hard to search through. But nevertheless, we must go on.

Indeed we must, he said.

And I said, catching sight of something, tally ho, Glaucon! We happen to have some sort of track here, so it seems that our quarry won't altogether escape us.

That's good news, he said.

Either that, I said, or we have been stupid.

In what way?

It appears, my friend, that it has been rolling around at our feet right from the beginning, and we didn't see it, but behaved most ridiculously. Just as people sometimes search for the very thing they are holding in their hands, so we didn't look at it, but gazed off into the distance, and that's perhaps why we didn't notice it.

What, he said, do you mean?

I mean, I said, that we seem to have been talking and hearing about it for a long time, but did not learn from ourselves that we were talking about it in some way.

That's a long prelude, he said, for someone eager to hear the answer.

Then, I said, listen and see whether there's anything in what I say. Justice, as it seems to me, is that which we posited from the beginning it was necessary to establish through the whole, when we were founding the city – either that, or some form of it.<sup>189</sup>

In this passage, the image of a hunt symbolises the process and goal of philosophical investigation. Justice is personified as a wild animal to be tracked down. Plato uses ἵχνος for the 'tracks' made by Justice, which is hidden in a 'bush' and has to be prevented from 'vanishing and [becoming] invisible'. Socrates even develops the picture further, describing the location of their search as δύσβατος...καὶ ἐπίσκιος...σκοτεινὸς καὶ δυσδιερεύνητος, 'difficult to traverse and overshadowed, dusky and difficult to search through.'<sup>190</sup> This chiasmus of adjectives, which draws attention to its own verbal elegance, contributes to the

<sup>189</sup> Translation based on Grube, revised Reeve, in Cooper (1997): 1064.

<sup>190</sup> Classen (1960): 38, compares Xenophon, *Kynegetikos* 8.4-8. The whole of this chapter of Xenophon's didactic work illustrates the use of ἵχνη and cognates in the context of hunting with dogs by following the tracks. Other parallels for Plato's 'hunting' vocabulary in Xenophon include: ἀφανίζει, of the hare's tracks covered by snow (8.1); ζητοῦντα, of the search on the hare's tracks (8.3); κύκλω, of going round 'in a circle' to locate the hare's form (8.5); ἕτερον δὲ ζητεῖν πρὶν τὰ ἵχνη ἀδηλα γενέσθαι, of seeking another hare before the tracks disappear, and περιίστασθαι, of surrounding the hare (8.8).

playful tone of the passage, which is one of the most lighthearted in the *Republic*. As suggested by the cumulation of adjectives, Socrates deliberately and amusingly exaggerates the drama of the situation.<sup>191</sup> His command to Glaucon to follow him, ‘praying with me’ (ἐὸξάμενος μετ’ ἐμοῦ), while at one level it suggests his typical piety in the pursuit of such sacred objects of knowledge as Justice, on another level draws attention to his playfully serious way of entering into his metaphorical rôle as κυνηγέτης, ‘hunter’. Socrates and his interlocutor also join in a prayer at *Phaedrus* 278b2-6 and 279b6-7. Here, as in the *Republic*, it is an act which unites them to each other and to the common pursuit of the divine good.<sup>192</sup>

In the same vein, Socrates’ hunt for the ‘truth’ ends in bathos, when he reveals to Glaucon that they have suffered something ‘stupid’, βλακικόν, since the meaning of Justice was ‘rolling around before our feet from the beginning’ (432d8-9).<sup>193</sup> The effect of this sudden, mock-foolish discovery is to deflate the seriousness of the previous hunting image. At the same time, the implication that the nature of justice is obvious is itself something of a trick on Socrates’ part, since it saves him having to approach it via argument. Even if the idea of justice as everyone ‘doing his own work’ (433a8-9) has been carefully and subtly prepared for in the preceding books, it certainly is not an obvious definition,<sup>194</sup> and Socrates’ method of approaching it lays him or Plato open to the charge of intellectual dishonesty or toying with

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<sup>191</sup> For a similarly dramatic presentation, see *Rep* 368c, where Socrates narrates how his interlocutors ‘begged me not to abandon the argument but to help in every way to track down what justice and injustice are’. Hutchinson (2009): 206, describes ἰοὺ ἰοῦ as ‘excited exclamation which evokes hunting’; Classen (1960): 38, considers it evocative of astonishment in general rather than necessarily of hunting.

<sup>192</sup> Cf. Socrates’ final request to his friend Crito that he sacrifice on his behalf, *Phd.* 118a7-8. Praying at the beginning of an undertaking was standard Greek practice (Classen 1960: 37). However, Plato’s depiction of Socrates as praying always makes an implicit dig against those who had accused the historical Socrates of impiety. As Classen (*loc. cit.*) suggests, Plato may also be implying at *Rep.* 432 that Socrates, and therefore the discussion of the dialogue, is directed by a ‘higher power’.

<sup>193</sup> On Plato’s use of κυλίνδομαι to denote circular motion around a point in the context of argumentative consistency, see Pender (1999), esp. 96-100. Pender argues that the verb usually has ‘negative epistemological connotations’; she interprets its occurrence at *Rep.* 432d8, for the second and final time in the dialogue, as indicating the ‘availability’ and ‘everyday nature’ of the definition of justice which Socrates has discovered, and its ‘provisional’ nature, since it has not yet been grounded in the theory of Forms.

<sup>194</sup> On the strangeness of defining justice as ‘doing one’s own thing’, see Annas (1981): 119.

the reader. Moreover, the way in which Socrates labours the point that what they were looking for is obvious postpones his revelation of the answer, and thus further increases the tension, as if before the punch-line to a joke. This is underscored by the suppression of the identification of the ‘thing’ being hunted, referred to by the neuter αὐτό, with δικαιοσύνη until the very end of the passage (433a2). However, rather than seeing this tactic as intellectual dishonesty, we should arguably see it as a challenge to the reader to be more sensitive to each hint Plato gives us.<sup>195</sup>

### **2.6.2 *Republic* 432b7-433a3 as a prelude**

Plato draws attention to his own craftiness through Glaucon’s protest at 432e7, that μακρόν...τὸ προοίμιον τῷ ἐπιθυμοῦντι ἀκοῦσαι, ‘your prelude is long for someone who is eager to hear [the answer].’ To the extent that this expression of impatience reflects the reader’s own feelings at this point, it will disarm any criticism by anticipating it. Moreover, by being drawn to sympathise with Glaucon, the reader is encouraged to be eager to know the answer. This tactic of anticipating or directing the reactions of the reader through an interlocutor occurs frequently in Plato. Its effect is often to confuse rather than to clarify. Here, for example, we might wonder why Plato includes a ‘prelude’ only to have one of his characters criticise it; he seems to be using them to play a game of suggestiveness and frustration. Just as we think we find something serious to hold on to, Socrates or Glaucon throw in a remark which makes us feel we have misunderstood the situation. As a result, by the time the definition of justice is introduced, we may be charmed by the linguistic play, but slightly bewildered by the argument.

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<sup>195</sup> For an approach based on the idea that every part of one of Plato’s writings contributes to its overall meaning, see Blondell (2002): 4.

It is unsurprising, therefore, that philosophical commentators have been impatient with this passage. Annas dismisses it as ‘a lot of tiresomely winsome by-play on the part of Socrates’, irrelevant to the main issue of defining justice.<sup>196</sup> What is most striking about the passage, after all, is its apparent lack of argumentative weight, its poetic use of language, and its wit. As a *προοίμιον*, it is closely associated with poetry and song. It incorporates some of the details of compositional unity appropriate to a poem, such as the sustained and dramatic hunting narrative, and the repetition of *ἐξ ἀρχῆς* at the beginning and end of Socrates’ feigned discovery of justice and of *δικαιοσύνη* at the beginning and end of the whole prelude, as touches of ring composition.<sup>197</sup> Such passages fail to elicit a sympathetic response from those who, like Annas, read the dialogues for their philosophical arguments. A reader of this kind, in the spirit of the impatient Glaucon,<sup>198</sup> would see the dialogues’ literary flourishes as hindrances to argumentative clarity.

In terms of function within Socrates’ attempts to define justice, Plato’s hunting scene is structurally useful, allowing the reader a pause between the discussion of the first three virtues of wisdom, courage, and moderation, and the last, justice, which at this point in the *Republic* is the most important one. Socrates’ prelude also draws to the reader’s attention the unusual way in which the definition of justice is introduced. This is a further hint that we are not to take the ‘discovery’ at face value. Rather, this tactic makes us reflect for ourselves, in the leisure of the prelude, on where we might have seen justice discussed earlier in the dialogue.<sup>199</sup>

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<sup>196</sup> Annas (1981): 118.

<sup>197</sup> *Ἐξ ἀρχῆς* is at 432d7, 433a1; *δικαιοσύνη* at 432b9, 433a2. At 432c1, Socrates tells Glaucon to ‘be eager’ (*προθυμοῦ*) to look for justice; at 432e8, Glaucon describes himself as ‘eager’ (*ἐπιθυμοῦντι*) to hear Socrates’ answer. For ring composition in classical literature, see Porter (1971); on its use in Greek lyric narrative poems: Slater (1983).

<sup>198</sup> Even Glaucon, however, takes pleasure in the undialectical myth of Er (614b1).

<sup>199</sup> See 432e4-6.

Popper, in the preamble to the ‘noble lie’ passage<sup>200</sup> which parallels this one, sees ‘an indication...of [Plato’s] uneasiness,’ and suggests that he did not expect the proposal which it anticipates to be easily accepted by the audience.<sup>201</sup> In a Popperian spirit, one could interpret 432b-433a as Plato’s attempt to prepare his readers so that they do not reject outright his strange new definition of justice, but are well-disposed towards it, even to the extent of accepting it without sufficient justification. However, even granted that this definition is novel and not like the conventional Greek view of justice given by Cephalus in *Republic* I. 330d-331b, this does not mean that Plato’s aim is to hoodwink his readers. Rather, the above passage is structured in such a way that the reader who pays close attention to it is made to reflect more rather than less on the definition introduced by Socrates’ play.<sup>202</sup> The passage thus illustrates how, for the attentive reader, Plato provides constant hints about the need to approach his characters’ claims with caution; the meta-theatrical way in which the passage draws attention to its own trickery is reminiscent of ancient comedy.<sup>203</sup> If Plato’s reader is lazy and inattentive to the self-consciousness of the narrative, then he may at least be conditioned to hold a more acceptable belief about justice than the conventional view. At worst, the reader could ignore such preludes altogether; but then he would have missed out on the humour and literary pleasure which is as essential a part of the *Republic* as its arguments.<sup>204</sup>

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<sup>200</sup> *Rep.* 414b-e; cf. 382c-d. Cf. also the preamble to the form of the Good as being the most important subject of knowledge, 504de.

<sup>201</sup> Popper (1995): 140-141.

<sup>202</sup> Cross and Woosley (1964): 109, note that Socrates’ introduction of the definition is laden with qualifications: ‘this is justice, *as it seems to me*, or *some form* of it’ (433a3). For criticism of Popper’s attempts to psychoanalyse Plato, see Bambrough (1967).

<sup>203</sup> E.g. *Clouds* 517-62; for Aristophanes and Plato, see Ch. 3. In Euripides’ *Electra* (515-46), Electra rejects the marks (lock of hair, footprint, cloth) by which she might recognise Orestes; all of which had been accepted by Aeschylus’ Electra (*Choephoroe* 164-245). Euripides may thus be self-consciously drawing attention to the difference between his version and Aeschylus’, or parodying the latter; see Cropp (1988): 134-5, 137-8; Garvie (1986): 86-7.

<sup>204</sup> Kurke (2006): 41, n. 18, similarly takes issue with Annas (1982b) for failing to ‘attend to the rhetorical feints and slippages of Socrates’ discourse’ in the *Rep.*

The above interpretation is supported by the route which the enquiry takes in Books VI and VII into the metaphysical dependence of virtues like justice on the Form of the Good, knowledge of which is a prerequisite for knowledge of them.<sup>205</sup> The difficult discussion in these books indicates that previous definitions, such as that of the four virtues in Book IV, should be seen as the early rather than the final stages of enquiry. In addition, Plato later presents preludes for an educationally more advanced audience: at *Rep.* VII.531d7-532a2, mathematics, music and astronomy are προοίμια to the study of philosophical dialectic.<sup>206</sup> In section 432b-433a, therefore, as elsewhere, Plato uses his writings to stir up discussion beyond themselves, and prepare the reader for further investigation, and indeed further ‘preludes’, along the path to philosophical knowledge.

Such progress by hints and allusions might be out of place in a philosophical treatise. However, the *Republic* is not such a treatise. Rather, the ‘search for the totally just and totally unjust man is in some sense an artistic performance.’<sup>207</sup> Socrates does not proceed directly to a definition of justice or any further revelations about philosophical knowledge, but indirectly through preludes and other such devices. This indicates that what he, or Plato, is trying to do is not simply to present an argument, but teach Glaucon and Adeimantus, and through them the reader. Teaching and writing, as shown above, both require σχολή.<sup>208</sup>

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<sup>205</sup> E.g. 505b1-3, 517b7-c5.

<sup>206</sup> Cf. Bacon (2001): 349.

<sup>207</sup> Bacon (2001): 345-46.

<sup>208</sup> This double use of the προοίμιον is supported by its use at 266d7-8, where, as Sansone (2007) points out, it is playfully etymologised from οἶμαι πρῶτον and associated with appropriate hymns to gods and sensible thinking.

### 2.6.3 Other Platonic preludes

Plato uses προοίμια in a number of dialogues, including the *Republic*, *Timaeus*, *Critias*, and *Laws*. Comparison with the later treatments sheds some retrospective light on how Socrates' προοίμιον functions at *Republic* 432.

#### 2.6.3.1 The *Timaeus* and *Critias*

The introductory conversation to the *Timaeus* (17a1-27b6), a sort of extended prelude to the *Timaeus* and *Critias*, is largely occupied by the myth of Atlantis. Critias' prelude, with its use of the image of painting,<sup>209</sup> and self-conscious characterisation of the speaker, is closer to poetical rhetoric than philosophical exposition. The προοίμιον of Timaeus' speech (27c1-29d3) is equally pious but more philosophical: beginning with a prayer, it draws a technical distinction between 'being' and 'becoming', sets up the key assumption that the world is eternal, and reflects on the uncertain status of the account to follow.

The variety between these preludes, and the myth-making and imagery which they involve, illustrates the adaptability of the Platonic prelude and the continuing importance of literary pleasure in the educational process of dialogues at different stages in Plato's life. The biggest formal difference between Socrates' prelude in *Republic* IV and the preludes of *Timaeus* and *Critias* is that only Socrates' is structured as a dialectical conversation, while the latter two are introductions to speeches. This indicates a shift in approach, from the tentative and exploratory exchange in the *Republic*, to the more didactic exposition from a position of authority in the *Timaeus* and *Critias*. However, as I shall argue in Chapter 3, the form of the

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<sup>209</sup> *Critias* 107b5-d8, discussed in Ch. 3.

*Timaeus* is partly a reflection of its subject matter, and the dialogue contains self-undermining humour. The same cannot be said of the *Laws*.

### 2.6.3.2 The *Laws*

The *Laws* contains Plato's only overt discussion of the function of προοίμια. At 718a-734e, most of the laws composed for the new city will be divided into two sections:<sup>210</sup> the law itself, outlining certain rules for behaviour and the punishment for their violation; and the prelude to the law. The rules and punishment are the part which compels the citizens, while the prelude persuades them, in a way analogous to the difference between the 'slave doctor', who treats patients against their consent and without regard to individual cases, and the 'free doctor', who finds out about the patient by talking to him and his friends, and works to persuade him to co-operate in getting better.<sup>211</sup>

The persuasive section of the laws, we learn at 718b2-c3, will aim to express subjects which are not suitable to be spoken in the 'shape' or 'form' (σχῆμα) of laws. That Plato speaks of the laws in terms of their form indicates how seriously he takes the task of finding a structure and organisation appropriate to the function of his compositions. It also underlines the deliberateness with which he chooses different structures for passages intended to persuade and those which, like the examples of the proscriptive part of the laws set down later in the dialogue, merely give commands.

The preludes are expected to have different effects on different people. At *Laws* 718c8-10, the Athenian expresses his wish that the citizens should be as easy as possible to persuade to be virtuous, and that the legislator will aim to achieve this in writing his laws.

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<sup>210</sup> The Athenian allows that not all laws should be preceded by a prelude: 723cd.

<sup>211</sup> 718b; 720c-e; 722e-723b.

The Athenian implicitly acknowledges, however, that not all people are equally keen to become virtuous. The preludes' persuasiveness therefore seems to be envisaged as operating on a sliding scale, to incline those who are not completely ineducable at least to become 'tamer' (ἡμερώτερος), better disposed towards the lawgiver and so 'better at learning' (εὐμαθέστερος).<sup>212</sup> The preludes would only have no effect on those who had slavish natures entirely impervious to persuasion, for whom the bare compulsion of the laws and punishment would have to suffice.<sup>213</sup>

At 723a2-7, the prelude (προοίμιον)<sup>214</sup> to a law is analogised to the opening of a speech (λόγος): its function, as at 718d2-e1, is to make the listener accept the law more cooperatively. That the preludes are preparatory to the actual laws is supported by the characterisation of preludes in general at 722d5 as ἀνακινήσεις, or 'warm-up exercises', in the sense of getting the audience psychologically ready to receive the imperative of the laws. This function of the προοίμιον, of making the audience well-disposed towards the speaker and towards the argument he was making, is mentioned as appropriate to speeches in later ancient discussions on rhetoric, such as those of Aristotle and Cicero.<sup>215</sup>

At *Laws* 723c8-d1, the composition of a law is compared both to that of a song, or a poem set to music, and of a λόγος; the structure of prelude followed by main content is thus considered a feature of all of them equally.<sup>216</sup> Similarly, at 722d3-e7, the προοίμια to all

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<sup>212</sup> 718d2-e1.

<sup>213</sup> 718b2-3.

<sup>214</sup> Cf. 722e7.

<sup>215</sup> Aristotle used προοίμιον as a technical term for the beginning of a speech. Isocrates, *Panathenaicus* 39, speaks of his introduction as like a χορὸς πρὸ τοῦ ἀγῶνος. In Latin, 'prelude' was usually *exordium* or, like the Greek, *prooemium*. The function was 'to gain the sympathy of the judge (or, in broader terms, of the audience) for the topic of the speech': Lausberg (1998), §263-4.

<sup>216</sup> Aristotle, at *Rhet.* 3.14, compares the prelude of a speech to that of a flute player.

compositions involving the voice (φωνή)<sup>217</sup> are designed to help the rest of the work, and can be very elaborate. These passages suggest that the ornamental, artistic aspect of preludes could be transferred to the new preludes to the laws. And there is artistry in the legal preludes; for example, in the introduction to the prelude at *Laws* 726a1-728a5, with its use of parallel phrases, repetition, balance, and an almost aphoristic style.

*Laws* 719b-720a compares the compositional practice of the legislator to that of poets – apparently, to judge from the quotation from Hesiod,<sup>218</sup> with reference to their exhortations to virtue. This underlines the parallelism between the legislator’s persuasive preludes and those of the poets; the difference is that only the legislator will have knowledge of his appropriate subjects.<sup>219</sup> These are, to judge from the examples, largely moral and theological,<sup>220</sup> as appropriate to a theocracy under strict laws.<sup>221</sup>

Plato thus positions his legislative preludes in the *Laws* close to those of rhetoric and poetry in terms of their persuasive and preparatory functions. His application of the traditional prelude form to the composition of laws is a typically Platonic innovation.<sup>222</sup> However, whereas in many dialogues, Plato reworks poetic and rhetorical forms in discussions or depictions of φιλοσοφία,<sup>223</sup> and whereas Socrates’ dialectical prelude at *Republic* 432 introduces a dialectical investigation of justice, the Athenian’s uninterrupted preludes in the *Laws* prepare their audience for iron legislation which is the opposite of open-

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<sup>217</sup> Note this categorisation in terms of the φωνή, rather than, say, in terms of the λόγος or the written work. However, like λόγοι in other dialogues, φωνή here refers to both rhetoric and poetry (presumably as opposed to music or other performances without words).

<sup>218</sup> *Leg.* 718e4-5; *Works and Days* 287-92.

<sup>219</sup> As Plato has the ‘poets’ admit, through the mouth of the Athenian: 719c1-e5.

<sup>220</sup> See 721b6-d6, 726a1-734e2, 885b4-907d1.

<sup>221</sup> Cf. Laks (2005): 291-2.

<sup>222</sup> Schöpsdau (2003): 225, notes the novelty of attaching preambles to laws; the originality of mixing persuasion into legislation is emphasised by the Athenian at 722b4-c2.

<sup>223</sup> As discussed in Part I. For Plato’s adaptation of Presocratic material to his new account of the world in the *Tim.*, see Ch. 3.

ended philosophical enquiry. In the *Phaedrus*, philosophical persuasion was made effective by being targeted at specific types of souls; in the *Laws*, in contrast, the citizens are addressed *en masse*, without the subtlety and flexibility allowed by argument personalised for an individual recipient.

At the end of the long general prelude to the laws (726a-734e), the Athenian argues that the virtuous life is more pleasant than the vicious one (732e-734e). He thus uses the promise of pleasure as a way of enticing the citizens to virtue. The enlisting of pleasure into the service of virtue is appropriate to a prelude, to the extent that this form is meant to persuade a mass audience of citizens without teaching.<sup>224</sup> That this prelude is directed at such an audience of fallible, incarnate human beings, rather than gods, is clearly acknowledged by the Athenian at 732e2-3. The argument in terms of pleasures and pains specifically deals with τὰ ἀνθρώπινα and is directed at humans, not gods: ἀνθρώποις γὰρ διαλεγόμεθα ἀλλ' οὐ θεοῖς. This contrasts with dialogues like the *Phaedrus*, in which the gods are the ideal audience.

It is clear that the prelude at *Laws* 726a-734e is not philosophy: not only is it too simplistic, but it is a speech, not a dialectical interchange of the kind required to impart knowledge. However, its method of dividing healthy and unhealthy, virtuous and vicious lives into different categories, and associating them with different pleasures, is reminiscent of illustrations of the method of 'collections and divisions' in the *Phaedrus* and *Sophist*, discussed in Part I. Moreover, the argument that the virtuous life is healthier and more pleasant than the vicious finds many parallels in other dialogues.<sup>225</sup>

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<sup>224</sup> Cf. Laks (2005): 276. On pleasure in the *Leg.*, see further White (2001), who argues that the dialogue presents a type of hedonism, since all humans, and not just the many, prefer pleasure to pain; justice is presented as the most desirable because it gives the most pleasure. The *Phdr.* presents the pursuit of philosophical knowledge in terms of the pursuit of intellectual ἡδονή.

<sup>225</sup> E.g. *Phdr.* 252b1; *Gorg.* 491d ff.

The prelude to the laws on impiety at 885b4-907d1 is arguably closer to philosophical argumentation than the earlier preludes,<sup>226</sup> in that it adopts the form of questions and answers rather than an unbroken speech,<sup>227</sup> and includes arguments about the nature of the soul.<sup>228</sup> However, it is made clear that the prelude is still directed at a mass audience of citizens; its approach should not be identified with that of a discussion conducted amongst philosophers, but is rather one of persuasion of pre-determined doctrines than open-minded enquiry.

At 887b1-c4, Clinias argues that it is important for the λόγοι addressed to the citizens to have persuasiveness (πιθανότης) that the gods exist and are good; a longer prelude will, he believes, provide a fuller and therefore more persuasive explanation.<sup>229</sup> At 890b3-891a7, the Athenian and Clinias agree that it is important to try to persuade the citizens to accept the principles behind the laws on religion and not just to compel them. In line with the analogy of the slave and free doctors mentioned above, the justification for the use of persuasion in addition to force would be that the citizens should, by preference, be treated as free men amenable to words rather than blows.

The Athenian raises an objection: the topics necessary to persuade people that the gods exist, when addressed to crowds (εἰς πλήθη λεγόμενα), may be too difficult to understand and too lengthy for them (890e1-3). Clinias gives the justification that these objections are mitigated if the prelude is written down:

καὶ μὴν καὶ νομοθεσίᾳ 890e6

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<sup>226</sup> See Laks (2005): 289-90, 'the long preamble which constitutes the major part of Book X, in which Plato gives us the final version of his kinetics, has a nicely argumentative flavour (although the argument is hardly dialectical, given the fact that, past a certain point, Clinias and Megillus are unable to follow what the Stranger is saying: cf. 893a)'; Schöpsdau (2003): 223-4.

<sup>227</sup> This approach is highlighted at 888a6 ff. and 892d6-893a7.

<sup>228</sup> See esp. *Leg.* 895a-899d.

<sup>229</sup> Cf. 887c2-3: μηδὲν οὖν δυσχεράναντες μηδὲ ἐπειχθέντες, ἦντινά ποτε ἔχομεν δύναμιν εἰς πειθῶ τῶν τοιούτων λόγων.

γέ ἐστὶν που τῆ μετὰ φρονήσεως μεγίστη βοήθεια, διότι  
 τὰ περὶ νόμους προστάγματα ἐν γράμμασι τεθέντα, ὡς 891a  
 δώσοντα εἰς πάντα χρόνον ἔλεγχον, πάντως ἡρεμεῖ, ὥστε  
 οὔτ' εἰ χαλεπὰ κατ' ἀρχὰς ἀκούειν ἐστὶν φοβητέον, ἃ γ'  
 ἔσται καὶ τῷ δυσμαθεῖ πολλάκις ἐπανιόντι σκοπεῖν, οὔτε 5  
 εἰ μακρὰ, ὠφέλιμα δέ, διὰ ταῦτα λόγον οὐδαμῆ ἔχει οὐδὲ  
 ὄσιον ἔμοιγε εἶναι φαίνεται τὸ μὴ οὐ βοηθεῖν τούτοις τοῖς  
 λόγοις πάντα ἄνδρα κατὰ δύναμιν.

And indeed this [presenting doctrines εἰς πλήθη] is a very great help to legislation conducted with wisdom, because the ordinances involved in the laws, once set down in writing, are completely still, so as to be able to provide an account [in response to questioning] for all time. Thus there is no cause for concern if these things are difficult to hear [and comprehend] at first, since the slow learner will be able to go back and consider them many times. Nor if they are long, but useful, is there any reason, nor because of this does it seem pious to me, for any man not to help these words to the best of his ability.<sup>230</sup>

This passage seems to contain a ‘startling rehabilitation of the written word, put in the very language that had served to condemn it in the *Phaedrus*’.<sup>231</sup> Thus the written περὶ νόμους προστάγματα, which the context makes clear are the preludes to the laws, keep quiet and still (πάντως ἡρεμεῖ), like the painting which Socrates compares to writing at *Phaedrus* 275d6. A written, lengthy discussion of the legal preludes is the greatest βοήθεια; but writing in the *Phaedrus* cannot βοηθῆσαι αὐτῷ (275e5). The slow learner of the laws can reach a better understanding by returning to the preludes πολλάκις; but in the *Phaedrus*, writing was unable to defend itself and respond to questioning.<sup>232</sup> Learning through questioning πολλάκις καὶ πολλαχῆ, that is, through approaching the same issue in different ways, was described at *Meno* 85c9-12 in the context of oral philosophical recollection. In contrast, the citizens in the *Laws* are to refer to the same written words repeatedly, not in order to understand an abstract topic better, but simply to ensure that they believe what is written and nothing else.

<sup>230</sup> Translation adapted from T. J. Saunders in Cooper (1997): 1547-8.

<sup>231</sup> Laks (2005): 291, who does not present a detailed comparison between the dialogues, but cites *Phdr.* 275, and *Leg.* 890e6-891a2, which he translates, 'And in some sense a legislation relying on insight...draws its strongest help from the fact that legal instructions, once put in writing, do not move at all.'

<sup>232</sup> 275e3-5 with 278e9, discussed in Part I.

In both the *Phaedrus* and *Symposium*, written legislation is a λόγος and ‘offspring’ inferior to the living λόγος of the philosopher, which alone is truly immortal. In contrast, the prelates in the *Laws* will provide an account for people to read εἰς πάντα χρόνον, like Thucydides’ κτῆμά ἐς αἰεῖ.<sup>233</sup> They will be on public display, a permanent monument accessible to all, as volumes of papyri, in the days before public libraries, would not have been.<sup>234</sup> As such, the inscription of the prelates would more closely resemble the inscriptions on public memorials traditionally erected to commemorate important events such as battles.<sup>235</sup> It is instructive that the first and perhaps only inscription of philosophical doctrine, and possibly the largest inscription of any kind in antiquity,<sup>236</sup> was set up several centuries later by the Epicurean, Diogenes of Oenoanda. Diogenes’ inscription is perhaps out of character with the Epicurean preference for withdrawal from public life.<sup>237</sup> However, the idea of setting philosophical doctrines in stone fits better with the Epicureans’ dogmatic attitude towards teaching than with the usual Platonic distrust of writing.

In both the *Phaedrus* and *Laws*, the λόγοι of the men who know, the philosopher and legislator respectively, are contrasted with all other types of λόγοι.<sup>238</sup> However, as the analysis above shows, and as is underlined at *Laws* 858b-859a, the written λόγοι of the laws have a final authority in the city which they lack in the *Phaedrus*.<sup>239</sup> Hence, at 858e5-859a1, the Athenian emphasises that the legal writings (τὰ περὶ τοῦ νόμου γεγραμμένα) in a city

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<sup>233</sup> Thucydides I.22. The criticism of writers who leave their name on their writings to gain immortality at *Phdr.* 257e1-258c2 would be applicable to Thucydides.

<sup>234</sup> While there was a flourishing book trade in Athens by the early fourth century, the public library at Alexandria, established c. 300 BC, was probably still the first of its kind: Casson (2001): 26-31.

<sup>235</sup> See Wade-Gery (1933).

<sup>236</sup> As claimed by the Deutsches Archäologisches Institut <<http://www.dainst.org/en/>>, accessed 12 May 2012; but compare the fifth-century BC Code of Gortyn in Crete.

<sup>237</sup> Warren (2000): 144.

<sup>238</sup> Compare *Leg.* 886c1-2 with the discussion of writings ‘with or without metre’ in Part I.

<sup>239</sup> Cf. 888d3-4 for the final authority of the legislator to teach (διδάσκειν).

ought to be by a long way its ‘finest and best’ works (κάλλιστα τε καὶ ἄριστα), much better than the writings of poets like Homer and Tyrtaeus. Plato’s ideal preludes will thus replace the traditional canon of Greek poets as the authoritative basis of his new city’s culture and *mores*, as well as their most beautiful written productions. It is the preludes to which everyone in the city ought to pay the closest attention (858d3-4) and which will teach the citizens ‘about fine and good and just things’ (περὶ καλῶν καὶ ἀγαθῶν καὶ δικαίων), including about what they are and about how they are to be practised by people who want to be εὐδαίμονες.<sup>240</sup> This stands in contradiction to the argument in the *Phaedrus* that only philosophy could make people εὐδαίμονες. In the *Phaedrus*, too, only philosophy could pass on knowledge about ideal Justice, Beauty and so forth. It is significant that the preludes in the *Laws* do not, apparently, teach about δικαιοσύνη or τὸ δίκαιον in the singular, but rather δικαία, ‘just things’: this underlines the point that their goal is not to impart philosophical knowledge of Being, but to guide the citizens in this world, among the many just and good things.

Unlike the best sort of writing in the *Phaedrus*, the aim of the written preludes in the *Laws* is not to induce a few fitting souls to advance on a lifetime’s journey towards knowledge of τὰ ὄντα, but to persuade the citizen body to obey the laws. As such, they are ‘prolonged enchantments’ which use ‘persuasion at the high level of rational insight suffused with emotion’.<sup>241</sup> As Cebes acknowledges at *Phaedo* 77e3-9, even willing learners have a παῖς in them who needs enchantments in addition to arguments to sustain their beliefs. Equally, the preludes must be κάλλιστα because, as Plato is aware, beauty is persuasive.

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<sup>240</sup> [Χρῆ τὸν νομοθέτην] διδάσκοντα οἷά τε ἐστὶ καὶ ὡς ἐπιτηδευτέον αὐτὰ τοῖς μέλλουσιν εὐδαίμοσιν ἔσσεσθαι (858d7-9).

<sup>241</sup> Morrow (1953), 240-242, who notes the language of enchantments (ἐπιωδή) in the prelude on religion in *Leg. X*, and argues that Plato’s legislation as a whole is designed as ‘one vast system of total persuasion’.

The preludes in the *Laws* have been seen as a sort of ‘meta-legislative reflection’, discussing the principles on which laws should be based, thereby forming a sort of philosophy for the masses.<sup>242</sup> However, in contrast to the philosophical use of writing hinted at in the *Phaedrus*, there is no suggestion that the preludes are to be used as starting points for the reader’s own dialectical development. In this sense not only are they not philosophy, but they are not designed to induce the reader to philosophy. Rather, it seems that the purpose of going over them repeatedly will be for the slow learner to absorb their content as fully as possible. This presents another parallel with dogmatic Epicurean attitudes to writing: the end of Epicurus’ *ad Herodotum* also required the novice to learn Epicurus’ writings by rote, as a way of achieving peace of mind.<sup>243</sup>

### 2.6.3.3 Platonic preludes: Conclusion

From this analysis of Plato’s treatment of the prelude form in later dialogues, a number of guidelines emerge for understanding Socrates’ prelude in *Republic IV*. The prelude is a form of introduction to an exposition of philosophical argument, whose function is to prepare the audience’s mind so that they have an attitude of greater acceptance towards that argument. This preparation may in itself be more or less philosophical, depending upon the level of the audience at which it is targeted. Through their varied combination of rhetorical, poetic and philosophical elements, Plato’s preludes emerge as a new literary-artistic genre, or sub-genre, within the form of the Platonic dialogue.<sup>244</sup> As such, they are also good examples of philosophical literature.

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<sup>242</sup> Laks (2005): 260-292, esp. 272. Laks argues that Plato uses the preludes to postpone the actual legislation because he is more interested in how to educate the citizens than how to punish them.

<sup>243</sup> *Ad Hdt.* 83.

<sup>244</sup> Cf. Morrow (1953): 241; Schöpsdau (2003): 223-4.

## 2.7 Hunting, philosophising, and the role of Socrates

To return to the prelude of *Republic IV*, at 432c2, Socrates modestly asks Glaucon to speak out if he catches sight of justice before Socrates does. Glaucon immediately protests that Socrates will use him μετρίως, ‘moderately’ or ‘fairly’, by taking him as his (Socrates’) follower who can see what Socrates has shown him.<sup>245</sup> The term μετρίως is a favourite one of Plato’s. It has connotations of decency, calm, dignity, and in general the proper conduct between two civilised men conversing together.<sup>246</sup> The prelude at 432 as a whole establishes the respective rôles of teacher and pupil, but with consent on both sides, and with the common purpose of finding the truth to dispel their mutual uncertainty.<sup>247</sup> Thus another of the functions of the prelude is to present an image of a well-functioning pedagogical relationship, whose attractiveness and closeness is emphasised through words such as μετρίως, the address ὦ μακάριε, here friendly (432d7),<sup>248</sup> Glaucon’s description of himself as ἐπιθυμοῦντι ἀκοῦσαι, the rhyme between ἐμοῦ and ἡγοῦ at the successive end of Socrates’ and Glaucon’s lines (432 c5-6), the echo of ἰτέον between Socrates and Glaucon at 432c9-d1, and the other literary flourishes discussed in Sections 2.6.1-2. In addition, the interchange between forms of λέγειν and ἀκούειν at 432e5-433a1 highlights both the interchange of the dialectic form and, to the extent that Glaucon here is the listener while Socrates is the speaker (432e8, 433a1), implies the latter’s greater authority. The success of the pair’s relationship is shown in their construction of a well-functioning theory as a result, in contrast to the destructive interchange between Socrates and Thrasymachus in *Republic I*.

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<sup>245</sup> Cf. *Phd.* 89c1-11.

<sup>246</sup> E.g. *Crito* 46c6; *Phd.* 95a5; *Plt.* 293e6; *Phdr.* 265c1, 279c4; *Sophist* 263a3.

<sup>247</sup> Socrates also plays with the roles of leading and following at *Phdr.* 234d4-5.

<sup>248</sup> As also at *Crito* 44c6, *Phd.* 69a6, *Sym.* 198b1, *Phdr.* 236d4.

The importance of the pedagogical relationship is further revealed through the hunting image and its connotations. As Burger notes, images of hunting in Plato are associated with both erotic love and philosophy.<sup>249</sup> In particular, at *Lysis* 205e1-206b8, Socrates compares wooing boys to hunting prey, but with the salient difference that boys are hunted by being ‘charmed’ (κηλεῖν) with ‘speeches and songs’ (λόγοις τε καὶ ᾠδαῖς). It is no accident that λόγοι and the song of dialectic are Socrates’ instruments of choice for enticing young men to philosophy, just as he will cast the spell of his argument over Lysis and Menexenus.<sup>250</sup> Hunting as an image for the pursuit of an argument appears at *Lysis* 218c4-5, where Socrates temporarily feels like a successful θηρευτής who has captured the discussion.

At *Laches* 194b5-9, Socrates depicts the ideal attitude of tenacity in philosophical discussion through the image of the ‘leader of the hunt’ (ἀγαθὸς κυνηγέτης),<sup>251</sup> and also presents philosophical hunting as an affair to be conducted in partnership by the interlocutors, by suggesting that he and Laches summon Nicias to join in (Νικίαν τόνδε παρακαλῶμεν ἐπὶ τὸ κυνηγέσιον). At *Parmenides* 128b8-c2, Socrates is described as ‘well pursuing and tracking down the words [in Zeno’s book] like Spartan hounds’ (ὥσπερ γε αἱ Λάκαιναι σκύλακες εὖ μεταθεῖς τε καὶ ἰχνεύεις τὰ λεχθέντα). This image underlines the youthful Socrates’ eagerness and tenacity in pursuing the argument. Finally, the guardians are compared to hunting dogs elsewhere in the *Republic*.<sup>252</sup> There may be resonances of this in Socrates’ encouragement of the young Glaucon at 432b-d, as if the latter were a dog needing to be trained to catch his quarry, and to distinguish real prey from shadows.

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<sup>249</sup> Burger (2003): 39, “‘hunting together’ – the Platonic metaphor for the erotic character of philosophy”; 53, n. 2; 59, n. 48; 60, n. 51. Burger mentions the *Lysis* and *Laches* passages, but does not discuss them.

<sup>250</sup> Cf. *Rep.* 532a1-2; *Phd.* 77e4-78a2, 84d9-85b9; *Phdr.* 259d3-7. On spells in Plato, see further de Romilly (1975): 23-43; *Leg.* 653bc ff., 659d-e, with Laks (2005): 238-40.

<sup>251</sup> Cf. *Rep.* 432b7, κυνηγέτας.

<sup>252</sup> Classen (1960): 36. On the likening of the Guardians to dogs at *Rep.* 451d4-e1, see Petraki (2011): 117-8.

The above passages show that, in Plato, while philosophical hunting is associated with ἔρωσ, it is also associated with something closer to friendship, especially in the *Laches* and *Republic*. In the *Laches*, erotic desire would be inappropriate due to the venerable age of the interlocutors; in the *Republic*, romantic involvement between Socrates and Glaucon or Adeimantus is conspicuous by its absence.<sup>253</sup> Rather, the emphasis is on Socrates as a teacher, or ‘leader’ in the pursuit for knowledge, while the two brothers are his ‘followers’ and disciples.<sup>254</sup>

The pedagogical aspect is highlighted through the image of the ἵχνος, the ‘trace’, ‘track’ or ‘footstep’ (432d3).<sup>255</sup> The traces left by Justice here, as indicated at 433a1-b1, refer to the earlier discussion of the principle of doing one’s own work. The word ἵχνος, in the singular or plural, is used only five other times in the *Republic*. In all cases it is used metaphorically, with a sense of journeying or hunting implied, and in a philosophical or otherwise educational context. At 365d2, the phrase ταύτη ἰτέον, ὡς τὰ ἵχνη τῶν λόγων φέρει is used for the opposite ‘traces’ to those at 432. While at 432, Socrates and Glaucon follow the traces of justice, at 365d, Adeimantus is describing the ‘traces of the accounts’ to be followed by those pursuing injustice. This shows the ambivalence of the symbolism of the path: it can either lead its enquirers to the truth, or it can lead them into confusion and error. This can occur even when Socrates, as he does particularly in the aporetic dialogues, ‘follows

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<sup>253</sup> Rosen (1965): 455, 465 emphasises the ‘sobriety’ of the *Rep.*, while observing that Glaucon is himself a lover of boys (474d-475a). Socrates takes pleasure in the two brothers’ speech (367e5-6), but does not woo them as he does Lysis.

<sup>254</sup> Compare the ἵχνος of the written word at *Phdr.* 276d4. In Aristotle, the association between hunting, philosophy and friendship is made more explicit (*EN* IX.12, 1172a4-6); Burger (2003): 52.

<sup>255</sup> Classen (1960): 38, notes that ἵχνος can be a technical term of hunting, and is found as early as Homer, *Od.* 17.317 and 19.436.

where the enquiry leads'.<sup>256</sup> Sometimes Plato leaves it up to the reader to decide the success of the dialectical path chosen.<sup>257</sup>

The portrayal of Glaucon and Socrates also illustrates the closeness of the pedagogic relationship, and the effectiveness of philosophical enquiry which comes through mutual assistance, respect and a shared intellectual desire for the truth. This is possible, however, not least because of Glaucon's unqualified acknowledgement of Socrates' superiority and acquiescence in the latter's direction of the search (432c3-6). The effective philosophical relationship here is not one among equals, but one involving a leader and a follower. The literary μίμησις of the philosophical relationship also provides, as discussed in Part I, a model to attract the souls of appropriate readers, and condition them at a pre-philosophical level into enjoying being 'led' by someone like Socrates.

The idea of ἵχνη which can lead either to truth or error recurs at *Republic* 462a6, in the context of deciding whether the account previously given of the just city fits into the 'track of the good' (τὸ τοῦ ἀγαθοῦ ἵχνος), and not the opposite one.<sup>258</sup> At 430e9, the usage most similar to 432d3, the ἵχνη are those left by (the Form of) σωφροσύνη; the traces are, as it were, the images or perceptible impressions of that Form. It is such 'traces' that Socrates and his interlocutors use to define the concept of moderation, in a way close to what is implied at 432d about justice. In both cases, the definition hinges on what has been said,<sup>259</sup> as is appropriate for an enquiry about, and conducted by, λόγοι. The other instances of ἵχνος are at 410b1-2, of the musically educated guardian 'pursuing' (διώκων) the ἵχνη of gymnastics; and 553a9-10, of the desire of the timocrat's son to emulate his father and 'follow in his

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<sup>256</sup> Cf. *Euthyph.* 14c3-5; *Rep.* 394d7-9; *Meno* 97a-98b.

<sup>257</sup> *Phdr.* 265b6-8, on Socrates' Palinode, by which they perhaps grasped some truth, and perhaps were 'borne off in the wrong direction' (τάχα δ' ἂν καὶ ἄλλοσε παραφερόμενοι). This phrasing also has resonances of the pursuit of knowledge, its partial grasp, and then the following of a false trail.

<sup>258</sup> Plato also uses στοχαζόμενον in this context (462a4), of the arrangement of the city being 'aimed at'.

<sup>259</sup> 430e9, λέγεται; 432e5-6, λέγοντες, ἐλέγομεν.

footsteps' (τὰ ἐκείνου ἵχνη διώκη). Both of these instances continue the metaphor of 'following the traces' for teaching and learning. In a similarly pedagogical spirit, the verb ἵχνεύειν is used at 401c5 of the good craftsmen who are able to 'trace out' the nature of the καλόν in their artwork, for the benefit of the young guardians.<sup>260</sup> As discussed in Part I, in the *Phaedrus*, ἵχνος and its diminutive are also used of the pursuit of philosophy.

At *Republic* 532e1-533a5, the process of dialectic is described in terms of a 'journey' (πορεία) along ὁδοί towards the sight of the truth.<sup>261</sup> This summarises the ascent described just previously in the image of the Cave.<sup>262</sup> The use of the imagery of sight, light and darkness in both this section and in the image of the Sun, to denote the movement from intellectual ignorance to understanding, is also reflected at *Republic* 432, in the fear that justice will disappear (b9), the description of the scene of the hunt as 'dark and shadowy' (c8),<sup>263</sup> and the recurrent verbs of seeing for the discovery of justice (432d8, e1, e2). These details also suggest the labour involved in hunting, and, by extension, in reaching knowledge about justice.<sup>264</sup>

Classen has shown how the journey as a metaphor for philosophy, which occurs frequently in Plato, is closely associated with the metaphors of ἵχνη and the hunt.<sup>265</sup> In particular, he points to the relationship between the 'trace' and the animal which makes it, and shows how this may reflect the Platonic idea of visible objects as copies or somehow 'imprints' of the Forms. Hunting thus becomes used as a metaphor for dialectic investigation, in which the interlocutors orient themselves by specific examples, as by ἵχνη, from which

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<sup>260</sup> At *Theaet.* 193c4, ἵχνος occurs as the 'trace' of a perception left in the 'wax' of the mind; Burger (1980): 149, n. 57; Fowler (2002): 204.

<sup>261</sup> As shown by the repetition of verbs of seeing (ἴδοις, ἰδεῖν).

<sup>262</sup> *Rep.* 514a-520c, with 532a-533a.

<sup>263</sup> This anticipates the shadowiness of the Cave and the visible world (520bc, 532b7).

<sup>264</sup> Cf. Classen (1960): 37, 54, who notes that the Greeks often used hunting as a metaphor for toil.

<sup>265</sup> Classen (1960): 31-62. Cf. Schindler (2000): 127.

they proceed to the universal idea on which the examples depend, but whose nature is not clearly known in advance.<sup>266</sup>

Classen also shows that, while the hunting image was well developed in Homer, lyric and especially tragedy before Plato, it occurs little in comedy, and even less in prose, which tended to avoid metaphorical expressions.<sup>267</sup> Plato's use of this identifiably poetic image, therefore, illustrates the closeness of his style to that of poetry, or, in other words, his way of refashioning Greek generic conventions to create a new style. Classen is surely right to argue that, firstly, at *Rep.* 432 and elsewhere, Plato refines the standard topos of the hunt and redirects it to give a deeper, more philosophical significance; that the hunting image is an illustration of Plato's repetition of a metaphor at different points in a dialogue to draw connections between them; and that Plato uses myths and images in similar ways, to provide a vivid and memorable starting-point for the reader's own reflection and interpretation.<sup>268</sup>

However, Classen, like many other scholars, views the main significance of Plato's images in their being a 'consciously sought component of the form of expression of the philosopher'.<sup>269</sup> The problem with this interpretation is that it leads to the surprising consequence that 'indicating with a sign' is more characteristic of (Platonic) philosophy than is the straightforward exposition of argument. This is precisely what modern philosophers such as Annas find problematic in the dialogues *qua* philosophy, and why, if Plato's idea of philosophy can be gleaned from his own compositional practice, his philosophy is so different from the modern academic sense of the term. Moreover, while Classen is sensitive to the poetic effects of the hunting imagery, he, like others who take this approach, arguably

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<sup>266</sup> Classen (1960): 50-54.

<sup>267</sup> Classen (1960): 60.

<sup>268</sup> Classen (1960): 36, 38, 60-62.

<sup>269</sup> Classen (1960): 62, 'ein bewusst gesuchter Bestandteil der Ausdrucksform des Philosophen, der lieber im Dialog Probleme erörtert als im Vortrag Lehren darstellt'.

underestimates the sheer aesthetic value of the *Republic* as literature, because he sees every poetic device as subservient to a narrow philosophical purpose. The view proposed by the present chapter is rather that the *Republic*, like the *Phaedrus*, is, in addition to a work of philosophical teaching, an enjoyable pastime, only superior to the materialistic pursuits of the many.

The hunting metaphor in Socrates' prelude in *Rep.* IV thus brings together a number of evocative associations, which romanticise the pursuit of philosophy. That this depiction has hints of irony does not detract from its vividness, but instead makes it more intriguing. The playfulness of tone both attracts the reader to the discussion and distances him or her from the characters, creating confusion and space for reflection. Paradoxically, the reader whose thoughts will be stirred most philosophically by Plato's prelude into questioning Socrates' tactics will be the reader who pays most attention to the literary features of the passage. Not coincidentally, the same reader is likely to gain the most delight from it, in seeing how the different features combine to convey a sense of playfulness and drama, and at the same time the wiliness of Socrates.

Passages like *Republic* 432b-433a are not about teaching as the art of telling or the art of training one's students to argue logically. Rather, they present images of teaching for the sensitive reader to reflect upon, through the poetical art of suggestion.<sup>270</sup>

## 2.8 Conclusion to Chapter 2

In the aim of affecting the reader's character at a subconscious level and conditioning his or her emotions, as well as making him or her thinking about particular characters, places and situations, dialogues like the *Phaedrus* and *Republic* are literature. They are also literature in

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<sup>270</sup> See Wimsatt (1967): 14-18, on poetry's 'suggestive power' rather than single binding meaning.

so far as they fix our attention on the beauty of the imaginative situation they create and on the visionary experiences they describe. They are philosophical because they are grounded in deep reflections about issues which, since Plato and Aristotle, have come to be defined as philosophical, such as the nature of reality and the soul, and the foundations on which the good life should rest. They are philosophical literature because they do not simply present philosophical arguments for the reader to judge at face value. Each is a philosophical fragment but an artistic whole. Taken collectively, the dialogues go some way towards filling out each other's incompleteness, and provide the beginnings of a 'way of living and thinking'.<sup>271</sup>

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<sup>271</sup> The phrase is Nightingale's (1995): 4-12, *et passim*.



## Chapter 3. Literature and Science I:

### The *Timaeus* and Enquiry into Nature

It was still possible for a gifted amateur to speak with authority. He could still argue with confidence that all attempts at a history of creation were merely guesses at truth, and that his guesses were quite as consistent as those of his opponents, and infinitely more beautiful. The verified detail of science makes it impossible for the modern controversialist to compose an alternative picture to the universe of Haeckel or Spencer...For these reasons, and on account of the incomparable splendor and majesty of its diction, the *Timaeus* will probably remain the finest statement of the teleological idea in literature.<sup>1</sup>

#### Part I. Plato and natural philosophy

##### 3.1 Natural philosophy and literature

###### 3.1.1 The *Timaeus*, the *De Rerum Natura*, and natural philosophy

Chapter 1 surveyed the connections between Plato and Lucretius in ancient thought and established that, in all likelihood, Lucretius did read Plato and consciously engaged with him when composing the *DRN*. Chapter 2 considered Plato's methods of philosophical writing. In this and the following chapter, I shall look more closely at the subject matter of their works, and in particular their treatment of the ancient tradition of enquiry into nature (περὶ φύσεως ἱστορία), which, from the time of Aristotle onwards, was commonly considered to be a distinct category of philosophy.<sup>2</sup> I shall focus on a few passages from the *Timaeus* (Chapter 3) and *DRN* II (Chapter 4) where engagement with this tradition is particularly clear. In Chapter 4, I shall also consider the influence of the *Timaeus* on the *DRN* within this tradition more widely.

In 1901, Shorey drew attention to a number of parallels between Lucretius and Plato, primarily in terms of their imagery and explanations of phenomena such as mirrors, as well as

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<sup>1</sup> Epigraph quoted from Shorey (1888): 407, on Plato's place in ancient scientific thought.

<sup>2</sup> On the divisions of philosophy in the different schools after Aristotle, see Seneca, *Epistles* 14.89.9-13: *philosophiae tres partes esse dixerunt et maximi et plurimi auctores: moralem, naturalem, rationalem.*

some apparently quite close similarities of phrasing.<sup>3</sup> Shorey argued that the *Timaeus* and the *DRN*, beyond textual similarities, share the ‘deeper likeness’ of being

composed under the immediate inspiration of the Pre-Socratic poet-philosophers. They are Hymns of the Universe rather than dry inventories of phaenomena. Guided by a few great thoughts, their majestic rhetoric sweeps across the entire field of knowledge from the origins of the world to the diseases of the human body. Both approach the investigation of nature in a spirit of glad wonder and awe. Both thrill with a sense of the beauty of the cosmos, the glory of the sum of things, that reflects itself in a sustained intensity of rhythm, diction, and vivid imagery.<sup>4</sup>

While much recent scholarship has focussed on Lucretius’ debt to Empedocles as a poet of nature, Shorey’s comparison suggests that the *Timaeus* might also be something of a conceptual model for the *DRN*, and that in a distinctive way which does not require both works to have been influenced by Empedocles or any other enquirer into φύσις outside the Socratic tradition. As I shall argue here, and in line with the conclusions of Chapter 1, both the *Timaeus* and *DRN* draw on the writings of early philosophers, including Empedocles, as well as on previous mythological and other works. Both parody, subvert, and otherwise synthesise this material into a new, comprehensive view of the universe which is both argued for and poetically imagined. Finally, both are ‘hymns of the universe’, or celebrations of nature seen as an integrated whole.

In his commentary of 1937 on the *Timaeus*, Cornford observed that ‘the *Timaeus* is a poem, no less than the *De rerum natura* of Lucretius, and indeed more so in certain respects.’ While Cornford was not interested in the possible influence of the *Timaeus* on the *DRN*, he identified an essential point of contact between them: that both ‘are concerned, in the first instance, with our practical attitude towards the world – what we should make of our life there and how face the prospect of death.’ He contrasted Lucretius’ reality of atoms and void with Plato’s reality of Forms:

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<sup>3</sup> Shorey (1901).

<sup>4</sup> Shorey (1901): 206-7.

For Lucretius reality is in the world of sensible things and he can offer statements about its nature which claim to be literally true; for Plato that whole world is an image...The perfection of microscopic vision can bring you no nearer to the truth, for the truth is not at the further end of your microscope. To find reality you would do better to shut your eyes and think.<sup>5</sup>

Cornford here draws attention to a key connection and distinction between the *Timaeus* and the *DRN*. Both works consider the extent to which the world as we see it is the real world. However, Lucretius claims to be making true statements about the world which is both his world and that of the reader. At the same time, as Wardy has shown, Lucretius' atoms are a different reality from the world as it appears to us; Lucretius uses poetic devices such as imagery and analogy to 'communicate the look of the world' based on atoms in order to bridge the gap between these two levels.<sup>6</sup>

Plato, on the other hand, not only presents his arguments through the distancing medium of other characters, but, in the case of the *Timaeus*, as well as in the *Phaedo*, seems to say that it is inherently impossible to give a true account of the physical world, because the latter is not an object of knowledge, but only of opinion. Rather, he chooses to give a 'likely account' of how the world might have been designed, on the assumption that it has been designed for the best.

Even if the epistemological status of Plato's geometrical atoms, presented as the fundamental constituents of the physical world, is open to debate, the *Timaeus* nevertheless displays more of an interest in the natural world than any other dialogue. At the same time, its poetic aspects arguably function to highlight our distance from the true reality, which we as readers may be initially encouraged to imagine, but which we can only reach after a more disciplined exercise of philosophy beyond that presented in the dialogue.

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<sup>5</sup> Cornford (1997): 31-2.

<sup>6</sup> Wardy (1988): 128, cf. 116, 'in his attempt to convince us that a few microscopic properties give birth to the fecundity of familiar appearances [Lucretius] tries to face and overcome the effect of alienation'. On atomic 'alienation', cf. Reinhardt (2005): 153.

An unexpected connection between Plato and Lucretius thus suggests itself: despite Lucretius' fervent materialism, he, like Plato, views the world as grounded in a reality which is beyond the reach of our senses. The difference, however, is that, for Lucretius, unlike for Plato, objects in nature really do exist as much as anything else and not merely at a level ontologically inferior to that of an abstract reality. As I shall argue, this makes Lucretius take the perceptible world more seriously than Plato, as a source of proofs for the nature of the atoms; in contrast, Plato does not view natural phenomena as susceptible of proof.

In this and the following chapter, I shall consider how Plato and Lucretius treat the writings of both ancient medicine and early philosophy which are associated with the *περὶ φύσεως ἱστορίαι*. Above all, I shall be concerned with what distinguishes the *Timaeus* and the *DRN* from the works of other ancient enquirers into nature. I shall argue that they provide two distinct but related illustrations of how rational speculation and enquiry into nature can be transformed into imaginative philosophical literature. Both the *Timaeus* and the *DRN* provide the sort of vision of the world mentioned by Shorey and Cornford. I shall investigate the details of how they combine imagination and argument, speculation and aesthetic appreciation.

An important point of comparison between Plato and Lucretius in terms of their attitude to natural philosophy is their treatment of teleology. In the passages on which I shall focus, both authors, in the course of explaining particular physical phenomena in the light of a more or less scientific theory, relate their explanation to the ancient debate over the question of whether the universe was the product of divine intelligence, and how far it might be said to be designed. In addition, Lucretius arguably has the teleological world-view of the *Timaeus* in mind as a target for his own anti-design arguments. On the present state of evidence, it cannot be proven whether Lucretius is reacting directly to Plato, although I shall argue that

this is probable. Either way, the comparison is still useful to the extent that the *DRN* attacks a teleological view of the type most famously advocated in the *Timaeus*.

### 3.1.2 The treatment of natural phenomena in the *Timaeus*

The *Timaeus* is the closest of Plato's dialogues to anything resembling modern conceptions of 'science' and the 'scientific'. Some scholars have searched enthusiastically for parallels between Platonic and modern scientific or mathematical ideas, or have seen in the *Timaeus* certain anticipations of modern theories or discoveries.<sup>7</sup> I take modern 'science' here in the sense in which it is defined by the *Oxford English Dictionary* as 'those branches of study that relate to the phenomena of the material universe and their laws'.<sup>8</sup> When considering the *Timaeus*, it is important to be aware that there are fundamental differences between the Platonic and modern scientific systems, and in particular the types of explanations deemed acceptable by each.

The *Timaeus* gives a geometrically-inspired explanation of natural phenomena, as well as of invisible constituents of the universe such as the human and cosmic soul. This purports to demonstrate how they are designed by an intelligent, ἀγαθός craftsman-god operating on pre-existing matter, who acts to make the universe as καλός as possible, or 'fine' in both a moral and aesthetic sense, in imitation of the αἰδίων παράδειγμα, the intelligible Form grasped by λόγος and φρόνησις.<sup>9</sup> Anaxagoras and Empedocles had given explanations of natural phenomena in which a deity was involved, but had not given a reason as to why such a deity would want to have created the universe as it is and not in another way. Rather,

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<sup>7</sup> Hall (1965); Lloyd (1968), esp. 87-90; Leggett (2010): 31-6; Brisson-Meyerstein (1995); Gregory (2000).

<sup>8</sup> *OED* s. v. 'science, n.', 5b, accessed 10 June 2012 <<http://www.oed.com/view/Entry/172672?redirectedFrom=science>>.

<sup>9</sup> *Tim.* 28c3-29b1. On teleology, see Netz (2002); on the designer, Johansen (2004): 16, 69-71.

their deity seems to have essentially been the force by which phenomena emerged as they did, and the focus was on explaining how they functioned. On the other hand, Aristotle's theory of the internal τέλος or function of an object does not involve a designer god.<sup>10</sup> Modern science explains how natural phenomena function, but does not, *qua* science, speculate as to why a god might have designed them to operate as they do; that would rather be a matter for philosophy, seen as a distinct discipline from science, or theology. By involving the intentions of the Demiurge, and offering a hypothetical account of how he might have shaped matter in line with his *a priori* goals of making it as καλός and rational as possible, Plato commits himself to a form of explanation which is, from our perspective, less scientific than those of other enquirers into nature.<sup>11</sup>

In addition, unlike modern scientists, Plato is positively averse to using mathematics to measure physical quantities or conduct tests. This is shown by Timaeus' remark at 68b6-8 that it is impossible to state the 'proportion' (μέτρον) between the different constituents of a colour, about which someone could not even give a probable account (εἰκῶς λόγος). As he illustrates at 68c-d, a probable account can be given of the colours which result from the mixture of other colours. No human, however, can actually put these claims about colour to the test (βάσανος), since only a god knows and is able to mix many (colours) into one and divide them up again (68d2-7).

The language of combination and division suggests a process parallel to that of the method of dialectic or 'collections and divisions' discussed in Chapter 2.<sup>12</sup> That Timaeus describes the constitution of the physical world in these terms underlines the rationality of its design. The implication, strange to a modern audience, is that, while humans have at least a

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<sup>10</sup> For the comparison between Aristotelian and Platonic teleology, see Lennox (2001).

<sup>11</sup> Barker (1994): 134-5, argues that 'the mathematics of which Plato approved had evaluative conceptions built into it'; cf. Netz (2002): 256-7.

<sup>12</sup> 68d4-6, θεὸς... τὰ πολλὰ εἰς ἓν συγκεραννύναι καὶ πάλιν ἐξ ἑνὸς εἰς πολλὰ διαλύειν ἰκανῶς ἐπιστάμενος ἅμα καὶ δυνατός.

chance of grasping the Forms through dialectic, there is little possibility that we may ever reach a similar depth of knowledge about the design of this world.<sup>13</sup> However, this does not matter, since the εἰκὼς λόγος only needs to give an account of the ἀναγκαῖον αἰτίας εἶδος, the necessary type of cause or explanation, in order for us to understand the divine (θεῖον) type of cause, which in turn we need in order to live happily (ἔνεκα εὐδαίμονος βίου).<sup>14</sup> Timaeus' remark at 69a2-5 that it is not possible to grasp the divine αἰτία without the necessary αἰτία must therefore be taken against the limitations which he has previously set on our ability to understand the god's arrangement of (necessary) matter. Thus the fundamental reason for studying the natural world, also alien to a modern audience, is as a precursor to gaining philosophical knowledge of the abstract realm of Being, through which to achieve the ethical end of the well-being of the soul.<sup>15</sup>

It is well recognised that the εἰκὼς μῦθος or εἰκὼς λόγος, by which Timaeus characterises his account of how the Demiurge created the cosmos and human beings, is a key concept for interpreting the relationship between natural phenomena and their explanation in the *Timaeus*.<sup>16</sup> Burnyeat has convincingly argued that εἰκὼς should be understood in the senses both of 'probable' and 'appropriate': Timaeus' account is likely to be the right account of why the Demiurge created the cosmos as he did, and also is, or at least strives to be, suitable and fitting to the 'rationality embodied by the Maker in the cosmos he produced'. The more the account is based on careful reasoning, the more it is probable that it is true. It cannot be more than probable, that is, it cannot be firm, stable and irrefutable, since its object,

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<sup>13</sup> Cf. Burnyeat (2005): 158-9, n. 32.

<sup>14</sup> 68e4-69a5.

<sup>15</sup> Cf. Steel (2001): 106-7; Netz (2002): 255-61. Lloyd (1968): 90-1, suggests that the teleological idea that the universe manifests order provided Plato with a motivation for enquiring into nature in the first place; cf. Hall (1965): 109.

<sup>16</sup> The main passage is *Tim.* 29c4-d3. The εἰκὼς μῦθος or εἰκὼς λόγος occurs again at 30b7; 48d2-3; 53d5; 55d5; 56a1, b4; 57d6; 59c6; 68b7, d2; 90e8. See further Johansen (2004): 48-68; Gloy (1986): 41-3; Atzpodien (1985): 101-10; Belfiore (1985): 52 ff.; Lloyd (1968): 81-2.

the visible cosmos, is itself only a resemblance or ‘likeness’ of the reality of Forms, which alone are unchanging and therefore explicable by a firm and unchanging account.<sup>17</sup> Timaeus’ account is a myth (μῦθος) in so far as it is a theogony in the tradition of Hesiod, narrating the birth of the divine cosmos; but it is also a rational account (λόγος) in that it is an appropriate reflection of the aims of a benign creator god.<sup>18</sup>

After Timaeus’ speech, Critias observes that audiences delight in speeches about heavenly and divine matters (such as those just discussed by Timaeus), even when they are not very probable: τὰ μὲν οὐράνια καὶ θεῖα ἀγαπῶμεν καὶ σμικρῶς εἰκοτα λεγόμενα.<sup>19</sup> It is easier, he claims, to appear eloquent when talking about the gods, because everyone suffers from ignorance (ἄγνοια) and a lack of experience (ἀπειρία) about them.<sup>20</sup> Similarly, in a painting, people are satisfied with approximate likenesses of objects in the distance and which they have little knowledge of, but are only satisfied with very good likenesses of human beings (107b5-d5). Indeed, he goes so far as to claim that with regard to paintings of such things as the heavens, people accept an ‘obscure and deceitful shadow-painting’, σκιαγραφία ἀσαφῆς καὶ ἀπατηλός.

Even if Critias is, out of competitiveness, particularly critical of Timaeus’ speech, his remarks offer another possible perspective for interpreting it. Firstly, speaking about τὰ οὐράνια καὶ θεῖα, such as Timaeus’ divine and divinely designed universe, satisfies an audience easily, because mortals do not know anything accurately (ἀκριβῆς) about such things (107c6-7). This applies not just to the heavenly bodies, but to all nature, γῆν καὶ ὄρη καὶ ποταμοὺς καὶ ὕλην οὐρανόν τε σύμπαντα καὶ τὰ περὶ αὐτὸν ὄντα καὶ ἰόντα, outside the

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<sup>17</sup> Burnyeat (2005): 146-56. With Timaeus’ ‘likely story’ compare *Phlb.* 59a7-b7; *Phdr.* 277d6-e3.

<sup>18</sup> Burnyeat (2005): 144-6, 151, with *Tim.* 40d-e on the lack of εἰκότες ἀποδείξεις in Hesiodic-style theogonies.

<sup>19</sup> *Critias* 107d6-7. The whole passage of his criticism runs from 107a7-d7.

<sup>20</sup> *Critias* 107b1-4; cf. Johansen (2004): 34-5.

pictorial depiction of human bodies, τὰ ἡμέτερα σώματα, and the spoken account of human affairs, τὰ θνητὰ καὶ ἀνθρώπινα.<sup>21</sup> Despite the analogy with the painting of human bodies, I assume that the inner workings of human bodies, such as the reproductive system discussed at the end of the *Timaeus*, should come under the category of natural phenomena and not of human affairs. This is because bodies are parts of the Demiurge's design which do not, unlike human actions, involve conscious moral choices, about which it is possible for us to make accurate decisions through dialectical knowledge of the Forms.

Critias thus warns us that any human audience is ill-equipped to judge the accuracy of Timaeus' speech. This is all the more so because the speech, like a painting, was a μίμησις or εἰδωλοποιία of the universe,<sup>22</sup> which itself is a μίμησις of the divine Form;<sup>23</sup> its accuracy, or closeness to the truth, is therefore additionally limited in virtue of being an imitation of an imitation.<sup>24</sup>

In analysing the ending of the *Timaeus*, I shall build on the above discussion of the status of Timaeus' account and Plato's attitude to the explanation of natural phenomena. Critias' warning about the necessary inaccuracies of accounts about the natural world raises the question of how far we should take Timaeus' account of the origin of animals at face value. Moreover, Critias assumes without further explanation that Timaeus' speech, through being a μίμησις of the universe, gives pleasure to its audience, even if it is improbable or inaccurate. It is worth dwelling on the pleasure of Timaeus' speech and its relation to the speech's aesthetic aspects.

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<sup>21</sup> The contrast is at 107c2-d8.

<sup>22</sup> *Critias* 107b5, b7, c2.

<sup>23</sup> *Tim.* 39e2.

<sup>24</sup> For artistic imitations as being at the third remove from ἀληθεία and φύσις (in the sense of the 'nature' of the Forms), see *Rep.* 597e3-8.

### 3.1.3 Beauty and pleasure in the *Timaeus*

In addition to its teleology, the *Timaeus* is distinguished from modern scientific explanations by the extent to which it treats nature poetically, in a way which does not simply instruct the reader but also reveals the aesthetic qualities of the perceptible universe and induces in the reader an appropriate attitude to it. The importance of the artistic qualities in Timaeus' account of the world is captured by Shorey in the two paragraphs of his cited in Section 3.1.1. The *Timaeus*, as Shorey well expresses it, is not a 'dry inventory of phaenomena', but a 'hymn' which 'thrills with a sense of the beauty of the cosmos'. It is important to connect this point back to the teleological nature of Timaeus' account: by attributing aesthetic qualities to the universe, Plato shows how its features are suggestive of an artistic design by a divine designer. As I will show with regard to its ending, there is a corresponding design and selectivity in Timaeus' account, both in terms of the order in which subjects are presented and in the amount of detail devoted to each. At the same time, as discussed in Chapter 2, Plato uses the artistic pleasure of καλοὶ λόγοι as an additional means of persuasion to arguments. Thus the beauty of Timaeus' account, through its imagery, allusiveness, ordering and poetic use of language, increases its aesthetic appeal to the reader, and therefore its persuasiveness.

In Chapter 2, I argued that the *Phaedrus* was conceived as a work of art which would give pleasure to the gods and philosophical mortals. Timaeus' speech is also intended to be κατὰ νοῦν θεοῖς, that is, to suit the gods' way of thinking or be approved by them (27c6-d1). It is appropriate that his speech should have the gods as its ideal audience, since it is an encomium of the cosmos which they have constructed. Its encomiastic nature is made clear at 92c7-9, where Timaeus concludes his speech by extolling the universe as μέγιστος καὶ ἄριστος κάλλιστός τε καὶ τελεώτατος. As an encomium, like Socrates' Palinode in the *Phaedrus*, Timaeus' speech is a rhetorical and poetic performance: he and Critias are poets in

a theatre before their audience.<sup>25</sup> Also like the *Phaedrus*, the *Timaeus* is self-consciously a pleasure composed in play.<sup>26</sup> The εικότες λόγοι of the world of becoming provide a ‘respite’ (ἀνάπαυσις) from accounts about the objects of Being (οἱ περὶ τῶν ὄντων λόγοι), which is the subject of serious philosophical investigation, and a ‘measured and sensible pastime’, μέτριος παιδιὰ καὶ φρόνιμος.<sup>27</sup>

At the same time, Timaeus is presented as an expert in φιλοσοφία ὅλασα,<sup>28</sup> making a didactic speech from which he expects his audience to learn; that is, to gain knowledge from his words.<sup>29</sup> This conflicts with the argument in the *Phaedrus* that only dialectic, and not rhetorical speeches, can impart knowledge to its audience. In examining the ending of the *Timaeus*, I shall consider how far Timaeus’ claims to teaching can be reconciled with his speech’s poetic and rhetorical nature, with the problems of knowledge raised by the status of the perceptible world, and with the idea that his speech is only a παιδιὰ.

## 3.2 Plato and the περὶ φύσεως ἱστορία

### 3.2.1 Plato’s treatment of the περὶ φύσεως ἱστορία outside the *Timaeus*: Introduction

Ancient philosophy from well before Plato developed polemically. Philosophers built on their predecessors’ work, but also attacked or rejected them through argument and rhetoric.<sup>30</sup>

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<sup>25</sup> *Critias* 108b3-7.

<sup>26</sup> See *Tim.* 17b2-4, with *Rep.* 354a10-b3; *Tim.* 20c5, 27b7-8. Plutarch saw the Atlantis story at the beginning of the *Tim.* as an important source of pleasure (*Non posse* 1093a).

<sup>27</sup> 59c5-d2. Bolton (1998): 108 (comparing *Apology* 23c), argues that this passage underlines the unsatisfactory nature and inaccuracy of Timaeus’ account; Johansen (2004): 64; *Plt.* 268d8-e6, where the Visitor offers an alternative method of explanation, through using παιδιὰ in a μῦθος (cf. Gregory (2000): 112).

<sup>28</sup> *Tim.* 20a1-5; cf. *Critias* 27a3-8.

<sup>29</sup> 27d2-4, τὸ δ’ ἡμέτερον παρακλητέον, ἦ ῥῶστ’ ἂν ὑμεῖς μὲν μάθοιτε.

<sup>30</sup> See Long (1999b): 17-8. Netz (2002): 251-2, observes that in ancient culture, philosophers were ‘rejected and ridiculed’ by their successors.

Empedocles, for example, was described by Theophrastus as an ‘emulator’ of Parmenides and the Pythagoreans; his fragments, abounding in quotations of Parmenides and other allusions to him, show ‘a deep preoccupation with Parmenides’ thought, both in what he denied and what he asserted’.<sup>31</sup> Aristotle thought that Leucippus had developed atomism as a critical response to Eleatic philosophy.<sup>32</sup> In Plato’s *Parmenides* (128b7-e4), Zeno’s book was written to support Parmenides’ argument against its critics.

In dealing with his predecessors, Plato follows the polemical tradition of the early enquirers into nature, under which I include both the philosophers before and contemporaneous with Socrates, and early writers on medicine. A key indication of how Plato treats his opponents is provided by his redefinition, or possibly introduction, of the concept of φιλοσοφία and the φιλόσοφος. Neither of these terms seems to have been used by philosophers prior to Socrates and Plato.<sup>33</sup> The construction of the φιλόσοφος in the *Phaedrus* as a figure defining Plato’s practices against those of the rhetoricians and poets was discussed in Chapter 2. It is in a similarly polemical spirit that he defines his view of the purpose of enquiry into nature against the theories of his predecessors in the *Timaeus* and elsewhere.<sup>34</sup>

The *Timaeus* has been interpreted as a ‘pastiche of Presocratic discourses on nature’, even, indeed, ‘the book to end Presocratic philosophy of nature’.<sup>35</sup> Its main opponents are all those thinkers who concerned themselves with enquiry into nature without espousing Plato’s teleological world view; among these, the most easily identifiable are the Presocratics, and

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<sup>31</sup> Theophrastus DK 31A 7; KRS: 281, 283.

<sup>32</sup> DK 67A 7, with KRS: 403-4, 406-9.

<sup>33</sup> Long (1999b): 3.

<sup>34</sup> Mueller (1998): 67, sees *Phd.* 95e7 ff. as the ‘earliest extended discussion’ of the criteria for a satisfactory explanation of physical phenomena.

<sup>35</sup> Netz (2002): 261-2, 256. Claghorn (1954): 124-5, argues that, in the *Tim.*, Plato comes to identify φύσις with νοῦς, thus making nature the ‘world of Reason’, and the rational natural.

writers on medicine, although some sophists may also be included.<sup>36</sup> Through an analysis of the ending of the dialogue, I shall develop the view of the *Timaeus* as a polemic to counter the early enquirers into nature and simultaneously to justify Platonic philosophy. Before doing this, however, I shall consider passages elsewhere in Plato in which the enquirers into nature are attacked.

Outside the *Timaeus*, Plato engages polemically with the early enquirers into nature in the *Phaedo* and *Laws*. At *Phaedo* 96a-99d, Socrates identifies thinkers whose accounts of the world disappointed him in his youth. Without going into the debate over the philosophical interpretation of this passage,<sup>37</sup> I shall consider some characteristics of Plato's portrayal of Socrates' opponents, and the scope of their enquiry, in dialogues other than the *Timaeus*. I shall argue that Plato consistently contrasts those whom he identifies as enquirers into nature with Socrates' and, implicitly, his own approach to nature. While the number of these opponents becomes increasingly broad and less tied to specific names in later dialogues, Plato repeatedly uses similar tactics against them. Having identified these tactics, I shall then show that they are at work again at the end of the *Timaeus*, where they serve both to criticise the early philosophers and to contrast their interpretation of the universe with Plato's own.

### 3.2.2 Plato and Parody

Several points of style and presentation serve to contrast Socrates' new approach to the study of φύσις, according to Plato's portrayal in the *Phaedo*, with that of his opponents, to imply their intellectual inferiority, and to replace their conceptions of the proper goal of enquiry

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<sup>36</sup> The sophist Hippias' studies included, in language similar to *Phd.* 96b9-c1, τὰ περὶ τὰ ἄστρα τε καὶ τὰ οὐράνια πάθη and γεωμετρία (*Hipp. Maj.* 285c1-3).

<sup>37</sup> For recent discussion, see Bostock (1986): 136-146; Bolton (1998); Mueller (1998); Sharma (2009); Menn (2010).

with his.<sup>38</sup> These include, firstly, an engagement with the philosophical ideas of Plato's predecessors, and secondly, a number of deliberate verbal links with the *Apology* and Aristophanes' *Clouds*. Both works are important for the *Phaedo*. The *Apology* is dramatically the second in the sequence of four dialogues dramatising Socrates' trial and execution, which culminates in the *Phaedo*, although the *Phaedo* seems to have been written later than the *Euthyphro*, *Apology* and *Crito*.<sup>39</sup> All four of these dialogues are defences of Socrates and justifications of his way of life. The *Apology* and *Phaedo* arguably engage with Aristophanes, particularly with his *Clouds*, in order to reverse his mockery of Socrates and the false impression of him which Plato implies it gave to the Athenian people.

In identifying Aristophanic allusions in the *Apology* and *Phaedo*, I follow Rashed's convincing analysis of the relation between these dialogues and Aristophanes.<sup>40</sup> Building on this, I shall argue that one aspect of Plato's treatment of the philosophers of nature is a refined type of parody, reminiscent of Aristophanic parody, but subtler, more sober, and without Aristophanes' crudeness.

As is well recognised, parody is a key feature of the comedy of Aristophanes and his contemporary comedians. The Greek term *παρωδή* has been explicated as 'something sung – or composed – conformably to an original but with a difference'; that is, which incorporates or imitates a source text to humorous effect.<sup>41</sup> One way in which parody operates is by the selective quotation of a source text from another genre inserted into an entirely new and often incongruous context. Another is by the imitation of selected features of a source, for example, style, language, scenes, or plot structure. The effect of parody *qua* parody will therefore

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<sup>38</sup> As in Ch. 2, I here treat Socrates as one of Plato's characters. Plato's depiction of the natural philosophers arguably has a logic of its own, independently of what the historical Socrates' views might have been; *pace* Cooper (2004): 90-1, with n.18, and Stockes (1997) *ad* 19c5-6.

<sup>39</sup> Cooper (1997): 49.

<sup>40</sup> Rashed (2009).

<sup>41</sup> Lelièvre (1954): 66, whose criteria I follow in the rest of the paragraph.

depend upon some degree of recognition by the audience of the foreign source introduced, in order to grasp the purpose of its adaptation and the contrast between the source and the parodic version.

Parody generates humour through the juxtaposition of the ‘vulgarity or trivial domestic predicaments’ of comedy with the serious or elevated language and content of its non-comic sources.<sup>42</sup> In addition, it can also ridicule or criticise a source by using such devices as misquotation or the exaggeration of certain features to reveal their strangeness. In its humorous or polemical purpose, and its clever variation on a source, it can be distinguished from pastiche, which is ‘the careful imitation of an original author without any attempt either to distort his style or to introduce original elements into it’.<sup>43</sup>

Tragedy seems to have been Aristophanes’ favoured target of parody, not least because of its immediate recognisability to its audience, and because he sometimes claims a didactic authority to vie with the tragedians’.<sup>44</sup> However, he also parodies other oral sources, including the mysteries,<sup>45</sup> written sources, including Homer,<sup>46</sup> and, particularly in the *Clouds*, the technical language of medicine, early philosophy, and literary criticism.<sup>47</sup>

In what follows, I shall consider how far Plato exploits these key parodic features of quotation and adaptation of a source text for the purpose of humour, criticism and emulation of those whom he labels as enquirers *περὶ φύσεως*. This forms part of the larger question which I shall attempt to answer, of what Plato’s attitude is to these philosophers and how his dialogues prompt us to react to them. In the *Phaedo*, Plato combines parody of the types of

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<sup>42</sup> Dover (1972): 73.

<sup>43</sup> Lelièvre (1954): 67-68, 74-77.

<sup>44</sup> For Aristophanes’ parody of tragedy, in particular Euripides, see Nesselrath (1993): 185-187. On the authority of poetry, see *Frogs* 686-7 with 1054-5.

<sup>45</sup> Heath (1990): 155.

<sup>46</sup> For parody of Homer in the *Acharnians*, see Olson (2002), *ad* 1171-3.

<sup>47</sup> On technical language in the *Clouds*, see Dover (1968): xxxv-xlii. On Aristophanes’ treatment of his rivals, see Murphy (1972); Heath (1990).

explanations used by the early philosophers with allusions to Aristophanic parody of them and to the allusions to Aristophanes in the *Apology*. At the end of the *Timaeus*, Plato uses parody in an Aristophanic spirit without allusions to Aristophanes as such. For comparison, I shall look ahead to another, less humorous treatment of the theme of enquiry into φύσις at *Laws X*.

### 3.2.3 Plato's treatment of the *περὶ φύσεως ἱστορία* outside the *Timaeus*: Key passages

#### 3.2.3.1 The *Apology*

Although other comic poets had satirised Socrates, Aristophanes is Plato's particular target in the *Apology*.<sup>48</sup> At *Apology* 18b6-c1, Socrates says he is accused of being a σοφὸς ἀνὴρ, τὰ τε μετέωρα [φροντιστῆς] καὶ τὰ ὑπὸ γῆς πάντα ἀνεζητηκῶς καὶ τὸν ἥττω λόγον κρείττω ποιῶν.<sup>49</sup> This charge is repeated at 19b4-c2: Socrates, according to his accusers, ἀδικεῖ καὶ περιεργάζεται ζητῶν τὰ τε ὑπὸ γῆς καὶ οὐράνια καὶ τὸν ἥττω λόγον κρείττω ποιῶν καὶ ἄλλους ταῦτα ταῦτα διδάσκων.

'Making the weaker argument the stronger' is immediately recognisable as coming from the *Clouds*, where it is associated with the teaching of Socrates' school; even if Aristophanes' Socrates may have been inspired by sophists such as Gorgias at least as much as by the real Socrates.<sup>50</sup> So too is the study of the sun and heavenly bodies: at *Clouds* 225-233, Socrates claims to study τὰ μετέωρα πράγματα. He also gives a parody of a natural philosophical explanation as to how his thought functions better when he is raised in a basket than down on the earth. The effect of this explanation, and Strepsiades' misunderstanding of it, is to highlight both the latter's ignorance and the outlandishness of such philosophical

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<sup>48</sup> As hinted at *Apology* 18c9-d1, and indicated explicitly at 19c2-3.

<sup>49</sup> Stockes (1997) *ad loc.* argues that φροντιστῆς is a learned interpolation. If so, it is an Aristophanic one, appearing at *Clouds* 266, 414, 456 (of the students at the Phrontisterion), and 1039.

<sup>50</sup> *Clouds* 112-5; Stockes (1997) *ad* 18b6-c1. For a survey of the influence of rhetoric on Aristophanes, see Murphy (1938); cf. Porter (2003).

theories, without necessarily relying on the audience to identify the precise philosopher being mocked.<sup>51</sup> Thus Plato's allusion to Aristophanes' parody is, in a reversal of the latter, serious in tone, since it implies that Aristophanes' indiscriminate confusion of Socrates with the natural philosophers contributed to the public's ultimately fatal misperception of him.

In its two occurrences in the *Apology*, Plato draws attention to the Aristophanic, fictional origin of the topos of the 'study of heaven and earth', that is, enquiry into nature, presented directly as a charge against Socrates. That this charge was serious, as being commonly associated with atheism, is underlined by *Apology* 18b7-c4, where people who study the heavens and earth are said to be considered not to believe in the gods. Socrates himself goes so far as roundly to deny all understanding of such enquiries, and even that he has ever discussed them in conversation: ὧν ἐγὼ οὐδὲν οὔτε μέγα οὔτε μικρὸν περὶ ἐπαῖω (*Apology* 19b5-d8).<sup>52</sup>

### 3.2.3.2.i. Enquirers into nature in the *Phaedo*

In the *Apology*, Plato is primarily concerned to reject Socrates' identification with the natural philosophers, as implied by the *Clouds*. In the *Phaedo*, Plato's treatment of the natural philosophers involves a deliberate policy of opposition and disparagement, at the levels both of philosophical argument and poetic parody in an Aristophanic spirit.

At *Phaedo* 96a-99d, Plato subtly but carefully distances Socrates, as he develops philosophically, from his predecessors. At 96b9-c1, Socrates, in his capacity as enquirer into nature, is presented as σκοπῶν ... τὰ περὶ τὸν οὐρανὸν τε καὶ τὴν γῆν πάθη. These are the last

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<sup>51</sup> Diogenes of Apollonia, although unmentioned in the *Apology*, was 'undoubtedly the source of Socrates' remarks' at *Clouds* 227-233 (KRS: 450). For Diogenes' theory of moisture (ικμάς) inhibiting thought, see *ibid.*, 448-9.

<sup>52</sup> ὧν refers here to the study of things in the heaven and earth, Socrates' travelling upon air, and other such φλυαρία.

of the subjects which he lists as having interested him before he became baffled by them. In terms of Socrates' supposed autobiography, their position is to underline his amateurishness and lack of serious interest in them.<sup>53</sup>

That the *Phaedo* was written somewhat later than the *Apology* is indicated not least by the fact that, in contrast to the latter, Socrates in the *Phaedo* presents himself as an eager student of matters about heaven and earth, until he becomes confused and disillusioned with them.<sup>54</sup> It is certainly true that, given the context, Socrates might feel more comfortable admitting a youthful interest in things of heaven and earth among his friends than he did in a hostile courtroom. In pedagogical terms, his admission of having such an interest when young (*νέος*) before changing tack also provides guidance to youthful readers who might still be tempted by the attractions of natural philosophy. However, Plato also uses the narrative structure of Socrates' youthful and short-lived attraction to the natural philosophical to reveal what Plato sees as its failings. In this light, the reference in the *Phaedo* to Aristophanes' charge against Socrates underlines the latter's distance from this charge as a mature philosopher, indicates that he alone is capable of learning from his mistakes, and anticipates the true culprits of this charge, whose theories about the heaven and earth he will briefly discuss: Anaxagoras and other natural philosophers and sophists.<sup>55</sup>

The natural philosophers who attracted the young Socrates are interested in the *περὶ φύσεως ἱστορία* (96a7). The description of this as a type of σοφία,<sup>56</sup> in light of Socrates' later disappointment with his predecessors, is a typical Platonic irony. Socrates attributes the phrase *περὶ φύσεως ἱστορία* to some unnamed 'they' who call it so (*καλοῦσι*). As it stands, however, it could just as well be a Platonic coinage out of Heraclitean and Herodotean

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<sup>53</sup> For different views, see Burnet (1911) *ad* 96b9; Sedley (2007): 89.

<sup>54</sup> Ἐγὼ γάρ... νέος ὢν θαυμαστῶς ὡς ἐπεθύμησα ταύτης τῆς σοφίας, 96a5-6.

<sup>55</sup> Sophists such as Hippias: Stokes (1997) *ad Apol.* 18b6-c1.

<sup>56</sup> Cf. Lloyd (1966): 12.

ἱστορίῃ and the probably fifth-century tradition of works περὶ φύσεως.<sup>57</sup> Either way, the fact that Socrates emphasises that it was when he was young that he was interested in the περὶ φύσεως ἱστορία indicates that it is to be contrasted with his own type of enquiry; and therefore that all the theories listed under natural enquiry are to be seen as one group in opposition to his own.

Socrates characterises the περὶ φύσεως ἱστορία as incorporating a variety of questions to do with the αἰτίαι or ‘explanations’<sup>58</sup> of each thing, on account of which it comes to be (γίγνεσθαι), perishes (ἀπόλλυσθαι) and is (εἶναι). The importance of this trio of areas of explanation for his enquiry is emphasised by their repetition as a group at 97b5 and 96c7. The questions περὶ φύσεως which he lists include whether creatures, ζῷα, are generated from putrefaction (σηπεδών), and whether we think with blood, air or fire, or whether the brain is responsible for perception, memory, opinion and knowledge (96b2-9), as well as the ceasing-to-be (φθορά) of these things and the state of the heaven and earth. It seems likely that all these questions had precedents in early philosophy. The question of how living things are generated may have been raised by Archelaus.<sup>59</sup> Empedocles seems to have identified thought with blood,<sup>60</sup> while Diogenes of Apollonia identified it with air (ἀήρ);<sup>61</sup> Heraclitus made the soul fiery.<sup>62</sup> The idea of the brain as the centre of perception may have been proposed by Alcmaeon and the Hippocratics.<sup>63</sup>

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<sup>57</sup> Περὶ φύσεως may have been the title of one of the works of Diogenes of Apollonia: KRS: 435-7. Its first surviving use as a formula, in the phrase περὶ φύσιος τῶν ἀπάντων, is in the *Dissoi Logoi*, datable to c.400 BC (Schmalzriedt 1970: 84).

<sup>58</sup> For convenience, I shall use ‘cause’ to translate αἴτιον and αἰτία in the following paragraphs. On these terms in the *Phd.*, see Mueller (1998); Lennox (2001): 282; Sharma (2009).

<sup>59</sup> Rowe (1993) *ad* 96b2-3.

<sup>60</sup> KRS, §392-4; Rowe (1993) *ad loc.*

<sup>61</sup> On Diogenes’ view of air: KRS: 441-5; Rowe (1993) *ad loc.*

<sup>62</sup> KRS: 202-5; cf. Rowe (1993) *ad loc.*

<sup>63</sup> Burnet (1911) *ad* 96b5; Rowe (1993) *ad* 96b4-8.

The unclear status of Socrates' youthful beliefs about similar questions, his maturer objections to them (96c8-97b7), and their difficult relation to previous philosophical thought, has sparked controversy.<sup>64</sup> In terms, however, of allusions to predecessors, his interest in bodily growth and his explanation in terms of flesh and bones (σάρκες and ὀστᾶ) is reminiscent of Anaxagoras' theory of ὁμοιομέρεια, and thus prepares for Anaxagoras' named appearance at 97b8-c1.<sup>65</sup> Socrates' autobiography as a whole provides an abbreviated, selective survey of enquiries into nature prior to him, which does not make subtle distinctions between the different positions or the names of the philosophers representing them.<sup>66</sup> Rather, he subsumes all of them under the title of 'enquiry into nature', as it is in his rhetorical interest to do, since it heightens the contrast of their common τρόπος τῆς μεθόδου with his own new τρόπος (97b5-7).<sup>67</sup> The latter phrase suggests that the subject matter of Socrates' predecessors' enquiries into nature is problematic because it employs the wrong method. However, it will appear that the subject and the method are closely linked.

From 97b8 onwards, Socrates contrasts what he had hoped for from Anaxagoras with the disappointing reality. Anaxagoras' νοῦς is ὁ διακοσμῶν τε καὶ πάντων αἴτιος (96c2); as the cosmic ordering cause, it must organise everything for the best (96c5-6).<sup>68</sup> From the perspective of the sort of teleological account developed in the *Timaeus*, this is a promising start.<sup>69</sup> Socrates ironically thinks that he has found a suitable 'teacher of the explanation about things which are', διδάσκαλος τῆς αἰτίας περὶ τῶν ὄντων (97d6-7). However, already in this Platonic terminology of τὰ ὄντα – things which really exist, like the Forms, rather than

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<sup>64</sup> See recently Menn (2010), who calls Socrates' criticisms of Anaxagoras the '*locus classicus* for teleological objections' to materialism (38); Sedley (2007): 86-92.

<sup>65</sup> Rowe (1993) *ad* 96d1-5; Burnet (1911) *ad* 96d1; for ὁμοιομέρεια, see KRS: 374-8.

<sup>66</sup> On the ancient practice of alluding to one's opponents without naming them, see Netz (2002): 262.

<sup>67</sup> On these different methods, see Mueller (1998): 101-6.

<sup>68</sup> Anaxagoras uses the verb διακοσμεῖν of the divine νοῦς in fr. 12.

<sup>69</sup> On differences between the account Socrates hopes for in the *Phd.*, and that in the *Tim.*, see Mueller (1998): 88; Bolton (1998): 106-8.

which are merely in a state of becoming and perishing, like the constituents of φύσις – Anaxagoras’ pedagogic failure is assured. Anaxagoras’ book dashed Socrates’ hopes by explaining things not in terms of an ordering νοῦς, but in terms of air, aether, water and many other ἄτοπα, ‘strange things’ (98b7-c2); these elements, as we have seen, were used not just by Anaxagoras, but by many of the other early philosophers.<sup>70</sup>

Socrates complains that the type of explanation used by Anaxagoras (and, by extension, the other natural philosophers) would be no better than explaining why he is sitting in the prison and not running away in terms of the operation of his ὅστ᾽α καὶ νεῦρα (98c5-d6, 99a5-7):<sup>71</sup> that his body consists of bones and tendons, whose arrangement and various properties are the ‘cause’ (αἰτία) of his sitting with his legs bent. This relatively detailed account anticipates the explanations in the *Timaeus* of such things as the male seed (91ab, below), although, as the explanation of Socrates’ materialist opponents, it makes no mention of divine purpose. An Anaxagorean type of explanation would, Socrates claims, also explain his conversation with his friends in terms of sound, air, hearing and ἄλλα μυρία τοιαῦτα (98d6-8). The very description of these causes as μυρία, ‘countless’, implies a negative judgement in the Platonic value system, where unity and singleness, as of the Forms, is considered good in itself. This is further suggested by the implicit contrast between these countless causes and the single true cause, the αἴτιον τῷ ὄντι (99b3).

At the same time, Socrates’ contrast between explanation in terms of natural causes and in terms of his conscious moral decision of the right action to take suggests that it is not

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<sup>70</sup> For air, see Anaximenes, cit. KRS: 144-162; for water, Thales, *ibid.* 88-91. On the function of Anaxagoras’ νοῦς in his physical system, see KRS: §476, 477, 478, with pp. 362-5, 371-4. On the difference between νοῦς in Anaxagoras and the *Phd.*, with Aristotle’s criticism of Anaxagoras at *Met.* 1.4, 985a18 see *ibid.*, pp. 374, 441. Diogenes of Apollonia may have postulated a divine νοήσις controlling the universe; cf. Solmsen (1960): 16; KRS: 440-1; Sedley (2007): 75.

<sup>71</sup> Aristotle, *PA* I.640b4-641a16 (with Balme 1972: 87), criticises Empedocles, Anaxagoras and Democritus for speaking only of material and not formal causes. His reference to discussion περὶ σαρκὸς καὶ ὀστοῦ καὶ αἵματος (640b19) suggests he had the criticism of the *Phd.* in mind. Empedocles had offered an account of the creation of bones, blood and flesh: KRS, §373-4. Sedley (2007): 60-62, sees Empedocles’ account as involving ‘intelligent design’ by Love at the stage of these initial ‘components’, but not in their later combination.

only the method of Anaxagoras and the others that Plato is criticising, but actually the subject matter of natural enquiry, because things such as bones, sinews and even the shape of the earth are fundamentally not of interest in themselves, but only, if at all, as illustrations of the manner in which the divine intelligence operates in the universe.<sup>72</sup> What is important, ultimately, is soul, at the cosmic and individual level, as the myth at the end of the *Phaedo* implies.<sup>73</sup> A similar idea is expressed at *Philebus* 28d-30d: the only account to do justice to the heavens, Socrates claims, is to say that reason orders all for the best.

The πολλοί, Socrates continues, have an incorrect conception of what the explanation of natural phenomena should involve. One of them surrounds the earth with a vortex, δίνη, and makes the earth stay still supported by the heavens, while another puts the air underneath to support the earth, as if the latter were a flat kneading trough (99b6-c1). Previously, Socrates had hoped that Anaxagoras' book would tell him whether the earth was flat or spherical, and whether it was in the middle of the universe, as well as about the sun, moon and other stars, and about their speeds, turnings and other conditions (98a2-7); but these answers would only have been satisfactory if they had explained why it was best for these things to be the way they were described, as in fact they had not (97d8-98a1, 98a7-b6).

These topics can all be paralleled by the theories of Plato's predecessors. Anaxagoras, Archelaus and other Ionians were among those proposing a flat earth; the Pythagoreans before Plato's time may have thought it was spherical.<sup>74</sup> That the earth was in the middle of the universe was also claimed by Anaxagoras and Archelaus; the atomists considered there to be an indefinite number of world systems within an infinitely large

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<sup>72</sup> On Socrates' criticisms of Anaxagoras in the *Phd.* and different senses of αἰτία, see Vlastos (1969): 291-6, 318-325.

<sup>73</sup> Cf. Menn (2010): 62.

<sup>74</sup> Burnet (1911): 97d8.

universe.<sup>75</sup> Among numerous early theories about the heavenly bodies, Plato reports at *Cratylus* 409a that Anaxagoras and his followers explained the light of the moon in terms of reflections from the sun. Heraclitus may have claimed that the sun was new each day.<sup>76</sup> The theory of the δίνη surrounding the earth may have been Empedoclean; Empedocles included a δίνη in his cosmogony as the initial force by which the four elements were separated.<sup>77</sup> The idea of the air supporting the earth underneath was proposed, according to Aristotle, by Anaximenes, Anaxagoras, and Democritus.<sup>78</sup>

Plato thus displays a broad knowledge of the variety of paths of enquiry into the natural world among his predecessors. It is not his intention, however, to do them the honour of discussing their theories judiciously or at length, even if, as has been argued, he ‘carefully selects and arranges the materials of Presocratic thought so as to recommend a radically new philosophical enterprise’.<sup>79</sup> Rather, Anaxagoras becomes the representative and scapegoat for all Plato’s opponents in natural philosophy. Plato thus links the *Phaedo* with the *Apology*, hints, far from justly, that all natural enquirers who do not involve teleology in their explanations are budding atheists, and reveals his ongoing interest in Anaxagoras, as the exemplar of a thinker who saw the need for νοῦς and then rejected it at the critical stage in his account, because he was distracted by explaining nature in terms of physical processes.<sup>80</sup>

At 99b4-c1, Plato explicitly identifies the proposers of all such physical explanations as part of the ignorant many. The many (οἱ πολλοί), Socrates says, are ‘groping about in the dark’, ψηλαφῶντες ὥσπερ ἐν σκότει, because they are not trying to explain the state of the

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<sup>75</sup> KRS: 413-5; Burnet (1911): 97e3.

<sup>76</sup> Heraclitus, fr. 6 Robinson (1987), with commentary (79).

<sup>77</sup> Aristotle, *Cael.* 300b2-3, 295a29; Democritus also mentions a cosmic δῖνος, fr. 167; KRS: 296-9; Rowe (1993) *ad* 99b6.

<sup>78</sup> Aristotle, *Cael.* 294b13-17=DK13A20= KRS, §150. Cf. Rowe (1993), *loc. cit.*

<sup>79</sup> Sharma (2009): 175, on *Phd.* 96d-97b.

<sup>80</sup> Plato implicitly mocks the opening to Anaxagoras’ book at *Gorg.* 465d4-5; Anaxagoras’ νοῦς is mentioned at *Crat.* 413c4-d1, 400a8-10.

world teleologically. This is a strong criticism of all those thinkers who represent the vortex or flat-earth views which Socrates then gives as examples of this groping in the dark.<sup>81</sup> Socrates had described himself as ‘blinded’ (ἐτυφλώθη), by his enquiries into nature at 96c6; the echo of this image in ψηλαφῶντες ὥσπερ ἐν σκότει underlines the point that while Socrates has grown out of these futile reflections, none of his predecessors ever did.<sup>82</sup>

### 3.2.3.2.ii. Elements of Aristophanic parody in the *Phaedo*

So far we have seen how Plato’s selective adaptation of the early philosophers distances them from his and Socrates’ philosophical interests. His use of them is complicated further by references not just to Aristophanes’ portrayal of Socrates in the *Apology*, but to Aristophanic comedy directly. Firstly, the phrase ψηλαφῶντες ὥσπερ ἐν σκότει echoes Aristophanes’ *Peace* (690), ἐψηλαφῶμεν ἐν σκότῳ τὰ πράγματα,<sup>83</sup> which refers to the Athenians’ running their city through ignorance and hazard. This echo suggests that the theories of the natural philosophers are no better than the hash of affairs made by comic characters, or also, perhaps, by the real Athenian democracy, of which Plato was no supporter.

The allusions to Aristophanes, specifically to the *Clouds*, continue in the lines which follow. The δίνη at 99b7 echoes the Δῖνος which Aristophanes’ Socrates claims is to be worshipped instead of the Olympians, whose existence he denies.<sup>84</sup> When Plato describes the air supporting the earth from underneath, ὥσπερ καρδόπῳ πλατεία, this comparison recalls

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<sup>81</sup> Rowe (1993) *ad* 99b4-6: ‘the nonchalant ὁ μὲν τις..., ὁ δὲ... itself [of the supporters of the vortex and flat-earth theories] reduces Empedocles and the rest to mere faces in the crowd’.

<sup>82</sup> On the similar idea of ‘fighting with shadows’ (σκιαμαχεῖν) as a metaphor for a vain pursuit, see *Apology* 18d6; *Rep.* 520c7-8.

<sup>83</sup> The parallel was noted by Burnet (1911) and Rowe (1993), *ad* 99b4.

<sup>84</sup> See *Clouds* 379-81, 828, 1471.

the discussion of the κάρδοπος at *Clouds* 669-680.<sup>85</sup> Commentators have been hesitant to see significance in this connection, because the discussion in the *Clouds* concerns the gender of κάρδοπος and apparently has nothing to do with physical speculation.<sup>86</sup> However, the comically pedantic length at which κάρδοπος was discussed in the *Clouds* would surely have given it long-lasting Aristophanic colouring, especially to as sensitive a user of words as Plato. The association is additionally relevant in the *Phaedo*, since it is a dialogue with a number of Aristophanic references and with close connections to the *Apology*, in which Aristophanes' version of Socrates is explicitly set against Plato's.<sup>87</sup> Finally, the banality of the image of the earth as a κάρδοπος recalls the Aristophanic caricature of Socrates as a vulgar charlatan and pseudo-sage.<sup>88</sup>

The cumulative effect of these Aristophanic allusions in the *Phaedo*, woven into Plato's presentation of his predecessors' natural philosophy, is to correct Aristophanes, by presenting these thinkers and not Socrates as the most appropriate target of comic parody.<sup>89</sup> The allusions also illustrate Plato's propensity to add a touch of humour to the criticism of his opponents and so soften the tone, although not the sting, of his attack. It is very difficult to discern, however, between the ridicule, even flippancy, of these allusions, and the serious philosophical criticisms which some scholars have identified in the passage, what attitude exactly Plato is encouraging us to take towards Anaxagoras and the others. To shed light on this, I shall now consider some further connections between the *Phaedo* and *Apology*, and, in the next section, *Laws X*.

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<sup>85</sup> Cf. *Clouds* 1248-58.

<sup>86</sup> Rowe (1993), Burnet (1911) *ad* 99b6. Rowe notes that κάρδοπος also appears at *Frogs* 1159, in a linguistic discussion between Euripides and Dionysus.

<sup>87</sup> See Rashed (2009): 122 ff.

<sup>88</sup> Plato's preoccupation with Aristophanes' mockery of Socrates is underlined by his portrayal of Aristophanes at *Sym.* 221b3-4, where he cites *Clouds* 362.

<sup>89</sup> Netz (2002): 256, argues that by the time of the *Clouds*, 'philosophical discourses about nature' were a 'recognisable genre'.

In the *Apology*, when Meletus accuses Socrates of denying the divinity of the sun and moon, and claiming that the sun is stone, the moon earth (26d1-5), Socrates replies that these λόγοι are not his own, but rather, τὰ Ἀναξαγόρου βιβλία are full of them (26d6-e3).<sup>90</sup> Young men (νέοι) can buy Anaxagoras' book or books for a drachma from the Orchestra.<sup>91</sup> The ideas which these writings contain are ἄτοπα; Socrates would deserve mockery if he claimed them for his own (26d10-e2). At 27e1, ἄτοπον is used of an argument contrary to obvious experience, within an argument that Socrates believes in the gods. At 31c4, he admits that his behaviour might seem ἄτοπον to outsiders, but has a good explanation (ironically, his far from normal 'divine sign'). The same adjective occurs again of Anaxagoras' theories, this time specifically of his physical explanations, at *Phaedo* 98c2, and again at 99a5, not specifically of Anaxagoras, but of his type of explanation, where to call one's bones and sinews αἴτια is 'too strange' or 'absurd', λίαν ἄτοπον.

Thus in both dialogues, ἄτοπος is used critically, of strange and misguided theories to which Socrates does not subscribe. In the *Apology*, Socrates uses ἄτοπος to emphasise that his reputation for being outlandish is misplaced, and to contrast himself with Anaxagoras, who, he implies, would have been a better target for Aristophanes. In the *Phaedo*, however, Anaxagoras is only one of an indefinite number of proponents of ἄτοπα, even if his views about νοῦς are particularly worthy of comment. This again indicates the shift of emphasis in the *Phaedo*, from a rhetorical defence of Socrates against his opponents to a broader consideration of why all those who approach nature like Anaxagoras are misguided. This brings with it a corresponding shift in perspective, from Socrates' presentation in the *Apology*

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<sup>90</sup> On Anaxagoras' denial of the divinity of the sun and moon, and his influence on Athenian thought, see Woodbury (1981), esp. 300; Gregory (2000): 28.

<sup>91</sup> The Orchestra was in the Agora; this suggests a pun on 'Anaxagoras' (Stokes 1997 *ad* 26d9-e3). Stokes suggests that a drachma would have been too expensive for a labourer, but affordable by the sort of wealthy young men following Socrates (*Apol.* 23c3); cf. KRS: 356-7. It is debated whether Anaxagoras wrote more than one book, as βιβλία suggests, and τὰς βίβλους at *Phd.* 98b4; KRS: 355-357.

as an ἄτοπος outsider among a hostile Athenian audience,<sup>92</sup> to the early philosophers' presentation in the *Phaedo* as themselves outsiders in relation to Socratic-Platonic doctrine.

In the *Apology*, Anaxagoras' books are suspicious because they are identified with the dangerous doctrines of its author, and are easily available. The *Phaedo* hints at something problematic about the very nature of knowledge from books. Firstly, they are deceptive. When Socrates first hears 'someone' reading one of Anaxagoras' books out,<sup>93</sup> he thinks it will solve his problems about explanation (97b8-98b6). However, when he reads on, he realises that he has misinterpreted Anaxagoras, and that the latter's ideas of explanation are not what he had anticipated (98b7 ff.). Secondly, books can propagate false perceptions of the world to people too young to understand them, and thus more likely to be corrupted by them; this is implicit in the *Apology* (26d9). At the same time, the emphasis on Anaxagoras' book may be another allusion to Aristophanes, given the number of book-related jokes in his plays.<sup>94</sup> This would support the redirection of the Aristophanic caricature from Socrates to Anaxagoras. Aristophanes' association of books with intellectuals, particularly Euripides,<sup>95</sup> suggests another reason why Plato might have been particularly keen to distance book-knowledge from Socrates in the *Apology*, while in the context of the *Phaedo*, since Socrates is on the attack rather than the defensive, it is more rhetorically effective to show him having rejected Anaxagoras' book only after having read it.

Although Socrates was immune to the charms of Anaxagoras, other young men in his position may not have been. The implicit moral criticism is enhanced by Socrates' speaking of Anaxagoras as a teacher in the *Phaedo* (97d6-7). Teaching, as Plato frequently makes

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<sup>92</sup> Cf. *Gorg.* 493c4.

<sup>93</sup> Burnet (1911) *ad* 97b8, suggests that τις may refer to Archelaus, who was meant to have been Anaxagoras' disciple and Socrates' teacher (KRS: 385).

<sup>94</sup> Denniston (1927): 117-8.

<sup>95</sup> Cf. Denniston (1927): 118. Aristophanes regularly mocked Euripides for his books: Casson (2001): 22-3.

clear, is a serious responsibility. That Anaxagoras' books cannot teach the type of explanation which Socrates is looking for in the *Phaedo* implies that they are failures as teaching; more truly so, we are surely meant to understand, than the Socrates accused of 'teaching' blasphemous doctrines in the *Apology* (19c2). At *Phaedo* 99c7, in implicit contrast with his earlier description of Anaxagoras as a teacher, Socrates says that he would very gladly become the μαθητής of anyone who taught the sort of αἰτία he is interested in. This further emphasises Anaxagoras' failure, while suggesting a possible future natural philosophical project, not to be undertaken by Socrates, which would replace Anaxagoras'.<sup>96</sup> The myth at the end of the dialogue (107d-115a), if it does not give an αἰτία for why things are as they are for the best, should perhaps be read as Socrates' display of his understanding not so much of geography as of the survival and judgement of the soul after death. The myth also underlines his piety, by showing him confident in the survival of the soul after death.<sup>97</sup>

### 3.2.3.3 *Laws* X.885b-910d

While the idea of the corrupting potential of natural philosophy remains implicit in the *Phaedo*, it is set out explicitly at *Laws* X.885b-910d. This contains a long attack on atheists, among whom Plato implies all previous enquirers into nature should be included, as well as other disbelievers in the gods' goodness and justice. The tone of the main speaker, the Athenian, is much more aggressive towards the atheists than attacks on the natural philosophers in previous dialogues; this is in line with the more dogmatic tone of the *Laws*.<sup>98</sup>

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<sup>96</sup> There is a sardonic reference to Anaxagoras at *Phdr.* 269e4-270a9 as Pericles' teacher about the φύσις νοῦ τε καὶ ἀνοίας (Hackforth 1972: 150-1).

<sup>97</sup> See further Annas (1982a): 125-9; Vlastos (1969): 323 with n.84; Sedley (2007): 93-95.

<sup>98</sup> Cf. Chapter 2. For the Athenian's anger with the atheists, see *Leg.* X.886d-887a, 887c-888a.

At *Laws* 886b-d, the Athenian claims that atheism is incited by certain λόγοι contained in writing, both in metre and without metre.<sup>99</sup> The ancient writings among them begin with the coming-into-being of ἡ πρώτη φύσις οὐρανοῦ τῶν τε ἄλλων, and from there proceed to the θεογονία, the creation of the gods; a term no doubt deliberately reminiscent of Hesiod's poem of that title.<sup>100</sup> The Athenian is hesitant to criticise such works, on account of their venerable age, but is still suspicious of them, presumably because they begin with a φύσις and emergence of the universe before the gods. He is far more direct in his attack on the αἴτια, the term in the *Phaedo* for 'explanations' of the universe, which are given by his contemporaries, the νέοι καὶ σοφοί (886d3-4). Here, νέοι, in alluding back to the discussions in the *Phaedo* and *Apology*, carries the double sense of 'contemporary' and 'young', suggesting either that these writers are young, or that they are capable of corrupting the young, or are themselves already corrupted. Σοφοί, like σοφία at *Phaedo* 96a6, is distinctly pejorative. By using this term for the early thinkers and their supporters, rather than φιλόσοφοι, here as in the *Phaedo* and other dialogues, Plato draws a clear line between his thought and theirs.<sup>101</sup>

Clinias has previously adduced the earth, sun, stars, the whole universe, and the order of the seasons with its years and months, as obvious evidence for the existence of the gods (886a3-7). What is most pernicious about these νέοι, says the Athenian, is that those who are persuaded by them, that is, through their writings, will say that the heavenly bodies and the earth are not gods but earth and stones (γῆ τε καὶ λίθοι), incapable of caring for human affairs (886d5-e3). This description of the heavenly bodies in these exaggeratedly

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<sup>99</sup> Οἱ μὲν ἔν τισι μέτροις, οἱ δὲ καὶ ἄνευ μέτρων (886c1-2).

<sup>100</sup> Mayhew (2008): 66.

<sup>101</sup> Nonetheless, later philosophers continued to use φιλοσοφία for their enquiries, which included physical explanations of the type of which Plato disapproved. For the Presocratics at *Theaet.* 152c8-e9, *Sophist* 242c8-243b1, and *Meno* 76c4-e6, see Ch. 1. On Aristotle's distinction among mythical thinkers (*Met.* 14, 1091a29-b3), see Mansfeld (2000): 344.

simplistic terms is reminiscent of Meletus' charge against Socrates at *Apology* 26d4-5, which Socrates attributed specifically to Anaxagoras, while the emphasis on written works and their association with spreading corrupting ideas is a stronger version of the presentation of Anaxagoras' book in the *Apology* and *Phaedo*, and thus appropriate to the more aggressively polemical context.<sup>102</sup>

The claim which the Athenian attributes to the atheists is that the primary substances, the four elements of fire, water, earth and air,<sup>103</sup> exist due to φύσις and τύχη, but not to τέχνη (889b1-3).<sup>104</sup> From the random motion of these ἀψύχα σώματα, without a god or design, but according to the bodies' combination of such properties as hot and cold, wet and dry, soft and hard,<sup>105</sup> the earth, sun, moon, stars and heavens were created, and later the seasons and all animals and plants (889b3-c8). Such beliefs inevitably produce immorality and lawlessness, the Athenian claims, because if τέχνη is considered secondary to nature, human laws are conventional rather than natural, which leads to moral relativism and a Calliclean or Thrasymachean rule of the stronger (889d-890a).

The *Laws* thus shows a further development of the theme of enquiry into φύσις begun in the *Apology* and *Phaedo*. While the *Apology* focuses on Anaxagoras as natural enquirer and the *Phaedo* alludes to the doctrines of others in addition to his, the *Laws* gives a much more simplified and schematic characterisation of the unnamed atheists' theory of nature to be replaced by the Athenian's own. Indeed, both the structure and content of the account of the heavenly bodies, animal life and the products of τέχνη, which is presented as a

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<sup>102</sup> Zuckert (2004): 375-6, argues that the attack on the atheists in the *Leg.* is directed against 'pre-Socratic philosophers like Archelaus...and Anaxagoras'.

<sup>103</sup> The theory of the four elements or 'roots' is attributed to Empedocles, but was also incorporated into the monistic theory of Diogenes of Apollonia (KRS: 438-9).

<sup>104</sup> Cf. Gregory (2000): 20. In ancient medicine, τύχη and φύσις were contrasted with τέχνη: Schiefsky (2005): 6-10.

<sup>105</sup> For similar pairs of opposites among the early philosophers, see KRS: 442-3 (Diogenes of Apollonia); §338-9 (Alcmaeon); §468, 484-6, 496, 498 (Anaxagoras).

cosmogony through the combinations of the four Empedoclean elements according to nature and chance, seems suspiciously like the cosmogony of the *Timaeus*, but with the Demiurge removed.<sup>106</sup> The ‘correct’ account in the *Laws* (892a-899d) does not attempt to give the full teleologist’s version of creation, but confines itself to demonstrating that the soul is the first mover, prior to matter, and the cause, somehow, of the generative combinations of the elements and the movements of the heavenly bodies. That this particular argument is not made in the *Timaeus* reflects the different purposes of the theme of nature in the two dialogues.<sup>107</sup> In *Laws X*, the atheists’ views are presented in order to be refuted: not as philosophical arguments to be taken seriously, or even as the ravings of eccentrics to be parodied and laughed away under the influence of the morally appealing figure of Socrates, but rather as the beliefs of precocious students corrupted by the writings of Anaxagoras and his like. The rejection of the power of the gods, the corollary of such beliefs, leads inevitably to immorality, and the Athenian is attempting to construct a constitution in which the gods will provide both a justification for his laws and a source of fear for wrongdoers.<sup>108</sup>

The criticism of the natural philosophers in the *Phaedo* is thus developed in the *Laws* and elsewhere to include not only the objectionable nature of their insufficiently teleological theories, and their confusion with Socrates, but also the much stronger claim, whose beginnings may be detected in the *Apology*, that they are in essence atheists, indistinguishable from one another, whose ideas are potentially detrimental to the morality of those they teach.

To sum up, the extent to which Plato treats writings of the early philosophers in each dialogue seriously or mockingly, or distinguishes one from another, depends upon that dialogue’s particular tone and balance of argumentative and dramatic purposes. At the same

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<sup>106</sup> Cf. Mayhew (2008): 79; Johansen (2004): 74-5, with n. 10.

<sup>107</sup> *Timaeus* claims that the soul of the universe was created before its body because the Demiurge gave the soul superiority to the body (34c).

<sup>108</sup> Contrast *Sophist* 265c-e.

time, there is a clear thread between these treatments in terms of the separation of the enquirers into nature from Platonic φιλοσοφία, as well as an increasing tendency to value φιλοσοφία more highly because it explains the universe, and human actions, in terms of divine goodness rather than chance, or design which does not aim at the best.<sup>109</sup>

The *Timaeus* differs from other dialogues in that it is, uniquely for Plato, centred on an account of the perceptible universe. Arguably, the attitude implicit in the *Timaeus* towards the natural philosophers is little changed from that in the *Apology*, *Phaedo* and *Laws*.<sup>110</sup> As in the *Apology* and *Phaedo*, polemical and parodic references to Plato's predecessors draw attention to the difference between their view of φύσις and his. However, the treatment of the natural philosophers in the *Timaeus* differs from that in earlier dialogues in so far as Plato now has an alternative account of the universe to oppose to theirs. In what follows, I shall argue that the treatment of animals at the end of the *Timaeus* involves parody of the natural philosophers in an Aristophanic spirit, as well as allusions to Aristophanes' own parodies of them. The effect is simultaneously to mock the natural philosophers' explanations and demonstrate the superior attractiveness of the Platonic, theocentric view of the universe.

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<sup>109</sup> Sedley (2007): 90, argues that the Socratic-Platonic teleology is distinguished from its predecessors in being the first fully to articulate the 'link of intelligence to goodness' in the design of the universe.

<sup>110</sup> Plato perhaps criticises the natural philosophers again at *Phdr.* 229c6-230a7: Rowe (1988): 139.

## Part II. The ending of the *Timaeus* and its significance

### 3.3 *Timaeus* 90e1-92c3: Philosophy and science in literature

The closing lines of the *Timaeus*, 90e1-92c3, contain what appear *prima facie* to be some particularly bizarre claims. As a result, the passage has been unjustly neglected by commentators. Cornford, for example, barely mentions it at all; Taylor considers it a little light ‘persiflage’ to relieve the ‘tedium’ of the long, technical account which precedes it.<sup>111</sup>

Campbell has taken the account seriously as a Platonic theory of species mutation, and Solmsen has seen in its categorisations of animals the first ‘great chain of being’ or *scala naturae*.<sup>112</sup> Steel, in contrast, finds it a ‘very funny appendix to the *Timaeus*, in which we find a reverse theory of evolution’,<sup>113</sup> while Schäfer, similarly, considers it a burlesque ending, whose system of evolution by punishment ‘has as much to do with research into nature as Hansel and Gretel do with astrophysics’.<sup>114</sup> Allen, Adair and Krell have considered Plato’s depiction of the female of the species, and have variously tried to vindicate him from *Timaeus*’ apparent sexism and from what seems to be a bizarre theory of the ‘wandering womb’.<sup>115</sup>

More recently, Sedley has argued that, in *Timaeus*’ zoogony, ‘the presence of humour does not entail the absence of seriousness’, and that we should be careful not to assume that an explanation which seems bizarre to us would have seemed equally strange to the ancients. Sedley stresses that the *Timaeus* is a ‘profound guide to Plato’s own views on the world’s

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<sup>111</sup> Taylor (1928): 635-7.

<sup>112</sup> Campbell (2000): 160. Cf. Solmsen (1955): 161-2: Plato’s ‘scale is ethical rather than biological in inspiration’.

<sup>113</sup> Steel (2001): 125.

<sup>114</sup> Schäfer (2005): 322-3, with n. 37. Disertori (1965): 326, sees the ending as a ‘myth within a myth’; Brisson (1974): 457, sees it as a ‘synthesis’ of the dialogue, which explains the origin of evil and the punishment of souls after death.

<sup>115</sup> Allen (1975); Adair (1996); Krell (1975).

teleological origin, purpose, and structure’, and was ‘probably the most seminal philosophical or scientific text to emerge from the whole of antiquity’.<sup>116</sup>

While Sedley is right to warn against assuming that *παιδιά* rules out *σπουδή*, the seriousness of the ending of the *Timaeus* is arguably not in the details of its account of the origin of animals. Rather, it is in the underlying ethical purpose.<sup>117</sup> I suggest that *Timaeus* 90e1-92c3 should be read against Plato’s other myths, whether the eschatological myths in the *Gorgias*,<sup>118</sup> *Phaedrus*<sup>119</sup> and *Republic X*,<sup>120</sup> the eschatological-scientific myth of the *Phaedo*,<sup>121</sup> the astronomical myth of the *Politicus*,<sup>122</sup> the myth of Prometheus in the *Protagoras*,<sup>123</sup> or the light-hearted myths of the *Symposium*. I shall refer to these myths in due course.

Aristophanes’ myth in the *Symposium* (189c-193e), and the myths of the *Politicus*, *Protagoras* and *Phaedo*, provide particularly interesting parallels. The first three concern, respectively, the origin of sexual reproduction; the origin of the current kinds of humans, animals and sexual reproduction; and the origin of humans and animals. The *Phaedo* concerns the geography of the earth and different ‘levels’ of reincarnation. All of these themes occur in *Timaeus* 90e1-92c3. However, their treatment varies considerably from dialogue to dialogue. I shall argue that, even if Protagoras and Aristophanes are not Plato’s main speakers, neither are there convincing reasons for taking Timaeus’ version more seriously than the Visitor’s or Socrates’ on his deathbed. Rather, the ending of the *Timaeus*

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<sup>116</sup> Sedley (2007): 132, 96.

<sup>117</sup> In emphasising the ethical aspect, I build on Steel (2001), Johansen (2004), and Schäfer (2005).

<sup>118</sup> 523a-527e.

<sup>119</sup> 245c-256e.

<sup>120</sup> 614b-621d.

<sup>121</sup> 107c-115a.

<sup>122</sup> 269b-274e.

<sup>123</sup> 320d-323a.

involves parody of the early philosophers and, probably, the ancient medical tradition. This parody is there to be noticed and undermines the seriousness of Timaeus' account.

### 3.4 *Timaeus* 90e1-92c3: Analysis

#### 3.4.1 90e1-6. The account of the universe is complete, apart from animals other than man

|   |                                |
|---|--------------------------------|
| Καὶ δὴ καὶ τὰ νῦν ἡμῖν ἐξ ἀρχῆς παραγγελθέντα διεξελη-<br>θεῖν περὶ τοῦ παντὸς μέχρι γενέσεως ἀνθρωπίνης σχεδὸν<br>ἔοικε τέλος ἔχειν. τὰ γὰρ ἄλλα ζῷα ἢ γέγονεν αὐτῷ, διὰ<br>βραχέων ἐπιμνηστέον, ὃ μὴ τις ἀνάγκη μηκύνειν· οὕτω γὰρ<br>ἐμμετρότερός τις ἂν αὐτῷ δόξειεν περὶ τοὺς τούτων λόγους<br>εἶναι. τῆδ' οὖν τὸ τοιοῦτον ἔστω λεγόμενον. | 90e1<br><br><br><br><br>5<br>6 |
|---|--------------------------------|

And now indeed, it seems, we have all but completed our initial assignment, that of tracing the history of the universe down to the emergence of humankind. We should go on to mention briefly how the other living things came to be – a topic that won't require many words. By doing this we'll seem to be in better measure with ourselves so far as our words on these subjects are concerned. Let us proceed, then, to a discussion of this subject in the following way.<sup>124</sup>

The introduction to the final section at 90e1-6 follows on from a long discussion of the Demiurge's design of the human body (41d-47e, 69c-90d).<sup>125</sup> Having brought this to its climax by urging his audience to cultivate the divine part of the soul that resides in the head, and bring its motions into conformity with those of the universe (90ad), Timaeus adds an epilogue.

His main task, as announced by Critias at 27a5-7 and repeated at 90e1-3, was to discuss the creation of the universe up to the emergence of human beings: the ἀνθρώπων φύσις or γένεσις ἀνθρωπίνη. However, although Timaeus has reached the end of his account according to Critias' prescription, he previously, through the Demiurge's speech at 41b7-c2, anticipated the need for 'three mortal races remaining', θνητὰ ἔτι γένη λοιπὰ τρία, to

<sup>124</sup> Translations which follow are based on Zeyl's *Tim.* in Cooper (1997).

<sup>125</sup> Johansen (2004): 137, argues that the body is given a more positive and important rôle in the *Tim.* than elsewhere in Plato.

complete the universe, beyond the one immortal γένος of the heavenly bodies. This follows on from 39e7-40a2, where Timaeus categorised the living creatures within the universe, itself the ultimate living creature with its own soul, into four kinds, each associated with one of the four elements. The first and most superior race, that of the divine heavenly bodies (οὐράνιον θεῶν γένος), is made of fire; the winged animals (πτηγὸν καὶ ἀεροπόρον γένος) travel in air; then there is the class of animals living in water (ἔνυδρον εἶδος); and those travelling by foot on the dry land (πεζὸν καὶ χερσαῖον).<sup>126</sup> The categorisation of mortal animals at the end of the *Timaeus*, as we shall see, is more complicated than this earlier threefold division.

Timaeus' account is complete in terms of its function within his and Critias' overall plan, which is to pass from the nature of humans in the universe to the mythical Athenians in action; but without animals, it is not complete as an account of the whole cosmos.<sup>127</sup> At the same time, Timaeus considers that the account of animals is one which should be mentioned briefly (90e4-6); there is no 'necessity', ἀνάγκη, to prolong it, but rather, a short account will make its speaker ἐμμετρότερος αὐτῷ, 'better in harmony with himself'. Within the cosmos, in other words, mortal animals are of comparatively little importance, and in terms of aesthetic composition, only contribute very modestly to the harmony or well-proportioned nature of Timaeus' account. Plants are of even less interest, appearing only briefly, and designed by the gods for human use (77ac).

By marking off the final section in this way, Plato indicates to his readers that he is proceeding to a part whose details are less important than the earlier topics of the dialogues, which centred on the structure of the cosmos and the nature of the (male) human body, and therefore deserving of much less space. In fact, Timaeus' account of animals, including

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<sup>126</sup> Cicero's translation of *Tim.* 39e10-40a2 (in his *Tim.* 34-35) brings out the connection with the elements of air, water and earth: *erant autem animantium genera quattuor, quorum unum diuinum atque caeleste, alterum pinnigerum et aërium, tertium <aquatile, pedestre et> terrestre quartum.*

<sup>127</sup> Cf. Sedley (2007): 126-8 with n.75.

women, and of the male and female reproductive organs, is little more detailed than the account of sexual reproduction at *Politicus* 274a-b or of the allotment of capabilities to animals at *Protagoras* 320d-321c; and, as we shall see, no less selective in its details.

### 3.4.2 90e6-91a1. The origin of women

|   |   |
|---|---|
| <p>τῶν γενο-<br/>μένων ἀνδρῶν ὅσοι δειλοὶ καὶ τὸν βίον ἀδίκως διῆλθον,<br/>κατὰ λόγον τὸν εἰκότα γυναῖκες μετεφύοντο ἐν τῇ δευτέρᾳ<br/>γενέσει·</p> | <p>90e6<br/><br/><br/><br/><br/><br/><br/><br/><br/><br/>91a1</p> |
|---|---|

According to our likely account, all of those born as men who were cowards and lived their lives unjustly turned into women in the second generation.

Having introduced the final topic of the dialogue as concerning the creation of the other animals, Timaeus then does not turn immediately to them, but first of all to the creation of women. While lines 90e1-4 imply that the *γένεσις ἀνθρωπίνη* is one stage in the creation of the universe, it is made clear (90e6-91a1) that this phrase refers primarily to the creation of men, which happened before that of women, although women and men will be considered part of the same *γένος*. Men who were cowards and lived unjustly became women in the second generation, ἐν τῇ δευτέρᾳ γενέσει.

Some scholars, including Taylor and Campbell, have suggested that, prior to the creation of women, there existed only an undifferentiated human being.<sup>128</sup> However, this cannot be right in the context of the dialogue, because Timaeus has already stated at 76d8-e1 that women (γυναῖκες) and the other animals (θηρία) would come to be ‘from men’ (ἐξ ἀνδρῶν).<sup>129</sup> Similarly, at 41e3-4, the Demiurge, in order that none of the souls might be disadvantaged by him, allots a *γένεσις πρώτη*, a ‘first creation’ or incarnation which is the same for all of them. This also entails that all souls start off in male bodies, since women do

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<sup>128</sup> Taylor (1928) *ad* 90e1-92c3; Brisson (1974): 455-457; Campbell (2000): 158-60.

<sup>129</sup> Cf. Sedley (2007): 128.

not arise until the second generation;<sup>130</sup> especially since it is emphasised at 42a2-3 that the male γένος of the human race is κρεῖττον, ‘superior’ to the female.<sup>131</sup> At 42b2-c1, after death, the first generation of souls created by the Demiurge and put in human (or male) bodies would go back to their home among the stars if they had lived justly, but those who had made a mistake would change to the φύσις of a woman in the second generation δεύτερα γένεσις; this phrase is also used at 90e8-91a1. Finally, at 90e7, those who were reborn as women had first been created as men, τῶν γενομένων ἀνδρῶν; ἄνδρες is again specifically of men in contrast to the γυναῖκες of the following line, not gender-neutral.<sup>132</sup>

That μεταφύονται, ‘change into’ (90e8), must refer to the reincarnation of the soul is made clear by 42b2-c1.<sup>133</sup> Women, therefore, according to Timaeus’ account, were created a generation after men, as a punishment for unjust souls, as well as to help to complete the visible universe. This justification for the existence of women in the universe, and that of the other animals which follows, has the form of a narrative of degeneration,<sup>134</sup> reminiscent of the introduction of Pandora in Hesiod’s *Works and Days*, who was created as a ‘bane for industrious men’, πῆμ’ ἀνδράσιν ἀλφιστῆσιν (82).<sup>135</sup> After the myth of Pandora comes a longer degeneration narrative of the five races of men, starting with the golden and deteriorating to the current race of iron, the worst of all (109-201).

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<sup>130</sup> Cf. Schäfer (2005): 321-6.

<sup>131</sup> Cf. *Rep.* 455d6-e2. Johansen (2004): 187, notes that the creation of women and animals is described ‘against the background of the diseases of the soul’. On women’s inferiority, see Allen (1975); Taylor (1928) *ad* 90e6-91d5.

<sup>132</sup> If Plato sometimes uses ἄνδρες apparently interchangeably with ἄνθρωποι (e.g. *Phd.* 81b5-8), this interchangeability itself indicates that his conception of the human is primarily a conception of a man.

<sup>133</sup> Cf. Taylor (1928) *ad* 91d5-92c3. At *Phdr.* 248c8-d2, γένεσις is used for ‘birth’ in the sense of ‘incarnation’ of the soul in a body.

<sup>134</sup> Cf. Sedley (2007): 98, 128; and the narrative of the degeneration of the ideal city in *Rep.* 546a-d.

<sup>135</sup> *WD* 47-105; cf. Empedocles fr. 62.1.

The association with Hesiod underlines the mythical status of Timaeus' explanation, and implies that what is really at issue in his slight, casual and evidently humorous<sup>136</sup> treatment of the origin of women is not to provide a biologically detailed account, but rather to highlight the care which the reader should take of his soul, in order to avoid demotion to an inferior body in a subsequent life. Hence why it is not part of Plato's purpose to answer such questions as whether female bodies were fashioned separately from the male, or out of previously male bodies with suitable adjustments.<sup>137</sup> Similarly, in assuming that men already had genitals before the creation of ἄρως by the gods, but only with an excretory and not a reproductive function (91a4-6), and claiming the gods created sexual reproduction 'because of' the new presence of women (διὰ ταῦτα, 91a1), Plato adapts biological facts to suit his narrative of degeneration.

By alluding to Hesiod's degeneration narrative, Plato also puts his account into a tradition of cosmogonies which, as he makes clear at *Laws* 886c-e, also included the early enquirers into nature. In their works, in which poetic and philosophical ways of thinking overlap,<sup>138</sup> the Hesiodic cosmogonic structure can be detected; for example, in Empedocles' and Anaxagoras' account of the origins of the present universe.<sup>139</sup> The early philosophers polemicised against Hesiod and other poets, in an effort to replace the poets' educational authority with their own.<sup>140</sup> Plato, in turn, steals the philosophers' language, but reworks it into a neo-mythical narrative about the fate of the soul.

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<sup>136</sup> Taylor (1928) *ad* 90e1-92c3, considers the account 'unmistakably playful'.

<sup>137</sup> Plato omits the idea that women might be created as a 'helpmeet' for men, as in Genesis 2.18, 2.22; Milton, *Paradise Lost*, IV.297-9.

<sup>138</sup> Most (1999); Long (1999b): 4; Hussey (2006): 17.

<sup>139</sup> Empedocles frs. 38, 96, 98, 57, 59-62, and 115, within the context of his doctrine of eternal recurrence (see KRS: 287-8, 300-305); Anaxagoras frs. 1, 4, with KRS: 357-8. The first meaning of φύσις is 'origin', 'birth' or 'growth': LSJ s.v. φύσις; Long (1999b): 11.

<sup>140</sup> Cf. Most (1999): 337 ff. Heraclitus is recorded by Diogenes Laertius as attacking Hesiod, Pythagoras, Xenophanes and Hecateus for having πολυμαθίη without νοῦς (DL IX.1); Xenophanes polemicised against Homer and Hesiod for attributing to the gods 'everything' considered shameful and disgraceful by mortals (Xenophanes, fr. 11; KRS: 168).

Timaeus' account of the origin of women is thus designed to contribute to the ethical teaching of the dialogue rather than to the progress of physiological understanding. This point receives further support from the *Timaeus*' significant divergence from other Platonic accounts of the origin of women. In Aristophanes' comic myth in the *Symposium*, the original double-humans include both female pairs and male pairs, as well as mixed ones (189d-190b), and sexual intercourse is explained in terms of seeking one's other half, as well as, incidentally, being the purpose of a new form of reproduction (191a-192e); heterosexual love and the production of children, however, Plato's Aristophanes considers decidedly inferior to the benefits accruing from homosexual love (192a3-b3). In the *Politicus*, in the rotations of the universe in which people are born from the earth, there is for this reason no 'possession of wives and children', κτήσεις γυναικῶν καὶ παιδῶν (271e6-272a2), while sexual reproduction, under the same 'movement' (ἀγωγή) that directs the cosmos after the god has ceased to guide it, arises mysteriously later on as a way of perpetuating the human race (274a1-b1).

While the details of the origin of sexual reproduction differs in each of these three accounts, nevertheless, in all of them, some sort of degeneration is involved before sexual reproduction arises. Plato's remarks about sexual intercourse here and elsewhere make it clear that sex is an inferior activity, at best a source of humour or metaphor and necessary for the perpetuation of souls in embodied form,<sup>141</sup> at worst a shameful, destructive and anti-philosophical pleasure.<sup>142</sup> This moral stance explains why the introduction of women is kept to a minimum; and why, as we shall see, Plato's account of sexual reproduction uses humour to undermine its importance.

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<sup>141</sup> So in *Sym.* 189d-193d (humour); 208e, 209c-e (inferiority of mortal children). Cf. *Phdr.* 250e-251a, 254a-256e (inferiority of intercourse compared with philosophy).

<sup>142</sup> *Gorg.* 494e-495a; *Rep.* 572e ff.

Timaeus qualifies his description of the metamorphosis of bad men into women by the phrase *κατὰ λόγον τὸν εἰκότα* (90e8).<sup>143</sup> By mentioning the *εἰκὼς λόγος*, he highlights his lack of knowledge, and directs the reader to consider the origin of women not in terms of a materialist explanation, but rather in terms of the Platonic view of reincarnation as reward or punishment of the soul, as it is presented in the eschatological myths of the *Phaedo*, *Phaedrus*, *Gorgias* and *Republic*.

Unlike these eschatologies, the myth at the end of the *Timaeus* does not involve the souls' being sent to a separate afterlife; rather, they seem to move directly from one body to another. However, Timaeus has told us earlier in the dialogue that the best souls in male bodies will eventually return to the stars to which the Demiurge assigned them before they were first incarnated (42b). Thus Timaeus' eschatology does not differ in a simple manner from those in earlier dialogues by keeping the souls in this world rather than removing them to another; the *Republic*, *Phaedrus* and *Phaedo* all involve reincarnation after punishment in another world. Nor do the other myths suggest that the afterlife in the latter dialogues, any more than in the *Timaeus*, is located outside the physical cosmos as a whole, rather than simply in a different place from the earth where humans are located.

Rather, the main innovations in the *Timaeus* are that there is no afterlife stage between incarnations; that the gods are less involved once the cycle has started; and, finally and most unusually for an eschatological myth, that the promise of disembodiment for souls is separated in Timaeus' speech by several pages from the cycle of reincarnation into different bodies. Arguably, however, this is not because Plato has abandoned a belief in ultimate

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<sup>143</sup>Εἰκὼς should be understood here as both 'probable' and 'appropriate' (Burnyeat 2005: 163).

disembodiment in order to give a more ‘scientific’ account.<sup>144</sup> Rather, as I shall show, it is because the end of the *Timaeus* is a parody of a Presocratic zoogony.<sup>145</sup>

### 3.4.3 91a1-b7. The male reproductive system

|   |      |
|---|------|
| καὶ κατ’ ἐκεῖνον δὴ τὸν χρόνον διὰ ταῦτα θεοὶ τὸν         | 91a  |
| τῆς συνουσίας ἔρωτα ἐτεκτήναντο, ζῶον τὸ μὲν ἐν ἡμῖν, τὸ  |      |
| δ’ ἐν ταῖς γυναιξίν συστήσαντες ἔμψυχον, τοιῶδε τρόπῳ     |      |
| ποιήσαντες ἐκάτερον. τὴν τοῦ ποτοῦ διέξοδον, ἣ διὰ τοῦ    |      |
| πλεύμονος τὸ πῶμα ὑπὸ τοὺς νεφροὺς εἰς τὴν κύστιν ἔλθον   | 5    |
| καὶ τῷ πνεύματι θλιφθὲν συνεκπέμπει δεχομένη, συνέτρισαν  |      |
| εἰς τὸν ἐκ τῆς κεφαλῆς κατὰ τὸν αὐχένα καὶ διὰ τῆς ῥάχεως | b    |
| μυελὸν συμπεπηγότα, ὃν δὴ σπέρμα ἐν τοῖς πρόσθεν λόγοις   |      |
| εἶπομεν· ὁ δέ, ἅτ’ ἔμψυχος ὢν καὶ λαβὼν ἀναπνοήν, τοῦθ’   |      |
| ἦπερ ἀνέπνευσεν, τῆς ἐκροῆς ζωτικὴν ἐπιθυμίαν ἐμπούσας    |      |
| αὐτῷ, τοῦ γεννᾶν ἔρωτα ἀπετέλεσεν. διὸ δὴ τῶν μὲν         |      |
| ἀνδρῶν τὸ περὶ τὴν τῶν αἰδοίων φύσιν ἀπειθές τε καὶ       | 5    |
| αὐτοκρατῆς γεγονός, οἷον ζῶον ἀνυπήκοον τοῦ λόγου, πάν-   |      |
| των δι’ ἐπιθυμίας οἰστρώδεις ἐπιχειρεῖ κρατεῖν·           | 91b7 |

And this explains why at that time the gods fashioned the desire for sexual union, by constructing one ensouled living creature in us, and another in women. This is how they made them in each case. There is [in men] a passage by which fluids exit from the body, where it receives the liquid that has passed through the lungs down into the kidneys and on into the bladder and expels it under pressure of air. From this passage they bored a connecting one into the compacted marrow that runs from the head along the neck through the spine. This is in fact the marrow that we have previously called ‘seed’ [73c1, 74a4]. Now because it is ensouled and had now found a vent [to the outside], this marrow instilled a life-giving desire for emission there, and so produced the desire for procreation. This is why, indeed, the male genitals are unruly and self-willed, like an animal that does not listen to reason and, because of its gadfly-mad desires, tries to overpower everything.

Having introduced women, Timaeus goes on to deal with the origins of sexual desire and reproduction, first in men and then in women. His account is arguably a highly selective physiology based on descriptions in natural philosophy and medicine and Aristophanic parody of these, rewritten so as to provide entertainment and make an underlying ethical point.

<sup>144</sup> Pace Sedley (2007): 132.

<sup>145</sup> Aristophanes and Eryximachus in the *Sym.*, as well as Plato’s character Protagoras, do not mention an afterlife in their myths, because they are meant to be ‘scientific’.

The gods, says Timaeus, fashioned the desire (ἔρωϑ) for intercourse. The verb he uses is τεκταίνομαι,<sup>146</sup> ‘make’, ‘build’, or ‘devise’, from τέκτων, a ‘carpenter’, ‘builder’, or other craftsman. This continues the idea of craftsmanship in making the world embodied by the Demiurge, and puts the gods created by him in the role of subordinate mechanicals.<sup>147</sup> This, as Steel has demonstrated, is a tactic also found in the account of the body and its organs at *Timaeus* 69-72.<sup>148</sup> It is also comical that ἔρωϑ, an abstract noun when it is not a god, can be constructed as if it were a piece of woodwork. Continuing the craft metaphor with another prosaic verb, Timaeus describes how the gods ‘bored a hole’, συνέτριψαν,<sup>149</sup> from the passage liquid takes through the lungs and kidneys to the bladder, to the compacted marrow going from the head along the neck and spine.

The ‘ensouled’ (ἔμψυχος) marrow, Timaeus explains, takes on from the gods the role of craftsman, ‘implanting’ (ἐμποιέω) the desire, ἐπιθυμία, for ejaculation in the genitals and thereby ‘completing’, ἀποτελέω, the ἔρωϑ to procreate, just as the Demiurge completes the universe. The penis is also anthropomorphised as being like (οἶον) a ζῷον, which is ‘unpersuadable’ (ἀπειθέϑ) and ‘disobedient to reason’ (ἀνυπήκοον τοῦ λόγου), that is, irrational and unphilosophical, and which tries to dominate everything, because of its mad ἐπιθυμία (91b6-7). This provides a comic touch, deflating sexual desire in men to the frustrations of a tiny beast and the undignified motions of the *membrum virile*.<sup>150</sup>

At 91a2-3, the gods, in fashioning sexual desire, implant one ζῷον ἔμψυχον in men, another in women. The question thus arises of what exactly, in either case, this should be identified with. There seem to be two possibilities: either the reproductive σπέρμα, or the

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<sup>146</sup> 91a2, ἐτεκτήναντο.

<sup>147</sup> Cf. Karfik (2004): 208.

<sup>148</sup> Steel (2001), especially 113, 125.

<sup>149</sup> 91a6.

<sup>150</sup> At *Plt.* 274a3-b1, in contrast, it is the animals rather than their parts which are led on by the procreative impulse.

organ in which it is lodged, in the case of men, the penis, described as ‘like’ a ζῶον, and in the case of women, the womb (see below). In the case of the man, the adjective ἔμψυχος is repeated of the marrow at 91b2, which implies that it is the marrow which should be identified with the ζῶον ἔμψυχον.<sup>151</sup> While the man’s αἰδοῖα behave like a ζῶον, they do this because the desire for procreation has been instilled in them by the ensouled σπέρμα. In this way, the male genitals are described in terms of an animal whose soul is the semen.<sup>152</sup>

The emphasis on irrational desire in the behaviour of the penis separates sexual behaviour from man’s reason and desire for the good, and connects it with the lowest part of the Platonic soul.<sup>153</sup> This is reminiscent of the playful description of the unruly black horse at *Phaedrus* 253c6-254e8, which also symbolises the lowest part of the soul and its carnal desires. This connection underlines the humour of Plato’s description of the penis, in line with the Platonic trend, noted above, to reveal the indignity of sexual desire and its effect on human behaviour.

Certainly, the idea that some divinity designed the human body is endorsed by the teleological account of the *Timaeus*. In addition, the ‘encephalomyelitic’ theory of sperm, that it came from the brain, and passed through the spinal marrow, through the vessels and kidneys to the testicles, is found in the Hippocratic *De Semine* 1-3.<sup>154</sup> In this respect, and in the anatomical vocabulary he uses,<sup>155</sup> Plato seems to be in line with contemporary medical thought.

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<sup>151</sup> The idea of a separate ζῶον ἔμψυχον within human or other animals is unparalleled in the Hippocratic corpus. The term ἔμψυχος appears only twice there, once of living creatures (*De Diaeta* I.28.1-5), and once of plant respiration (*Epist.* 16.21).

<sup>152</sup> *Contra Adair* (1996): 161, who interprets the ζῶον ἔμψυχον as the abstract ‘desire for sexual intercourse’. At 73b1-e1, the gods make the μυελός as the πανσπερμία containing all three types of soul, with the brain (like the womb later) as its ἄρουρα; cf. Schäfer (2005): 321. Pender (1992): 72, sees connections between the male generative process in the *Tim.* and psychic pregnancy in the *Sym.*

<sup>153</sup> For the mortal soul, see *Tim.* 69c-70b.

<sup>154</sup> Jouanna (1999): 271-2, finds a similar view in *Aēr.* 22.

<sup>155</sup> Compare *Tim.* 91a4-b2 with *Sem.* I.14-20; and with αἰδοῖα at *Tim.* 91b5, αἰδοῖον at *Sem.* I.6, 20. See further the system of veins in Diogenes of Apollonia (KRS: 450-2).

However, the claim that the male body existed without a reproductive system, and that the gods had to bore holes through the body to insert one, is a wittily unscientific extension of medical theory, which is required because women are born in the second generation. Equally comical is the banausic way in which Timaeus describes the Demiurge's assistant gods, almost as amateurs or shoddy craftsmen who do not think to include a path for the male seed until the time when the first men are reborn as women, to aid sexual reproduction.<sup>156</sup>

Comparison with Aristophanes and ancient medical texts suggests that the above passage parodies physiological accounts of the body to be found in the early philosophers and Hippocratic corpus. At *Thesmophoriazusae* 11, Euripides tells the mystified Mnesilochus that the senses of seeing and hearing each have a different φύσις. In this physiological context, φύσις indicates that Euripides is going to be giving a 'scientific' explanation. At lines 14-18, Euripides explains how the personified Aether, when he gave birth to all the living creatures moving about inside him (ζῶα ἐν αὐτῷ ξυνετέκνου κινούμενα), 'devised' (ἐμηχανήσατο) the eye as an imitation of the sun's 'wheel' (τροχός), and 'bored out the ears as a funnel for hearing' (ἀκοῆ δὲ χοάνην ὧτα διετετρήνατο).<sup>157</sup>

The image of all the animals, as if primordial elements, moving about inside the Aether as if it were a cosmic womb, is reminiscent of a Presocratic cosmogony.<sup>158</sup> Aristophanes' use of ζῶα here suggests that it might already have had connotations of a technical term; thus ζῶον, used as a technical term in the *Timaeus*, may also be intended to recall a Presocratic original. Aristophanes' Euripides has Aether as a craftsman-god.<sup>159</sup> This

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<sup>156</sup> 91a1, κατ' ἐκείνον δὴ τὸν χρόνον διὰ ταῦτα.

<sup>157</sup> Johansen (2004): 113-4, connects this passage with *Tim.* 45b2 ff.

<sup>158</sup> Compare Plato's 'receptacle': *Tim.* 50b-51b, 52a-53b.

<sup>159</sup> Cf. Austin-Olson (2004) *ad* 16-18.

is comical in its insinuation that Euripides is an atheist,<sup>160</sup> just as Anaxagoras was alleged to have been, and in its positioning of a ‘scientific’ term in the role of a conventional deity.<sup>161</sup> Aristophanes’ personification of Aether is comparable to Plato’s personification of the ἔμψυχος marrow at 91b2-4, as well as to the doctor Eryximachus’ personification of ἔρωσ as a force of nature at *Symposium* 188a-b. However, Plato, in a reversal of Aristophanes’ association of cosmogonies with atheism, makes the gods the primary craftsmen of the male body and its ζῶον.

Like Timaeus, and like Socrates in the *Clouds*,<sup>162</sup> Aristophanes’ Euripides explains human physiology in terms of comically prosaic items and mechanical processes: wheels, funnels, and boring. This suggests a parody of a Presocratic or medical explanation. Empedocles, for example, had explained respiration by analogy with the klepsydra, and written of the χοάνοι (‘mixing-pots’ or ‘hollows’) of the earth, in which the elements are mixed to make bones.<sup>163</sup> Plato’s συνέτρησαν (91a6) is thus reminiscent of the boring motif in Aristophanes and the early philosophical tradition.

*Thesmophoriazousae* 11-18 thus presents a ‘parodic image of Euripides as natural philosopher’.<sup>164</sup> These lines indicate that demythologised cosmogonies and divine craftsmen of the body were already associated with the natural philosophers by 411 BC. That Plato appreciated Aristophanes’ treatment of these themes and the comic potential of craftsman-explanations is demonstrated by his Aristophanes in the *Symposium*, who tells the amusing

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<sup>160</sup> Euripides invokes Aether at *Frogs* 892; Socrates does at *Clouds* 265.

<sup>161</sup> Plato uses αἰθήρ as a technical term, and only in a ‘scientific’ context: *Phd.* 98c1, 109b8, 111b1, 111b5; *Crat.* 408d8, 410b6; *Tim.* 58d2; and in a quotation at *Rep.* 391e9.

<sup>162</sup> *Clouds* 160-164.

<sup>163</sup> Empedocles 96.1, with Austin-Olson (2004) *ad* 16-18, 18.

<sup>164</sup> Austin-Olson (2004) *ad* 13-18.

story of how Apollo cut humans in two as a punishment and smoothed them out using shoemakers' tools, while Zeus moved their genitals around to enable sexual intercourse.<sup>165</sup>

The above evidence supports the interpretation of *Timaeus* 91a1-b7 as a parody of early physiological explanations of the mechanics of the body. It is true that Timaeus is a weightier speaker than Plato's Aristophanes; and that he refers to serious medical theories about the male seed. It is also true that the craftsman metaphor was taken seriously by later authors on physiology, not least Aristotle; the metaphor may also be reflected in the debate among medical writers as to whether medicine was a τέχνη.<sup>166</sup> The gods, however, are conspicuous by their absence from Aristotelian and Hippocratic physiology. In contrast, the account of the male reproductive system in the *Timaeus* relies throughout on craftsmen gods to explain both its structure and purpose. As such, although Plato uses medical theories and Presocratic metaphors, he rejects any account which does not explain human physiology in terms of divine purpose.

In sum, this passage contains a clever parody, in an Aristophanic spirit, of early physiological explanations of the human body. While the explanation is teleological, the gods have a particularly comic role. Timaeus' explanation, Plato implies, is neither more nor less convincing than earlier physiological theories, but does at least, unlike them, explain why desire and sexual procreation was necessary in terms of the fate of the soul. I now turn to the continuation of these tactics in Timaeus' presentation of the female reproductive system.

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<sup>165</sup> *Sym.* 190e2-c4; cf. 192d3-e5.

<sup>166</sup> For Aristotle's use of the metaphors of house-building and other crafts in animal physiology, see *PA* 639b17-18, 640a15-18. For the ancient debate over medicine as a τέχνη, and its influence on Plato and Aristotle, see Schiefsky (2005): 5 ff.; *Sym.* 186a-e.

### 3.4.4 91b7-d6. The female reproductive system

|   |          |      |
|---|----------|------|
|   | αἱ δ' ἐν | 91b7 |
| ταῖς γυναιξίν αὖ μῆτραί τε καὶ ὑστέραι λεγόμεναι διὰ τὰ   |          | c    |
| αὐτὰ ταῦτα, ζῶον ἐπιθυμητικὸν ἐνὸν τῆς παιδοποιίας, ὅταν  |          |      |
| ἄκαρπον παρὰ τὴν ὥραν χρόνον πολὺν γίγνηται, χαλεπῶς      |          |      |
| ἀγανακτοῦν φέρει, καὶ πλανώμενον πάντη κατὰ τὸ σῶμα,      |          |      |
| τὰς τοῦ πνεύματος διεξόδους ἀποφράττον, ἀναπνεῖν οὐκ ἔδῳν | 5        |      |
| εἰς ἀπορίας τὰς ἐσχάτας ἐμβάλλει καὶ νόσους παντοδαπὰς    |          |      |
| ἄλλας παρέχει, μέχρι περ ἂν ἑκατέρων ἢ ἐπιθυμία καὶ ὁ     |          |      |
| ἔρως συναγαγόντες, οἷον ἀπὸ δένδρων καρπὸν καταδρέψαντες, | d        |      |
| ὡς εἰς ἄρουραν τὴν μῆτραν ἀόρατα ὑπὸ σμικρότητος καὶ      |          |      |
| ἀδιάπλαστα ζῶα κατασπείραντες καὶ πάλιν διακρίναντες      |          |      |
| μεγάλα ἐντὸς ἐκθρέψονται καὶ μετὰ τοῦτο εἰς φῶς ἀγαγόν-   | 5        |      |
| τες ζῶων ἀποτελέσωσι γένεσιν. γυναῖκες μὲν οὖν καὶ τὸ     |          |      |
| θῆλυ πᾶν οὕτω γέγονεν·                                    | 91d6     |      |

As for the wombs or uteri said for the same reasons to be in women, a living animal being inside desirous of childbearing, when this remains unfruitful for a long time beyond due season, it bears this with great difficulty and vexation, and wanders all over her body, blocking up the exits of the breath, not allowing her to breathe, and so it throws her into extreme emergencies and gives her all sorts of other sicknesses, until finally the desire and love of both [the man and the woman] bring them together and, like plucking down the fruit from trees, so they sow the living creatures, too small to see and as yet unshaped, into the ploughed field of her womb, and, differentiating them again, they nourish them until they are big within and after this, bringing them to the light of day, complete the creation of living creatures. So this is how women and the whole female sex came to be.

The account of the woman's womb parallels the account of the penis. Just as the penis is like a ζῶον, because it contains the ensouled seed, so the woman's womb either is or contains a ζῶον ἐπιθυμητικὸν τῆς παιδοποιίας, which wanders about inside her body. It has been debated whether the text implies that the ζῶον is the womb, if ζῶον is taken in apposition to μῆτραί τε καὶ ὑστέραι, or whether, if it is not taken in apposition, it is to be read as living inside the womb, as ἐνὸν might suggest. As far as 91b7-c2 goes, the standard reading is to take ζῶον ἐπιθυμητικὸν as in apposition to μῆτραί τε καὶ ὑστέραι, with a meaning as translated above. Adair has argued that we should interpret the woman's ζῶον ἐπιθυμητικὸν as being a creature inside her womb which wanders about the body if it has not been fertilised for a long time, rather than in apposition to μῆτραί τε καὶ ὑστέραι, which are plural, while ζῶον is singular.<sup>167</sup> He interprets the ζῶον in the case of women, as of men, as a 'lust-based

<sup>167</sup> Adair (1996): 156 ff.

psychological force' which is responsible for their traumas. He also argues that neither Plato nor contemporary Hippocratics would have believed that the womb could wander all around the body.<sup>168</sup>

Arguably, however, the question of whether or not the ζῶον is to be identified with the womb is only elucidated by the explanation of the function of the ζῶον in the lines which follow. The ζῶον, when it is unfruitful, gets frustrated (ἀγανακτοῦν) and wanders everywhere around the body (πλανώμενον παντὶ κατὰ τὸ σῶμα), chokes the woman and causes difficulties and diseases (91c2-7). This does not seem like the effect of some abstract force, but rather of some concrete physical object. The woman's ζῶον is, like the man's penis, associated with irrational desire (ἐπιθυμητικὸν). This implies that it should be identified with her womb. In either case, the switch from the plural μῆτραί to the singular ζῶον can be explained by the parallel with the singular ζῶον ἔμψυχον of the man at 91a2-3. *Pace* Adair, there seems to be considerable evidence in the Hippocratic corpus for a belief in a violent womb which wandered all the way from the toes to the head, and was responsible for a multitude of disorders.<sup>169</sup> Parallels are also to be found in the Hippocratic corpus, as well as in Diogenes of Apollonia, between the penis and the womb.<sup>170</sup> This evidence provides an early philosophical and medical context which makes sense of Plato's brief sketch, even if, as with the penis, he anthropomorphises the womb and links its behaviour to the irrational part of the soul.

Taylor has read 91c7-d5 as following the theory that the woman provided no seed in conception, but only the location in which the embryo was to grow.<sup>171</sup> This belief was held by

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<sup>168</sup> Adair (1996): 158-162.

<sup>169</sup> *Loc. Hom.* 47.1, which views the womb as the cause of all diseases in women; *Nat. Mul.* 3, 8, 14, 38 48-9, 62; *Mul.* I.7, II.145; cited by Jouanna (1999): 311, with nn. For further disorders associated with the unfertilised womb, see the Hippocratic *Virg.*

<sup>170</sup> *Sem.* II.2-3; Diogenes of Apollonia, in Aristotle, *HA* Γ2, 512b2-5 (cit. KRS: 450).

<sup>171</sup> Taylor (1928): 637-640.

Aeschylus and Aristotle, and was subject to debate among the Hippocratics, although many of them were in favour of the view that both the woman and the man contributed seed.<sup>172</sup> Rankin has argued that Plato's model involves the latter view.<sup>173</sup> The difficulty of finding a solution is exacerbated by the metaphorical language which Plato uses throughout the passage on sexual reproduction, and in particular at 91c7-d5, where the procreation and fostering of the unborn child are described.

The language used here echoes earlier parts of the account of reproduction. The only way in which the woman's ζῶον can be cured of its wanderings is through the agency of the ἐπιθυμία and ἔρωσ which draw the man and woman (or their unruly 'creatures') together. These two personified forces, of the feminine and masculine genders respectively, convey the impression that the impulses of both man and woman have drawn them together. Love and desire sow ζῶα in the womb, as if in a ploughed field (ἄρουρα), and as if they are plucking down fruit (καρπὸν) from a tree, an unusual positioning of a conventional topos.<sup>174</sup> The ἄρουρα simile presents the womb as a container; this is also suggested by the image of filling the womb with καρπὸν and thus curing its condition of being ἄκαρπον (91c3). Against this, it is the ἐπιθυμία and ἔρωσ which together pluck the fruit and sow the ζῶα; this and the fact that ζῶα is plural could suggest that they are produced by both parties.<sup>175</sup>

There are, however, two further considerations which tip the balance in favour of the traditional interpretation of the passage, that the woman does not contribute seed. Firstly, only the man has σπέρμα, the seed which will make the new human being. That the womb is likened to an ἄρουρα would complete the image of the man sowing the 'seed' in the woman's

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<sup>172</sup> On the female as contributing no seed, see Aeschylus, *Eu.* 657-66; Aristotle, *GA* 4.1, 763b30-3 (cited by Krell 1975: 414). For the opposite view, see *Sem.* 7-8; *Nat. Puer.* 12; Jouanna (1999): 271; for further debate, KRS: 452.

<sup>173</sup> Rankin (1963).

<sup>174</sup> 'Plucking the fruit' is used by other ancient authors of taking the bride's virginity: Griffith (1989): 56-9.

<sup>175</sup> So Rankin (1963): 141 ff.

‘field’.<sup>176</sup> The gods do give the woman a ζῳον ἔμψυχον, but this seems to be explained well enough by identification with the womb, on the appropriate reading of 91c2; unlike the penis, the womb is not ‘like’ a ζῳον, but is a ζῳον, which is ‘ensouled’ and so moves around the body. *Ex silentio*, there is no positive indication that the womb actually emits seeds. Secondly, while ἐπιθυμία and ἔρωσ may imply a feminine and masculine force respectively, the penis and the sperm have also previously been characterised as acting or implanting ἐπιθυμία as well as ἔρωσ. This leads to the suspicion that these two forces are in fact deliberately abstract and impersonal at 91c7 ff.; it is they, and not the man and woman as such, who ‘sow the creatures’ in the womb (91d3). This is supported by what follows: the two forces mould the ζῳα inside the womb, nourish it there, and, bringing it to birth, complete the ζῳων γένεσις (91d3-5). It would be inaccurate to attribute these actions to the man and woman as agents, rather than to the natural forces controlling their reproductive functions.

This analysis of the account of the female reproductive system and procreation illustrates how Plato takes a mechanistic theory from ancient medical and philosophical debate as it suits him, and, without discussing its merits or even acknowledging the existence of a different theory, works it into a highly poetic description to fit in with his overall thesis that everything in nature, especially human beings, is designed by the gods, or in this case by their agents, the ensouled ζῳα and the forces of ἐπιθυμία and ἔρωσ. His explanation of the wandering womb as an angry animal is a parodic elaboration of the serious Hippocratic theory in terms of his own associations of sexual desire with the irrational soul.

It is remarkable how, even in a supposedly scientific treatise, *Timaeus* does not mention the vulgar act of sexual intercourse in anything but the most flowery and euphemistic language. This is a further indication of the gulf separating Plato from serious medical and philosophical texts. Once again, Plato’s version is more reminiscent of a (sanitised)

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<sup>176</sup> A common image for intercourse in antiquity: Clarke (2001): 369-73.

Aristophanic parody of a Presocratic explanation, which uses comical abstract forces to explain phenomena as a substitute for giving a detailed account of the phenomena themselves. Aristotle similarly criticises the Presocratic philosophers for relying too heavily on inadequately explained forces.<sup>177</sup>

The overall effect of this passage is, like the section on the male reproductive system, to ridicule sex, as well as to show the gods' ultimately good purpose in devising a means by which the human race might reproduce. Fundamentally, however, Plato's teleological account faces a serious problem: the very existence of sex, if not of women altogether, and the indignity of the reproductive organs. His implicit solution, that the gods, in fashioning degenerate animal bodies for imperfect souls, displayed a sense of humour, is in keeping with his view of the unimportance of the physical world compared with the soul.

Having led the reader to believe that he was only talking about women,<sup>178</sup> Timaeus suddenly broadens the scope of his account to cover the females of all animal species, remarking tersely that γυναῖκες μὲν οὖν καὶ τὸ θῆλυ πᾶν οὕτω γέγονεν (90d5-6). These words imply that women are not to be conceived of as a separate γένος from men, although born in the generation after them, any more than other female animals are different γένη from male ones. At the same time, it causes fatal problems for any interpretation of the end of the *Timaeus* as a theory of reverse evolution or 'devolution',<sup>179</sup> if this is supposed to happen in several stages over time, rather than all at once. This is firstly because the remark implies that all female animals were created at the same time. This in turn implies that all the other animals, of both sexes, were created at the same time as women, a point which is not contradicted by Timaeus' subsequent account of birds, land and water animals. Each of these is described as originating from different types of men, which suggests that, like women, they

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<sup>177</sup> E.g. PA 640b4-641a18.

<sup>178</sup> So γυναῖκες at 90e8, 91c1.

<sup>179</sup> Cf. Sedley (2007): 128.

all appeared in the second generation. There is no sense that the animals themselves changed into one another, but rather that their forms were fixed from the beginning by the gods, in a manner appropriate to the types of soul destined to go into them.

Secondly, in Timaeus' account, it is a punishment to be reincarnated from a man into a woman, that is, within the same γένος, as much as from a man into another animal altogether. Thus the idea of penal reincarnation does not serve to distinguish between the adaptation of different species to their environment, as an evolutionary model would, because women are considered a separate step in the reincarnation process, just as the other types of animals are. Indeed, at 42c1-4, Timaeus classifies all animals together as the third possibility of reincarnation for the soul who had previously been both male and female. The model of penal reincarnation thus does not imply a classification system of types of animals which resembles the sort of observationally-based ones adopted by Aristotle or modern biologists, but rather one based entirely upon the morality of the soul.<sup>180</sup>

### 3.4.5 91d6-e1. Birds

#### 3.4.5.1 Reincarnation into birds

|  |      |
|--|------|
| τὸ δὲ τῶν ὀρνέων φύλον μετερρυθ-                           | 91d6 |
| μίξετο, ἀντὶ τριχῶν πτερὰ φύον, ἐκ τῶν ἀκάκων ἀνδρῶν,      |      |
| κούφων δέ, καὶ μετεωρολογικῶν μὲν, ἡγουμένων δὲ δι' ὄψεως  |      |
| τὰς περὶ τούτων ἀποδείξεις βεβαιοτάτας εἶναι δι' εὐήθειαν. | e    |

The race of birds, growing feathers instead of hair, was the result of a reordering from men who were not bad, but light-headed, and were experts on the heavenly bodies, but in their simplemindedness thought that the proofs about these things were the firmest through sight.

Having accounted for women as cowardly, unjust men, Timaeus continues his scientific allegory of psychic degeneration with the origin of birds. The race of birds was 'reordered' (μετερρυθμίξετο) from ἄνδρες (91d7); another indication that they, like women,

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<sup>180</sup> For the doubtful question of whether the doctrine of metempsychosis among the Pythagoreans before Plato included punishment, see Burkert (1972): 125-32. Reincarnation as a punishment is associated with the followers of Orpheus at *Crat.* 400c4-7.

are products of the second generation of ζῶα.<sup>181</sup> These men were ‘free from badness’, ἄκακοι, but κοῦφοι, ‘light’ in the sense, perhaps, of ‘empty-headed’. They were, on the one hand (μέν), ‘students of the heavenly bodies’ (μετεωρολογικοί), but, on the other (δέ), thought they could gain the firmest proofs or expositions (ἀποδείξεις) about the μετέωρα through sight (ὄψις). This incorrect belief was due to their εὐήθεια, ‘good-natured simple-mindedness’.

Campbell has interpreted this passage as implying that men physically metamorphose into birds.<sup>182</sup> However, there are problems with this view. Timaeus’ entire explanation of the birds’ physical form is confined to μεταρρυθμίζομαι, ‘be changed in form’ or ‘have one’s form changed’, and the humorously oversimplified substitution of feathers for hair (ἀντὶ τριχῶν περὰ φύον); this neat metamorphosis is facilitated by the fact that birds, unlike most other animals but like humans, walk on two feet.<sup>183</sup> This explanation seems to suggest, not that the astronomers start off as men and then change into birds, but that birds are a type of modified man with the souls of astronomers.

There is therefore a considerable difference between Timaeus’ treatment of human anatomy and that of the birds. While he gives a long account of the male body and even discusses the male and female reproductive organs, he makes only the slightest allusion to the birds’ physical form, focussing instead on the intellectual qualities of the men who were transformed into them. The birds’ precise anatomy, and their differences from the body of a man, do not matter; firstly because the lower animals are less interesting and important in themselves than the human body, and secondly, because the real focus of the account is the soul.<sup>184</sup>

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<sup>181</sup> So Taylor (1928): 641.

<sup>182</sup> Campbell (2000): 158-162.

<sup>183</sup> Pace Sedley (2007): 129-130, if this detail is an important contribution to ‘biological theory’, it is serendipitously so.

<sup>184</sup> Aristotle, *PA* 1.5, argues that knowledge of celestial bodies is more pleasurable than knowledge of terrestrial things, because the former are more divine, but that knowledge of the latter is more complete, because they are more accessible to the senses; cf. Burnyeat (2005): 160.

This leads to the question of whether Plato has any specific types of men in mind in his description of those who became birds, which has an air of subtle mockery. Plato presents Timaeus as the real ἀστρονομικός and authority on the heavens and natural philosophy. Here, he allows Timaeus a dig at his rival μετεωρολογικοί. Timaeus' *ex cathedra* judgement of the μετεωρολογικοί as ἀκάκοι but κούφοι, with its witty reference to the physical lightness of birds, sounds like damning with faint praise, as does his condescending explanation of their simple-minded mistake about the μετέωρα.<sup>185</sup> This mockery carefully separates Timaeus from a group of supposed experts on astronomy. In doing so, it aligns them with the same vaguely defined group which, as discussed above, Plato repeatedly attacks and distinguishes from his own conception of philosophy: the enquirers into nature, including Anaxagoras and others.<sup>186</sup>

### 3.4.5.2 The purpose of sight in the *Timaeus*

That it is the natural philosophers that are mocked at *Tim.* 91d6-e1 is suggested by the phrase at 91d8-e1, ἡγουμένων δὲ δι' ὄψεως τὰς περὶ τούτων ἀποδείξεις βεβαιοτάτας εἶναι, when considered in the light of Plato's remarks earlier in the *Timaeus* and elsewhere.<sup>187</sup>

At 90b6-d7, Timaeus says that the man who has been serious about the love of learning (φιλομαθία) and true understanding (ἀληθείαι φρονήσεις) will, if he grasps the truth, think immortal and divine thoughts (ἀθάνατα καὶ θεῖα), and, by serving the divine part in himself and keeping his internal δαίμων in order, will be extremely happy (εὐδαίμων). The

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<sup>185</sup> Cf. *Rep.* 348c12, where Thrasymachus calls justice a πάνυ γενναία εὐήθεια; *Rep.* 400e1.

<sup>186</sup> According to *Phdr.* 270a4-5, Anaxagoras studied μετεωρολογία. At *Plt.* 299b7, μετεωρολόγος and σοφιστής are used mistakenly of the expert doctor and steersman; all the more reason for Plato to distance his philosophy from 'meteorology'. *Sym.* 188b6 makes Eryximachus the doctor interested in ἀστρονομία.

<sup>187</sup> For different identifications of the μετεωρολογικοί, see Campbell (2000): 161; Johansen (2004): 167-8; Carone (2005): 71; Schäfer (2005): 322.

only way he can do this is by following (συνεπόμενος) the ‘thoughts and revolutions of the universe’ (τοῦ παντὸς διανοήσεις καὶ περιφοραί), which are most akin (συγγενεῖς) to the divine part of the human soul, and making his understanding (τὸ κατανοοῦν) like them. He will thereby gain the best life (ἄριστος βίος), as far as the soul is concerned, that the gods have offered to humans.<sup>188</sup> The force of 90b6-d7 relies on Timaeus’ earlier explanation of the way in which the revolutions of the soul follow those of the universe, and of the purpose of ὄψις.<sup>189</sup>

According to Timaeus, the correct use of astronomy is to order the invisible revolutions in one’s soul, whose motions went astray from their original course at birth (90d1-2), to imitate the invisible orbits of the soul of the universe. The paths of these cosmic orbits are marked out by the planets and stars (38c3-40b8). These follow the circles of the ‘Same’ (τὰντο) and ‘Different’ (τὸ θατέρον) in the divine soul, which is a mixture of the Same, Different, and Being according to ratios (35a-37a). The cosmic soul practises the art of generating a λόγος which distinguishes objects of knowledge from objects of opinion through assigning such objects to the category of the perceptible or intelligible according to what they are like and from what they differ, and thus, according to whether they should be classed with the Same or Different (37a2-c5). Since this is a likely account, Timaeus does not give us further details of this process. However, it seems clear that it is intended to suggest the process of dialectical thinking, which, as we saw in Chapter 2, involves identifying the different categories under which objects fall. The distinction between objects of knowledge and opinion also implies that the cosmic soul is able to contemplate the Forms, the paradigmatic objects of knowledge. The overall implication is that for the human soul to

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<sup>188</sup> On the ethical value of correcting the revolutions in one’s soul, see Mahoney (2005).

<sup>189</sup> On *Tim.* 46cd see Bolton (1998): 107.

imitate the revolutions of the cosmic soul is for it to be able to practise philosophy, and so become happy.<sup>190</sup>

This is supported by 39b5-c1, where the chief purpose of the sun is ἵνα ὅτι μάλιστα εἰς ἅπαντα φαίνοι τὸν οὐρανὸν μετάσχοι τε ἀριθμοῦ τὰ ζῶα ὅσοις ἦν προσῆκον, μαθόντα παρὰ τῆς ταύτου καὶ ὁμοίου περιφορᾶς: firstly, to shine on everything, and secondly, to allow appropriate creatures – that is, philosophical humans – to have a share in number, by learning from the orbits of the Same and the Different. The philosophical purpose of the sun is thus to be a guide whose perceptible path marks an intelligible orbit for the revolutions of the human soul to imitate.<sup>191</sup>

The way in which the human soul is able to imitate the cosmic soul is connected not just to the sun, but explicitly to sight, at 46c7-e6. Here, in his discussion of how the god or gods made sight operate, Timaeus makes the four elements ‘auxiliary causes’ (συναίτια) but not the *πρώται αἰτίαι* (46d8), the first or fundamental causes.<sup>192</sup> These, he claims, must be the soul and that which belongs to ἡ ἔμφρων φύσις, nature as containing thoughts, which is presumably, like the soul (46d6), invisible. What distinguishes these types of causes is that those which operate with intelligence (μετὰ νοῦ) are personified ‘demiurges’, makers of things which are beautiful and good (καλῶν καὶ ἀγαθῶν δημιουργοί), while those without intelligence produce τὸ τυχὸν ἄτακτον, that which is disordered and haphazard. This characterisation echoes that at 29a5-6, where the Demiurge is the *αἰτία* of the universe, thus linking the intelligent *αἰτία* closely with his purpose.

The *συναίτια* need the intelligent *αἰτία* to impose a morally good and beautiful order on the world. It follows that, in showing the way in which the world is ordered for the

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<sup>190</sup> Frede (1996), connects the thought of the world soul at *Tim.* 37a2-c5 to the accounts of dialectic in the *Phlb.* and *Theaet.*

<sup>191</sup> Cf. Ballew (1974): 205-208.

<sup>192</sup> On the relationship between these types of causes, see Johansen (2004): 106 ff.

best, the philosopher will reveal the intelligent design and the god's purpose inherent in it. This is a more schematic elaboration of the distinction made by Socrates in *Phaedo* 97b-99c, discussed above, between explanation in terms of, firstly, physical causes and, secondly, why it was best for things to be as they were; the *Timaeus* explains the latter in terms of the divine νοῦς.

At 46d1, Timaeus characterises the confusion of συναιτίαι and αἰτίαι as believed 'by most people', ὑπὸ τῶν πλείστων. Here, as at *Laws* 886b-d, Plato presents natural philosophical theories as subscribed to by the undifferentiated 'many'. The effect in this context is to categorise all their theories together as mundane, ignorant and populist, in contrast with Plato's more beautiful, truthful and exclusive explanation. The effect at the end of the *Timaeus* is different: there, the bird-men, although unnamed, are characterised as μετεωρολογικοί. However, the way in which 90b6-d7 and 46d-47c complement each other indicates that the fundamental objection to them is the same in both cases, and that Plato is both times attacking the influence of the same group: the early, materialist philosophers.

At 46e6-47b5, Timaeus ends his discussion into τὰ τῶν ὀμμάτων συμμεταίτια, the auxiliary causes of the eyes, that is, the physical explanation of the mechanism of seeing (45b-46c). He passes to the more important αἰτία, the intentional reason, rather than the mechanical cause, why the gods gave humans sight. Sight is a benefit (ὠφελία) for us, not for any of the banal practical reasons that an ancient physicist or modern evolutionary biologist might come up with, but, according to Timaeus, because observing the heavenly bodies leads to λόγοι περὶ τοῦ παντός (47a2-4). The regular motion of the day, night, months and years, being seen, have 'devised number' (μεμηχάνηται ἀριθμόν), and have bestowed (ἔδοσαν) the thought of time (χρόνου ἔννοια) and enquiry into the whole of nature (περὶ τε τῆς τοῦ παντός φύσεως ζήτησις); from which we have acquired philosophy, the highest gift for mortals (47a4-b2). This language presents the heavenly bodies as surrogate demiurges, and the intellectual

ideas which mortals derive from them as the direct result of seeing them. This underlines their divine nature and teleological purpose.

At 47b5-c4, Timaeus makes a similar point, in similar language, to that at 90b6-d7: the reason (αἰτία) for the gods' gift of sight to humans is so that we might thereby look at the orbits of the divine mind in the heavens (αἱ ἐν οὐρανῷ τοῦ νοῦ περιόδοι), and, applying them to the kindred (συγγενεῖς) but more disordered revolutions of intelligence (περιφοραὶ τῆς διανοήσεως) in our own minds, through having a share in correct reasonings according to nature (λογισμῶν κατὰ φύσιν ὀρθότητος μετασχόντες), make our own mental revolutions stable like those of the divine universe.<sup>193</sup> This confirms the model of the relationship between philosophy, the heavenly bodies and the soul outlined above: the way in which we can make our revolutions imitate those of the soul of the universe is by using λογισμοί correctly, that is, by doing philosophy, which, as discussed in Chapter 2, seeks to give a λογισμός of everything.

Thus, at 46c7-47c4 and 90b6-d7, Timaeus shows that the most important purpose of sight is to lead the philosophical soul from the visible world, in particular the heavenly bodies, to the invisible, rational order according to which their movements, and those of the soul before its distortion by embodiment, were constructed. His explanation is in the form of a physicalist account, like those of the early philosophers. However, they thought that the expositions about the heavenly bodies could be most firmly established through sight. Timaeus, in contrast, teaches that the visible planets and stars trace the orbits of the invisible divine soul of the universe. They are therefore less significant in themselves than they are as markers of the orbits of the Same and Different, by which humans learn philosophy. The proofs about τὰ μετέωρα lead to the greatest security and certainty not through sight, as the

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<sup>193</sup> See Lennox (2001): 298; Johansen (2004): 110-115.

bird-men think, but through the intellectual grasp of the divine which follows, for those who astronomise correctly.

### 3.4.5.3 Astronomy and ‘looking up’ in the *Republic*

At *Republic* VII.529a1-530c1,<sup>194</sup> Socrates distinguishes between philosophical and non-philosophical ἀστρονομία in terms of invisible and visible objects of study.<sup>195</sup> At 529a1-2, Glaucon claims that astronomy ‘makes the soul look upwards and leads it from the things here (in the visible world) to the things there (the Forms)’, ἀναγκάζει ψυχὴν εἰς τὸ ἄνω ὄραν καὶ ἀπὸ τῶν ἐνθένδε ἐκεῖσε ἄγει. Socrates fixes on the idea of ‘looking upwards’ to make the point that the real contrast is not between looking in one direction or another, but between looking at perceptible things (αἰσθητά) and mentally seeing τὸ ὄν καὶ τὸ ἀόρατον, invisible Being; this is the true ἄνω βλέπειν. While the stars are the κάλλιστα καὶ ἀκριβέστατα, ‘most beautiful and most precise’, of things in the visible realm, their motions, because they are part of the imperfect perceptible world, nonetheless deviate from the perfect ratios and geometrical motions of the realm of thought.<sup>196</sup> Thus the true astronomer, τῷ ὄντι ἀστρονομικός (530a4), will treat astronomy like geometry, and study it without considering the sky and its objects, but rather ‘by problems’, προβλήμασιν (530b6-c2).

According to this account, astronomy, even conducted abstractly rather than by looking at the sky, is only a prelude (προοίμιον) to philosophy, like geometry and harmonics (525c-531c). Its objects may be more ἀκριβής, and therefore closer to the products of a true

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<sup>194</sup> Referenced by Taylor (1928) ad 91d6-e1.

<sup>195</sup> Cf. Sedley (1991).

<sup>196</sup> *Rep.* 529d1-5, 529e3-530b4.

τέχνη,<sup>197</sup> than any other objects in the perceptible world, but they are still by implication less ἀκριβής than the invisible objects of reason.

In the *Republic*, as in the *Phaedo*, Plato presents objects in the physical world as imperfect copies of the intelligible Forms.<sup>198</sup> While the heavenly bodies in the *Republic* do compel the soul to look towards the Forms, they only do so by turning it away from themselves to the ideal motions and ratios which they imitate imperfectly, as Socrates emphasises. Timaeus, in contrast, develops a much more detailed account of the cosmos, according to which the heavenly bodies follow the circles of the divine mind. Studying these circles and making λογισμοὶ κατὰ φύσιν enables people to achieve philosophical understanding of the Forms and their relation to this world.

It is unclear, however, how far the accounts of the *Republic* and *Timaeus* differ in fundamentals. The orbits of the heavenly bodies in the *Timaeus* seem to be more perfect than those in the *Republic*, in that they actually follow the revolutions of the divine cosmic mind. However, Timaeus' cosmic mind itself is still a created thing and therefore not to be identified with the objects of Being, even though it has a share in Being.<sup>199</sup> The *Timaeus* gives a different explanation of how exactly this process works, based on a quasi-physicalist analogy between the orbits of the soul and the cosmic mind. It presents a more direct relationship between the heavenly bodies and philosophy (the motions of the circles of the Same and Different) than in the *Republic*, where the heavenly bodies are imitations of the Forms like everything else, even if they are more precise ones. The *Timaeus* also gives a teleological justification of the heavenly bodies in terms of their best purpose which is at most implicit in the *Republic*. However, Timaeus' interest in the precise orbits of the heavenly bodies is

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<sup>197</sup> Accuracy (ἀκρίβεια) was important to the ancient concept of a τέχνη: Schiefky (2005): 13-9.

<sup>198</sup> *Phd.* 72e-77a, 79c-d; see further Nehamas (1975).

<sup>199</sup> *Tim.* 34b10 ff.

confined to listing the relative positions of the sun, moon, and five planets.<sup>200</sup> He does not have the *σχολή* to consider the orbits and purposes of the other heavenly bodies, any more than Socrates in the *Phaedrus* has the *σχολή* to rationalise myths.<sup>201</sup> Above all, Timaeus' account is an *εἰκῶς μῦθος*: we should be wary of taking any details about things in the created cosmos for certain, even the heavenly bodies or the divine mind.

Despite their differences in detail, the *Timaeus* and the *Republic* agree that the best use of the heavenly bodies is as a way into philosophy, through which the soul comes to have knowledge of the objects of Being, and is thereby able to become virtuous. Conversely, in both dialogues, those astronomers who focus on the heavenly bodies and do not use them as a stepping-stone to philosophy are equally misguided. Whether or not the relationship between sight, the *μετέωρα* and philosophy in the *Timaeus* was Plato's best guess,<sup>202</sup> his model has the additional function of giving a pleasing teleological justification of the heavenly bodies and sight within a divinely governed universe. To the astronomically-minded reader, this offers an alternative to the atheist philosophies of the early thinkers. In this way, Timaeus' mockery of the bird-men at 91d6-e1 is the final move in a systematic undermining of Presocratic philosophy throughout his speech. As I shall now show, the treatments of the incorrect astronomers in the *Timaeus* and *Republic* are further linked through their relation to an Aristophanic motif.

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<sup>200</sup> 38c3-e3.

<sup>201</sup> *Phdr.* 229c6-230a6.

<sup>202</sup> Ballew (1974) compares the circular thought of the *Tim.* with Parmenides'. *Plt.* 272e-274e gives another version of Platonic astronomy; cf. McCabe (2000): 141-64.

#### 3.4.5.4 'Looking up' in Aristophanic parody

That Plato had the same type of thinkers in mind in *Republic* 529a-c as in *Timaeus* 46e6-47b5 is indicated by his use in both passages of an Aristophanic parody of the activity of those who explain the world in terms of physical causes. In particular, both Aristophanes and Plato, in the *Timaeus* as well as the *Republic*, use the motif of 'looking up' to mock the early philosophers.

At *Republic* 529b5-c2, Socrates ridicules the idea that astronomy makes the soul look upwards. According to his idea of learning and knowledge, whether someone is gaping upwards or squinting downwards, ἄνω κεχηνῶς ἢ κάτω συμμεμυκῶς, he will not gain knowledge of the Forms; his soul is looking not up but downwards in all such investigations, even if he learns (about the visible world) floating on his back on land or in the sea, κἄν ἐξ ὑπτίας νέων ἐν γῆ ἢ ἐν θαλάττῃ μανθάνῃ. Previously, at 529b1, Socrates had also described incorrect astronomy as trying to learn by craning one's neck and looking up at decorations on a ceiling, ἐν ὀροφῇ ποικίλματα θεώμενος ἀνακύπτων. These phrases employ the language of awkward movements: craning one's neck, gaping upwards and squinting downwards, and as if 'swimming' (νέων) on one's back on both land and sea. This depiction of a confused and frenetic bustle of activities conveys the enthusiastic but misguided attempts of the natural philosophers to gather useless evidence from above and below, from earth, heaven and even the sea, the least interesting place in terms of the Platonic hierarchy, for their studies. This description is a parodic exaggeration of the sort of practical investigations which we can imagine that some of the natural philosophers may have been involved in.

As discussed in Part I, the topos of investigation in the earth and heavens is associated in the *Apology* (91b2-c4), *Phaedo* (96b9-c1), and *Laws* (889b) with the natural

philosophers. *Republic* 529b5-c2 continues this trend. In addition, it echoes lines from the *Clouds*, in the scene where Strepsiades is being introduced to the Phrontisterion by a student:

|     |   |     |
|-----|---|-----|
| Μα. | ζητοῦντος αὐτοῦ τῆς σελήνης τὰς ὁδοὺς<br>καὶ τὰς περιφοράς, εἴτ' ἄνω κεχηνότος<br>ἀπὸ τῆς ὀροφῆς νύκτωρ γαλεώτης κατέχεσεν. | 171 |
| ... |   |     |
| Στ. | ἀτὰρ τί ποτ' εἰς τὴν γῆν βλέπουσιν οὗτοί;   | 187 |
| Μα. | ζητοῦσιν οὗτοι τὰ κατὰ γῆς.   |     |
| ... |   |     |
| Στ. | τί γὰρ οἶδε δρῶσιν οἱ σφόδρ' ἐγκεκυφότες;   | 191 |
| Μα. | οὗτοι δ' ἐρεβοδιφῶσιν ὑπὸ τὸν Τάρταρον.   |     |
| Στ. | τί δῆθ' ὁ πρωκτὸς εἰς τὸν οὐρανὸν βλέπει;   |     |
| Μα. | αὐτὸς καθ' αὐτὸν ἀστρονομεῖν διδάσκεται.  |     |

Student: When [Socrates] was investigating the paths and orbits of the moon, then one night a lizard defecated on him from the ceiling as he gaped upwards.

...

Strepsiades: But why are those [students] looking at the earth?

Student: They are investigating things beneath the earth.

...

Streps.: What are those ones doing stooping down so?

Student: They are conducting dark investigations under Tartarus.

Streps.: But why are their bottoms looking up at the sky?

Student: They are learning astronomy for themselves.

This passage parodies the terminology and activities of the natural philosophers. At lines 171-3, the student tells Strepsiades how Socrates was once investigating the paths and revolutions of the moon, τῆς σελήνης τὰς ὁδοὺς καὶ τὰς περιφοράς. This type of astronomical study is the sort of thing Plato's Socrates disapproves of in the *Republic*, but whose language Timaeus uses in discussing the motions of the heavenly bodies;<sup>203</sup> ζήτησις, like ζητοῦντος at *Clouds* 171 and ζητοῦσιν at 188, is used of enquiry into nature at *Timaeus* 47a7. While these terms are used seriously in the *Timaeus*, their previous occurrence in Aristophanes suggests that they were already recognisable terms from discourse on astronomy.

Aristophanes highlights the crackpot nature of these investigations and their humorousness by a sudden joke: Socrates was attacked by a lizard from the ceiling, ἀπὸ τῆς ὀροφῆς, while 'gaping upwards', ἄνω κεχηνώς, to investigate the moon. Both the motif of the

<sup>203</sup> For περιφοραί, see *Tim.* 44b5.

ὄροφή as associated with upward gazes, and the comic phrase ἄνω κεχηνώς, suggesting exaggerated gestures, are found in *Republic* 529b5-c2, in a context which omits Aristophanes' scatological humour, but nevertheless reminds the reader of the original comic scene. In Plato's version, however, it is Socrates who mocks the wrongheaded astronomers, rather than being mocked for such a practice himself.<sup>204</sup> This aligns Socrates and philosophy as presented in the *Republic* against the methods and doctrines of the natural philosophers, and implies that only the former should be taken seriously. Similarly, ἐγκεκυφότες at *Clouds* 191, of the students who are 'stooping down' towards the earth, is reflected in the *Republic* both through its opposite, ἀνακύπτων, of bending up towards the ceiling, and in Plato's variation on the theme of stooping down, συμμεμυκώς. If anything, this play on the theme of looking up and down sounds even more comical than Aristophanes' ἐγκεκυφότες, especially in the pairing of συμμεμυκώς with the Aristophanic κεχηνώς, with their rhyming final syllables. In imitating an Aristophanic parody of a 'scientific' investigation, therefore, Plato adapts it to his own ends, and, in doing so, purges it of scurrilities and improves on its language.

At *Clouds* 187-8 and 193-4, Aristophanes opposes the actions of looking down into the earth (εἰς τὴν γῆν βλέπουσιν) and up into the heavens (εἰς τὸν οὐρανὸν βλέπει) respectively, as practised by Socrates' students; the second activity is specifically characterised as astronomising (ἀστρονομεῖν, 194).<sup>205</sup> This contrast is echoed by that between ἄνω and κάτω βλέπειν at *Rep.* 529b4-c6; as we have seen above, the topoi of looking up into the οὐρανός and down into the γῆ are repeatedly used by Plato of the natural philosophers' activities, and specifically of the astronomers in the *Republic* passage. Finally, Plato's comical depiction of the misguided astronomers 'swimming' on land or sea to conduct

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<sup>204</sup> Sedley (2007): 129, compares Socrates' suspension in a basket at his first entrance with the elevation of the birds.

<sup>205</sup> On *Clouds* 188 and its echoes in Plato, see Sommerstein (1991) *ad loc.*

their investigations is an original variation on the Aristophanic theme of bodily contortions in the name of science.

The similarities between these passages of the *Republic* and the *Clouds*, and the connections with similar allusions in the *Phaedo*, suggest that Plato intends the reader to draw a comparison between his and Aristophanes' parody of the vocabulary and supposed activities of the natural philosophers. Plato is more refined in both vocabulary and image than Aristophanes; this implicitly demonstrates the superiority of philosophical μίμησις over the comic.<sup>206</sup> His parody is both mediated through Aristophanes, and developed in an original way to reflect his new target. This target is defined negatively rather than positively: the primary point is that the natural philosophers should not be identified with Platonic philosophy.

Plato makes little more effort than Aristophanes to distinguish between the natural philosophers' different theories. In the *Republic*, *Timaeus* and *Laws* they are unnamed and associated with the ignorant many, while in the *Phaedo* and *Apology*, Anaxagoras is used, like Socrates in the *Clouds* or Euripides in the *Thesmophoriazousae*, as a representative of them all. Aristophanes' humour, however, comes from concentrating all of the natural philosophers' traits in the figure of Socrates and his Phrontisterion. Plato, in contrast, is less interested in later dialogues in attaching their views to a named figure. This is surely not because he considered them to have ceased to be a threat: the lengthy treatment of φύσις in *Laws X* belies such a view. Rather, the double tactic used by the above-mentioned dialogues of parodying and anonymising the natural philosophers has the effect of deflating their theories and reducing them to the status of nothing more than myths. Underlying the parody, therefore, is the serious didactic purpose of persuading the reader on an emotional as well as rational level of the futility of the non-Platonic ἱστορία περὶ φύσεως.

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<sup>206</sup> Cf. Rashed (2009): 133: Socrates in the *Phd.* is a 'refined and improved version of the Aristophanic Socrates'.

### 3.4.5.5 'Looking up' and Timaeus' bird-men

Having associated the natural philosophers with Aristophanic parody in the *Phaedo* and *Republic*, and here and in the *Apology* and *Laws* with purely physical astronomical doctrines not involving intelligent design or divine control, Plato recalls these associations at *Timaeus* 91d6-e1.

The light-headed men have become birds because they were looking up into the sky. As birds, they are thus, Plato implies, raised nearer to the μετέωρα on which they focussed their attention as men.<sup>207</sup> In this respect, they form a contrast with the entirely unphilosophical men reincarnated as land and water animals, which are located further down on the surface of the earth (91e-92c). The conceit of raising the μετεωρολογικοί towards the objects of their study suggests a sense of poetic justice worthy of the *Clouds*, which satirises the μετεωροσοφισταί (360), and as deliberate a disregard for the differences between individual philosophers or intellectuals as Plato displays in the *Phaedo*, *Timaeus* and *Laws* towards all philosophers opposed to his main speaker's views. The conceit of elevating the μετεωρολογικοί is also a variation on the theme of looking up to the heavens and down to the earth which, as we have seen, is associated with the natural philosophers elsewhere in Plato, often in reference to Aristophanes.

At 90a2-b1, Timaeus compares the human body to a 'heavenly plant', φυτὸν οὐράνιον, growing upside-down, with its head as the 'root', the highest point of its body and therefore the nearest to the divine heavens from where it has come, and its trunk growing downwards, with the more mortal parts of its soul growing nearer the earth. This schema of increasing height as symbolising greater involvement in philosophy, and depth as the opposite, will be continued with the land and water animals. The birds, however, do not fit

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<sup>207</sup> The philosophical lover is described as 'looking upwards (to the Forms) like a bird' (ὄρνιθος δίκην βλέπων ἄνω) at *Phdr.* 249d7-8.

comfortably into this symbolic system; if a man's head is higher up to make it nearer the heavens, by this logic, the birds ought to be even more philosophical than men. This anomaly in Timaeus' explanation of the existence and location of birds in relation to humans suggests that he has sacrificed the consistency of his upwards-downwards symbolism in order to polemicise more amusingly against the natural philosophers.

The inconsistency in symbolism is underlined by Timaeus' previous account of the soul at 41d-42d. Here, the souls which the Demiurge creates seem to be spatially located, and to return to the visible stars if they have lived just lives as men; but if so, we might have thought that the fate of being higher up and farther away from the earth, like birds, would be a reward rather than a punishment. However, taking seriously the idea that humans are superior because they can philosophise and so progress towards the invisible truth, a view supported by Plato's assertions both in the *Timaeus* and *Republic* that the true 'looking up' of the soul does not depend upon spatial orientation, it must be concluded that the up-and-down symbolism of the *Timaeus*, and even the idea that souls journey back to stars after their incarnations, is not to be taken at face value, but as mythical play.

Altogether, at the end of the *Timaeus*, Plato appears willing to employ every analogy possible to justify the superiority of the philosophical way of life, as conducted by the soul of a man, even at the expense of logic. While his teleological interpretation of the design of the human body and that of other animals sits uncomfortably with his upwards-downwards symbolism, the purpose of the images of the human as a plant and of the astronomers as birds is the same: to reinforce the philosophical purpose of human life.

The humour and parody inherent in the birds passage, including its description of the metamorphosis of natural philosophers into birds and the cleverness of fitting the origin of birds into a Platonic schema of psychic justice, are reinforced by the associations which the passage encourages with other Platonic treatments of the natural philosophers, and their



philosopher would do, but instead followed the parts of the soul in the chest (91e2-5). Timaeus has already explained, at 69e-71a, how the gods divided the mortal part of the soul into the spirited, courageous, ambitious and angry part, roughly corresponding to the θυμοειδές part of the soul in the *Republic*, and the beast-like part of the soul which desires food, drink and other bodily pleasures, like the ἐπιθυμητικόν part of the soul in the *Republic*.<sup>208</sup> Land animals in the *Timaeus* thus correspond to the superior mortal part of the soul; they have presumably been ambitious, angry or courageous men in their previous incarnation.

The above passage develops the theme of contemplation of the universe mentioned in the birds section. While the bird-men had used the sight of the heavens incorrectly, those who become land animals have not contemplated the heavens at all. This is underlined by the use of περίοδοι, almost a technical term in the *Timaeus*, which alludes back to the discussion of the correct use of sight at 47b7. Timaeus' degeneration narrative is thus in part a categorisation of increasingly incorrect ways of doing or failing to do astronomy, and therefore of the relation of increasingly degenerate souls to the cosmos. This point, and Plato's design in the ending in general, is further illuminated by consideration of 90b1-6. Here, Timaeus tells us that all the opinions (δόγματα) of anyone preoccupied with desires (ἐπιθυμίαι) or competitiveness (φιλονικία), that is, with the appetitive and spirited parts of the soul respectively, will necessarily be mortal (θνητά), as opposed to that part of the soul which is immortal because it has a rational understanding. The appetitive or competitive man will therefore become as mortal as possible. As mentioned above, at 90a2-b1, the human is compared to a plant, the lower parts of whose body are mortal, unlike the soul stored in the head. Altogether, 90a2-b6 implies that those men who indulge the mortal parts of their soul at the expense of the intellectual part will bind themselves increasingly to the earth.

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<sup>208</sup> For the tripartite soul, see *Rep.* 434e-444a.

Lines 91e2-92a7 thus function to explain the psychic degeneration of the human being, anticipated at 90a2-b1, in terms of souls which, in their incarnation as men, followed the revolutions in their chests. Given that practising philosophy means aligning one's revolutions with the circular revolutions of the soul of the universe, the degeneration of animals according to their souls' increasingly distorted revolutions means that they are increasingly less philosophical. Timaeus' account of animals, therefore, is not just a narrative of how new animals emerged as a punishment for souls who have previously led immoral lives as men: it also explains the shapes of animals in terms of the increasing distortion of their quasi-material souls.

The style of *Timaeus* 91e2-92a7 is light-hearted, even garrulous, with a series of artfully constructed descriptions which together picturesquely evoke the variety among land animals. At 91e6-92a4, Timaeus tells us that, because the souls of these animals had previously followed the revolutions in their chest rather than those in their head, they dragged their front legs and heads on the ground, out of 'kinship' (συγγένεια) with it. Plato seems to make a scientifically perceptive point in suggesting that human arms are in some way analogous to the front legs of animals.<sup>209</sup> On the other hand, he assumes that the function of arms was primary and that of front legs derivative, in contrast to modern evolutionary explanations. Equally, his idea that animals gain increasing numbers of legs as their soul increasingly resembles the earth cannot, with the best will in the world, be seen as a prescient insight into the evolutionary relationship between species. Rather, founding his taxonomy on the state of the imperceptible soul gives Plato very broad scope for interpreting the facts of nature to suit his story. If his ideas happen to bear some resemblance to modern theories, or pick out some of the resemblances which do exist among natural phenomena, it is less clear whether we should attribute any significance to this.

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<sup>209</sup> Cf. Sedley (2007): 131-2.

The idea of the land animal's 'kinship', συγγένεια, with the ground, may have originated in Democritus.<sup>210</sup> Plato uses συγγένεια and συγγενής frequently in the dialogues to denote both kinship relations and metaphorical extensions of this relationship.<sup>211</sup> In the *Timaeus*, συγγένεια indicates, in a natural-philosophical vein, certain affinities which unite the world at the macroscopic and microscopic levels, including the likeness between larger bodies and elements (57b6, 63c8), and the kinship of the human soul and the soul of the universe (47c1, 47d1).<sup>212</sup>

Plato uses the principle of συγγένεια to draw analogies between natural phenomena, in a way which blurs the boundary between morally significant metaphor and empirical explanation. At 91e8, the metaphorical συγγένεια of the souls of land animals with the earth is based on their heads' being closer to the ground than those of humans, in the context of a divinely controlled punishment. The revolutions of the universe do not control those in the head, but rather, it is up to humans to make their revolutions copy those of the universe by the conscious, willing practice of philosophy.

The animals' heads have all kinds of shapes, oblong and others (προμήκεις τε καὶ παντοίας ἔσχον τὰς κορυφάς), according to the ways in which the revolutions in them have in each case been squashed by 'lack of use' (ἀργία).<sup>213</sup> The ingenuity of this description lies in the way in which *Timaeus* takes the human male as the starting point, along with the model of the revolutions of the divine soul in the round head, and the kinship of this soul to the cosmos, and applies this soul-body system as a way of explaining the physical appearance of other animals. He explains the shape of their heads as a function of the disorder of the revolutions

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<sup>210</sup> Democritus, DK 68A128, 68B164. Cf. Gregory (2000): 24-5.

<sup>211</sup> Des Places (1964): 63-99.

<sup>212</sup> Des Places (1964): 86-90. On the etymology and significance of συγγενής, see Jones (1999): 9-10.

<sup>213</sup> Campbell (2000): 161, sees an anticipation of the 'atrophy and loss of organs from lack of use' in Lamarckian evolutionary theory.

of their souls, and the positioning of their front legs to touch the ground, instead of holding them upright, as with man, in terms of their greater similarity to the earth; this is due to the way that such animals follow one of the mortal parts of their soul.

Timaeus' theory of psychic degeneration is ingenious because it shows how one explanatory model, primarily designed for humans, can be applied to all animals, in such a way as to account for their variety of shape and show them to be worsened forms of men, due to their souls' having degenerated from the souls originally designed for the male human body.

The imaginative ingenuity of categorising animals according to a quasi-mechanical, intellectualist model of the soul continues in the lines which follow. Timaeus explains the creation of four-footed and many-footed animals in terms of their decreasing intelligence, according to the increasingly awry movements of the soul in their heads. The more ἄφρων the animals (or their souls) are, the closer they crawl to the ground, and consequently the more legs they need: τοῖς μᾶλλον ἄφροσιν, ὡς μᾶλλον ἐπὶ γῆν ἔλκοιντο (92a4). This line uses the repetition of μᾶλλον in the two halves to suggest a causal link between the lack of intelligence and the animals' greater proximity to the ground. The description of the god slipping extra feet under the less intelligent animals (92a3) reinforces the idea that they are works of the god's (or gods') craft, and also the idea of man as the standard animal from which all others are deviations.

At 92a5, the superlative ἀφρονεστάτοις is reinforced by παντάπασιν and πᾶν after the conjunction to emphasise, as if to the point of absurdity, the complete prostration of the lowest animals on the ground, the extreme example of their kind. This is further emphasised by the compound κατατεινομένοις, with its prefix underlining the image of movement downwards. Timaeus explains that these animals are prostrate because they no longer need



While the legless animals might have seemed the most mindless of all creatures, at 92a7-c1, Timaeus goes on to discuss an even more psychically inferior class: the γένος ἔνυδρον. As we have seen, at 39e7-40a2, Timaeus had spoken of three γένη of mortal animals, which he had identified with the three elements of air, earth and water; this is repeated in the three categorisations at 91d-92c of birds, land and water animals. At 92b1, however, Timaeus speaks of water animals as τὸ τέταρτον γένος, thus categorising them, along with land animals, birds, and humans, as four separate kinds.

This remark would seem to be at odds both with the previous three-γένη categorisation, and the schema whereby women represent the first type of reincarnation in the stages of the degeneration of the soul. The effect of making water animals the fourth γένος, with humans as the first, is to structure Timaeus' account into a neat fourfold narrative of degeneration, which implies that humans are a special case, and not to be linked with any of the three elements associated with air, land and water animals. This is presumably because humans are closer to the divine soul of the universe than other animals.<sup>215</sup>

Altogether, Timaeus' zoogony makes distinctions between men, women, birds, land animals, and water animals; earlier in his speech he also mentions stars (fiery animals), as well as, in a separate class, gods. Just as Plato borrows from Empedocles in having Timaeus use earth, water, fire and air as his basic elements, so Timaeus' categories of ζῷα seem to be based on Empedocles' list, repeated in his extant fragments, of trees, men, women, beasts, birds, fish, and gods, as 'all things which were or are or will be'. All of these, Empedocles claims, emerged from his four elements, under the direction of the two principles of Love and Strife.<sup>216</sup> Plato also matches his categories of ζῷα to the Empedoclean elements, but, as we

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<sup>215</sup> *Tim.* 90a2-b1; cf. *Plt.* 271e6-7; *Crat.* 399c1-6. At *Plt.* 271c1-2 some human souls are taken by the god to another destiny instead of being reincarnated.

<sup>216</sup> KRS: 292-4, with §355, 356 = Empedocles, fr. 21, 23.

have seen, in a more schematic and complex fashion which leaves room for the special place of humans between the mortal and divine spheres.

Empedocles also explains the species existing at his time in terms of a number of evolutionary stages, where the animals which survive through procreation are the result of fortunate chance unions, rather than any deliberate design.<sup>217</sup> As we have seen, Plato draws attention to the gods' involvement at every stage of animal development in order to underline his point that everything in the universe is the result of divine design.

Plato's double use of Empedoclean categories has the effect of further associating his zoogony with the explanations of the μετεωρολογικοί. However, the purpose of his adaptation is humorous rather than serious, to provide a convenient structure for making distinctions among souls rather than to really cut nature at the joints.

#### 3.4.7.2 Water animals in the *Timaeus*

While *Timaeus* has used the category of birds to attack the physicists, and the category of land animals to criticise those who are ambitious and spirited but non-philosophical, the category of water animals gives a different explanation for a type of soul described in different terms from those before. This evokes both the theories of the natural philosophers and the *Phaedo*.

The fourth γένος, says *Timaeus*, was born from the most mindless and unlearned; that is, from (the souls of) the most unlearned men of the first generation (92a7-b2). These lines, while appearing simple, are very carefully constructed. The verb γέγονεν is repeated from 91e2, where it was used of the land animals, thus suggesting a formulaic continuity in the narrative. It also creates an etymological play with γένος, drawing a close connection, through verbal association alone, between the nature of the γένη and the fact that they are

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<sup>217</sup> KRS: 303-7, with §376-82 = Empedocles, fr. B57, B59-61, B62, A75.

‘created’, and so products of the world of Becoming. While the men who were reincarnated as both water and land animals are described in superlatives as ‘very mindless’, Plato uses different adjectives to convey this in each case: ἀφρονέστατοι of those changing into legless land animals, and ἀνοητότατοι and ἀμαθέστατοι of those becoming water animals. Two superlatives are needed for the latter, to emphasise that they are even worse than the former. Timaeus’ categorisations again rely for their persuasiveness on their rhetorical and artistic manner of description at least as much as on their definitions or evidence. All three of the above adjectives denote a lack of mind or mental ability: of φρένες, νοῦς and the ability to μαθεῖν respectively. All of these terms are used of the highest, immortal part of the soul in humans, residing in the head.

Those who refashioned the most unlearned men into fish, explains Timaeus, did so because they did not think them worthy of a pure drawing of breath, καθαρὰ ἀναπνοή. Rather, since the soul of such men was in an unclean condition, the gods pushed them into the water and forced upon them a θολερὰ καὶ βαθεῖα ἀνάπνευσις. The transition from one element to another is highlighted by the closeness of the terms at 92b5: ἀέρος εἰς ὕδατος. The link between the purity of the air appropriate for the creatures to breathe and the purity or lack thereof of their souls is made verbally, through the way in which καθαρᾶς balances ἀκαθάρτως, and λεπτῆς καὶ καθαρᾶς ἀναπνοῆς ἀέρος is balanced by ὕδατος θολερὰν καὶ βαθεῖαν ἀνάπνευσιν, each phrase with its two adjectives and modifying genitive of opposing elements. The variation between ἀναπνοῆς and ἀνάπνευσιν seems to be done for aesthetic reasons, to prevent overly heavy repetition, as well as to suggest continuity within change, through literary rather than argumentative means.

The description of the gods as οἱ μεταπλάττοντες links the process of transformation here with that of the birds and women, whose transformations are described using verbs with

the μετα- prefix, even though Plato is, as usual, careful to vary the precise verb used.<sup>218</sup> The gods' presence in the passage, and the explanation of fish in terms of the type of breathing of which they 'thought them worthy' (ἠξίωσαν), reinforces the teleological nature of Timaeus' account, and specifically the point that the different races of animals were designed to reflect a moral judgement of their souls' previous lives. We may also note the comedy in the verb ἔωσαν, which again presents the gods not just as distant designers or even artisans, but as mechanics or engineers<sup>219</sup> who have to start their creations moving in an undignified way which is less than perfectly controlled. This detail further contributes to the self-undermining of Timaeus' account, and its invitation to the reader not to take its biological details too seriously.

With land animals, Timaeus made the shape of their heads correspond to the previously disturbed revolutions in their souls, and their closeness to the ground correspond to the extent to which those men reincarnated as them had nourished the mortal parts of their soul. With water animals, in contrast, Timaeus uses a different, though still apparently physicalist model: the soul was in an ἀκάθαρτος condition due to its πλημμελεία πᾶσα, and therefore was no longer permitted to breathe in καθαρὸς air. The idea of πλημμελεία, a 'false note', 'mistake in music', or a 'mistake' more generally,<sup>220</sup> as applied to the soul, reminds us of the parallel drawn earlier between the soul's revolutions and those of the universe, which in turn is constructed, like a musical scale, according to ratios.<sup>221</sup> The description of those changed into fish in terms of the condition of their ψυχή finally makes explicit the idea which informs Plato's account of the origin of animals as a whole: that it is the soul of men of the

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<sup>218</sup> Of women: μετεφύοντο, 90e8. Of birds: μετερρυθμίζετο, 91d6-7.

<sup>219</sup> For the gods as engineers, cf. Sedley (2007): 98, 127.

<sup>220</sup> LSJ s. v. πλημμελεία.

<sup>221</sup> At 30a4-5, the perceptible realm prior to the Demiurge's intervention is described as κινούμενον πλημμελῶς καὶ ἀτάκτως. At 82b5, in discussing the origin of diseases, substances harmful to the body are described as 'being offensive' (πλημμελήση) to it as they pass in or out. For the construction of the universe according to ratios, see 35b-36b.

first γένεσις which is reincarnated in new animal bodies, designed for this purpose by the gods, rather than that the men themselves were somehow transformed into animals.

The state of the soul in the water animals thus is reflected, not in the shape of their heads or bodies, but rather in the air or water which they are permitted by the gods to breathe. This is an appropriate explanation for a myth aiming to stress the greater value of learning and cultivating the more philosophical, intellectual part of the soul. It is, however, unsatisfactory as a biological explanation, not least since to use ἀκαθάρτως for the state of the soul implies a moral impurity or intellectual flaw of some kind, while it is in physical terms that the air is more καθαρός than the water, which is specifically described as ‘muddy’.

It is from these origins, Timaeus continues, that the ἰχθύων ἔθνος, the oysters and all those creatures which dwell in water were created, receiving the ἐσχάται οικήσεις, the ‘most extreme’ or perhaps the ‘deepest’ dwelling-places, because of their ἀμαθία ἐσχάτη. This sentence (92b6-c1) involves at least two verbal manoeuvres to improve the plausibility of the explanation. Firstly, it categorises the fish as an ἔθνος. This would be very similar to categorising them as a γένος, which Plato does not want to do, because he wants to create his own γένος of water-dwelling creatures. The only other example he gives of ἔνυδρα, however, are oysters. His failure to go into detail about the different water animals again shows his greater interest in dividing up the animal kingdom neatly but crudely according to the four elements, rather than by any criteria based on more detailed differences between animals themselves.<sup>222</sup>

Secondly, the juxtaposition of ἐσχάτης and ἐσχάτας functions to connect the extent of the water animals’ ignorance with the depth of their dwelling places. However, as with καθαρός above, ἔσχατος is used differently in the two cases; an ἀμαθία ἐσχάτη is only ‘extreme’ metaphorically, while ἐσχάται οικήσεις are ‘extreme’ in terms of spatial location.

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<sup>222</sup> Contrast Aristotle’s observationally-based approach (*PA* 643a36 ff.).

This explanation is connected with the previous one at 92b2-6 through the adjective βαθεῖαν at 92b5: it seems, although it is not explicitly stated, that the reason why having ‘extreme dwelling-places’ is a punishment (δίκη) is because the deeper the fish dwell, the thicker, muddier and less palatable is the water which they breathe. This association of natural phenomena, under a certain description, with ethical values, makes Timaeus’ account resemble an Aesopic fable more than a medical or scientific explanation.<sup>223</sup>

The last sentence of the passage quoted above (92c1-3) sums up Timaeus’ account of animals. All animals change into each other (διαμειβεται εἰς ἄλληλα) as they did at the creation, and still do now (τότε καὶ νῦν). The latter phrase indicates that we are not meant to understand the changes among animals as a literal occurrence, since it would blatantly contradict everyday observation, but rather as referring to a perpetual cycle of reincarnations of souls. As the souls of animals are transferred from body to body, they lose and gain νοῦς and ἀνοία, that is, the measure of intelligence which comes from the divine part of their soul’s proper functioning, and which, in other words, makes it more or less philosophical. *Timaeus* 92c1-3 therefore directs us to consider the account of animals purely in terms of the fate of the soul, and, in a whimsical fashion, leads us to the conclusion that we would be better off in a life devoted to νοῦς and φιλοσοφία.

### 3.4.7.3 Levels of reality in the *Phaedo*

The above interpretation of Timaeus’ account of water animals receives support from consideration of the early philosophers’ ideas of the origin of animals, and a passage of the *Phaedo*. Anaximander is reported to have thought that the first creatures were born in bark,

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<sup>223</sup> For Aesopic influences on Plato, see Kurke (2006). Sedley (2007): 129, views Timaeus’ account of the birds as a ‘Just So story’.

and that the first humans grew to maturity inside fish or fish-like animals.<sup>224</sup> Anaxagoras may have followed this view.<sup>225</sup> Archelaus reportedly held that all animals emerged from a primaeval slime.<sup>226</sup> Timaeus' account of water creatures appears to be a parodic alternative to these, which has the advantage of setting the ἔνυδρα within a schema which explains them in terms of intelligent design. This directs the reader, in an elegant and playful tone, to look away from the empirical details towards the real focus of human life: the soul.

Timaeus' explanation of the transformation into fish in terms of breathing impurities is also reminiscent of Socrates' description of the world at *Phaedo* 109a9-110b2.<sup>227</sup> Here, Socrates presents the 'hollows' of the earth, where humans live, as purer and more beautiful (καθαρώτερος καὶ καλλίων, 109d3) than the depths of the sea, and things on the higher, 'real' earth above the human level as purer and more beautiful still. Socrates likens the individual living in the hollows, who yet thinks he is living on the surface of the earth, to that of someone living on the bottom of the sea, who yet thinks he is living on its surface, and incorrectly believes that the sea, through which he sees the sun and stars, is the οὐρανός. We cannot travel up to the surface of the earth any more than someone at the bottom of the sea can travel to its surface, because we are hindered, like those at the bottom of the sea, by 'slowness and weakness' (βραδυτής καὶ ἀσθένεια 109c8, d8-e1).

If, however, someone could become winged (πτηνός, 109e2-3) and fly to the surface of the earth, then, like fish raising their heads above the water,<sup>228</sup> if his nature were sufficient

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<sup>224</sup> KRS: 140-2.

<sup>225</sup> KRS: 382-3, with §505 = DK 59 A42.

<sup>226</sup> KRS: 386-8. See Taylor (1928) *ad* 92b2 for other ancient theories about aquatic breathing.

<sup>227</sup> Taylor (1928) *ad* 92b7-c1 compares with these lines the theory of the different levels of air, but does not make detailed comparisons. He suggests that 'a fanciful use is being made of the theory of Diogenes about ἰκμάς'. On the end of the *Phd.* as scientific material used symbolically, see further Hackforth (1955): 171-5.

<sup>228</sup> Ἀνακίπποντες, 109e3-5. The same verb is used at 109d2 and e3, respectively of the sea-dweller raising his head above the water, and the human flying up to the earth's surface.

to contemplate it (εἰ φύσις ἰκανὴ εἶη ἀνασχέσθαι θεωροῦσα, 109e5-6), he would there find the true heaven, light and earth. The moisture down on earth damages the stones, earth and its plants (φυτὰ) and animals (ζῷα).<sup>229</sup> In contrast, those living on the true surface of the earth are free from disease, live longer, and their ὄψις, ἀκοή and φρόνησις is superior to that of humans in the earth's hollows, just as air (ἀήρ) is purer than water and aether (αιθήρ) is purer than air (111b2-c3). They see the sun, moon and stars as they really are, dwell with the gods, and have achieved a correspondingly greater level of εὐδαιμονία. Socrates will go on to describe the regions under the earth, where souls are sent which need to be purified through punishment,<sup>230</sup> and the final stage of purification of the soul, which is complete disembodiment (114c2-6).

The concept of purity in the *Phaedo* is used of the soul freed from the body and having knowledge of the realm of truth, as well as of the realm of truth itself.<sup>231</sup> The four (or five) levels of the world in the *Phaedo* myth, from the underworld to the upper aether and disembodiment, symbolise an 'arrangement' or hierarchy of souls according to their 'degree of purification'.<sup>232</sup> According to this schema, then, the more the soul is purified, the more it is freed from the body, and the better it is able to 'see' the true reality. The elements of aether, air and water are the media which to a greater or lesser extent prevent the individual from seeing the universe clearly; they thus symbolise something like the soul's ignorance, or the degree to which it is still impure and bound to the body.<sup>233</sup> The βραδυτής καὶ ἀσθένεια which prevent the individual from moving up out of the sea, or from the hollows of the earth to its

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<sup>229</sup> 110e2-6.

<sup>230</sup> 113d-114b; cf. 108bc.

<sup>231</sup> Loriaux (1975): 139.

<sup>232</sup> Sedley (1991): 373-4.

<sup>233</sup> Sedley (1991): 380, takes the impurity of the realm to correspond to that of the souls. Hackforth (1955): 174-5, sees a parallel, if an imperfect one, between the journey from the hollows of the earth to its surface and the journey in *Rep.* VII from the cave to the upper world.

surface, suggest a failing of the soul due to its being weighed down by the attractions of the body.<sup>234</sup> The idea of needing wings to reach the true surface of the earth seems to anticipate the flight of the soul in the *Phaedrus* to the upper heaven, where it catches sight of the Forms (246a-250c). As in the *Phaedrus*, *Republic* and *Timaeus*, the language of sight at *Phaedo* 109e6 looks like a metaphor for the soul's intellectual comprehension of the true, invisible reality.

The purpose of Socrates' description of the earth in the *Phaedo* is primarily symbolic and 'psychocentric'.<sup>235</sup> This is implied both by the different ways in which Plato describes the earth and the soul's life after death in different dialogues, and by Socrates' closing remarks in his account in the *Phaedo*. At *Phaedo* 114d1-2 he admits that it is not humanly possible to be certain about his account, but something like it must be true of our souls and their dwelling-places (περὶ τὰς ψυχὰς ἡμῶν καὶ τὰς οἰκίσεις, 114d2-3). In any case, it is a risk worth running, since the soul is definitely immortal (114d4-6). One should use such accounts as a charm (χρὴ τὰ τοιαῦτα ὥσπερ ἐπάδειν ἑαυτῷ, 114d6-7), and be confident about the fate of one's soul after death if one has lived virtuously (114d8-115a3). These remarks show that the primary function of Socrates' description of the earth is to provide the reader with a way of conceiving of his soul's place within the universe, and of persuading him, at the rhetorical and poetic rather than argumentative levels, of the supreme importance of acting virtuously and, in doing so, caring for his immortal soul rather than the pleasures of his mortal body. From this perspective, as Sedley observes, it does not matter how far Plato believed his account of the earth was accurate.<sup>236</sup>

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<sup>234</sup> Cf. *Rep.* X.611cd.

<sup>235</sup> Sedley (1991): 374.

<sup>236</sup> Sedley (1991): 383. Fine (1991) criticises Sedley's argument that the myth of the *Phd.* conceals beneath its surface a teleological explanation of the world.

The myth of the *Phaedo* thus functions as a charm against the materialistic, atheistic accounts of the early philosophers. It charms us against them by parodying them, through comparing the condition of the human soul to that of fish in the depths of the sea, and through the conceit that humans live in the murky hollows of the world.

#### **3.4.7.4 The ignorance of fishes**

The association between impurity of element inhaled and impurity of the soul through its disordered revolutions at *Timaeus* 92a7-c1 clearly echoes the *Phaedo*. As the individual in the *Phaedo* is able to see the heavenly bodies once he has progressed to the aethereal realm, but is able to see them less clearly from the hollows of the earth, and would be even less able to see them from the bottom of the sea, so in the *Timaeus*, the level of ἀμαθία increases in creatures dwelling deeper in the water from those on land, as the water they breathe becomes muddier. In the *Phaedo*, however, the state of dwelling in the sea, and the reference to fish, is used in an analogy with the current human condition relative to the dwellers on the earth's surface. Timaeus' account, in contrast, purports to explain the existence of water animals.

The *Phaedo* implies an analogy between sight and knowledge at all levels, and the water, air and aether are considered in relation to this. In the *Timaeus*, the muddy water does not impede sight, but rather, what the animals inhales corresponds to the state of its soul. While in the *Phaedo*, therefore, the medium has a direct impact on the ability of the individual to see, which is an allegory for intellectual comprehension, in the *Timaeus*, there is no more than a faint allusion to natural philosophical theories of breathing in the correspondence between element and soul, and Plato does not discuss the mechanics of it in any detail. This comparison illustrates how Plato changes the details of the quasi-scientific analogy which he uses from dialogue to dialogue to harmonise aesthetically with the particular myth he is

telling. In both dialogues, however, the fundamental focus, beneath the pleasures of the story, is the soul. The similarity-within-difference of Socrates' and Timaeus' myths prompts us to reflect on what exactly Plato's point about the soul might be, and on the relative importance of the body and the soul, and what we can know or should believe about either.

The analysis of Section 3.4 shows how the focus of Plato's zoogony moves away from the Presocratic interest in the actual constitution of animals, towards their purpose as soul-carriers designed by the gods. In the *Timaeus*, Plato continues his tactic from the *Phaedo* and elsewhere of parodying the early philosophers and medical theorists, and of transforming their enquiries into mythical narratives of the soul. In this way, the *Timaeus* emerges as a scientific myth to charm scientifically inclined readers out of their atheistic tendencies into believing Plato's more attractive teleological explanation.

### 3.5 Conclusion

|   |      |
|---|------|
| Καὶ δὴ καὶ τέλος περὶ τοῦ παντὸς νῦν ἤδη τὸν λόγον      | 92c4 |
| ἡμῖν φῶμεν ἔχειν· θνητὰ γὰρ καὶ ἀθάνατα ζῶα λαβῶν καὶ   | 5    |
| συμπληρωθεὶς ὁδε ὁ κόσμος οὕτω, ζῶον ὀρατὸν τὰ ὀρατὰ    |      |
| περιέχον, εἰκῶν τοῦ νοητοῦ θεοῦ αἰσθητός, μέγιστος καὶ  |      |
| ἄριστος κάλλιστός τε καὶ τελεώτατος γέγονεν εἰς οὐρανὸς |      |
| ὁδε μονογενῆς ὄν.                                       |      |

And so now we may say that our account of the universe has reached its completion. This world of ours has received and is filled with living creatures, mortal and immortal; a visible living creature encompassing visible ones, a god and perceptible image of the intelligible god, it has come into being as the greatest and best and most beautiful and most complete, this one universe, being the only one of its kind.

Timaeus reaches the peroration of his encomium of τὸ πᾶν (92c4), a universe which, as a god fashioned by a god in the image of a god (92c7), is the divine product of divinely rational thought imposed on matter. These lines remind us that, for Timaeus, to talk about φύσις and the universe is to talk about gods and divine purpose.<sup>237</sup> The repetition of ζῶα and ζῶον links the end of the *Timaeus* with the beginning, where Socrates likens the city discussed in the

<sup>237</sup> *Critias* 106a3-4, 107a7-b4, with Johansen (2004): 25.

*Republic* to a painting of beautiful animals (ζῷα καλά).<sup>238</sup> This echo, together with the rhetorical style of the ending, with its repetition of paired and superlative adjectives, reinforces the point that Timaeus' speech is a work of art, an image of the universe which itself is a work of art and image of an eternal παράδειγμα.

Timaeus' account of the universe is complete not in the sense in which a scientific treatise is complete but in the sense in which a work of art is complete. Despite being highly selective, and only mentioning the majority of the world's ζῷα in the smallest detail, Timaeus' speech encompasses all the details relevant to his didactic purpose of showing the reader how to find a divine purpose in nature and an ethical significance for the soul. In this respect, the purpose of the *Timaeus* is similar to that of other Platonic dialogues: to educate the reader's soul by both rational and irrational means.

The coda on animals uses a humorous parody of Plato's predecessors to provide a pleasing close to the dialogue, and, through this civilised form of persuasion, finally ween any unsure readers off a materialist view of the cosmos. By drawing attention to his account's parody of its predecessors, Plato implies that all accounts of this process are equally comical, and no more likely to be accurate than his own. As Shorey elegantly puts it in the epigraph to this chapter, Plato 'could still argue with confidence that all attempts at a history of creation were merely guesses at truth, and that his guesses were quite as consistent as those of his opponents, and infinitely more beautiful'. Even if, as we have seen, Plato sometimes abandons empirical consistency to make a polemical or moral point, we may certainly agree with Shorey that his 'guesses' are aesthetically charming, as well as entertaining. If Plato's εἰκῶς μῦθος is not always good science, it is always good poetry and rhetoric; as, we might think, is appropriate for a narrative which aims at convincing the reader of the virtue of philosophy rather than of the precise details of the creation.

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<sup>238</sup> 19b5; cf. Osborne (1996): 182; Taylor (1928): 48. Johansen (2004): 191, compares *Phdr.* 264c.

Timaeus' zoogony is interwoven with a variety of patterns of explanation, verbal humour, and allusions both within the dialogue and to other dialogues, particularly the *Phaedo* and *Republic*. This requires awareness of the scientific doctrines echoed and the theory of the soul developed earlier in the *Timaeus*. However, the dialogue's force and its pleasure are neither in the argumentation, which is weak, nor the scientific insight, which is variable in quality. Rather, the type of reading which best appreciates these effects is a literary and imaginative one, which catches the nuances and the connections made beneath the surface, and recalls multiple associations simultaneously. The passage does not function to teach the reader in the sense advocated in the *Phaedrus*, of discussing the same point repeatedly in different ways through the use of dialectic. Rather, it pleases and thereby stimulates the reader to reflect on his own hierarchy of values.

To this extent Critias is right, at least as far as its ending is concerned, to hint that Timaeus' speech was σκιαγραφία ἀσαφής (*Critias* 107d1). It is a shadowy imitation of an imitation of true reality: a μῦθος of creative artistry which stirs the imagination as much as a mathematically-based, rational λόγος. Rather than a scientific or philosophical treatise, it is philosophical literature.



## **Chapter 4. Literature and Science II:**

### **Natural Philosophy in the *De Rerum Natura***

#### **4.1 The *DRN*, literature and philosophy**

In Chapter 3, I considered the extent to which the account of the universe in the *Timaeus* is based on a teleological interpretation of natural phenomena in terms of divine purpose, and how the ending of the dialogue in particular parodies and reworks scientific themes into what is fundamentally a myth of the soul. I shall now return to the *DRN*, and Lucretius' treatment of natural philosophy. I shall use the close analysis of *DRN* II.333-80 as a foundation for considering Lucretius' reversal of the teleology of the *Timaeus*.

Arguably, Lucretius' attitude towards the material world as the only reality leads him to present his empirical observations as proofs of the existence of atoms, or descriptions which can be correctly explained in terms of the workings of atoms. This contrasts with Plato's treatment of descriptions of the material world, as discussed in Chapter 3, as a game of reorganising the universe, and particularly the lower animals, in terms appropriate to an aesthetically and mathematically inclined Demiurge. At the same time, the *DRN*, even in supposedly more technical stretches like II.333-80, does not simply consist of a series of logically valid arguments and conclusive inferences from the visible to the invisible. Rather, it mixes analogical reasoning based on a theoretical model of atoms with rhetorical polemic and poetic narrative and description.

My argument will focus in particular on II.371-80 and its philosophical lineage. I shall argue that Lucretius' references to intelligent design here and elsewhere are consciously antagonistic to the view presented in the *Timaeus*, although in some places they may also be engaging with Aristotle's *De Philosophia*. I shall also consider whether Lucretius' treatment

of the issue may be said to be more scientifically or argumentatively sound than Plato's, and whether there are any similarities at a literary level, despite the doctrinal differences.

As I will show, Lucretius' combination of the scientific and philosophical with the ethical and aesthetic is characteristic of philosophical literature as I have defined it: writing which stimulates the mind to think both imaginatively and logically, associatively and analytically. In this respect, Lucretius may turn out to be closer to Plato than usually assumed.

## 4.2 *DRN* II.333-380: Analysis

### 4.2.1 Atoms and their shapes

#### *DRN* II.333-380

nunc age iam deinceps cunctarum exordia rerum  
qualia sint et quam longe distantia formis  
percipe, multigenis quam sint uariata figuris; 335  
non quo multa parum simili sint praedita forma,  
sed quia non uolgo paria omnibus omnia constant.  
nec mirum; nam cum sit eorum copia tanta  
ut neque finis, uti docui, neque summa sit ulla,  
debent nimirum non omnibus omnia prorsum 340  
esse pari filo similique adfecta figura.  
praeterea genus humanum mutaeque natantes  
squamigerum pecudes et laeta armenta feraeque  
et uariae uolucres, laetantia quae loca aquarum  
concelebrant circum ripas fontisque lacusque, 345  
et quae peruolgant nemora auia peruolitantes –  
quorum unum quiduis generatim sumere perge:  
inuenies tamen inter se differre figuris.  
nec ratione alia proles cognoscere matrem  
nec mater posset prolem; quod posse uidemus 350  
nec minus atque homines inter se nota cluere.  
nam saepe ante deum uitulus delubra decora  
turicremas propter mactatus concidit aras,  
sanguinis exspirans calidum de pectore flumen;  
at mater uiridis saltus orbata peragrans 355  
quaerit humi pedibus uestigia pressa bisulcis,  
omnia conuisens oculis loca si queat usquam  
conspicere amissum fetum, completque querellis

frondiferum nemus adsistens et crebra reuisit  
 ad stabulum desiderio perfixa iuenci; 360  
 nec tenerae salices atque herbae rore uigentes  
 fluminaque illa queunt summis labentia ripis  
 oblectare animum subitamque auertere curam,  
 nec uitulorum aliae species per pabula laeta  
 deriuare queunt animum curaue leuare: 365  
 usque adeo quiddam proprium notumque requirit.  
 praeterea teneri tremulis cum uocibus haedi  
 cornigeras norunt matres agnique petulci  
 balantum pecudes: ita, quod natura reposit,  
 ad sua quisque fere decurrunt ubera lactis. 370  
 postremo quoduis frumentum non tamen omne  
 quidque suo genere inter se simile esse uidebis,  
 quin intercurrat quaedam distantia formis.  
 concharumque genus parili ratione uidemus  
 pingere telluris gremium, qua mollibus undis 375  
 litoris incurui bibulam pauit aequor harenam.  
 quare etiam atque etiam simili ratione necessest,  
 natura quoniam constant neque facta manu sunt  
 unius ad certam formam primordia rerum,  
 dissimili inter se quaedam uolitare figura. 380

Come now, perceive next of what sort the beginnings of all things are and how far they differ from each other in their forms, how varied they are in their figures of many kinds; not that too few of them are endowed with a similar form, but that usually not all are like each other. Nor should you be surprised; for since there is such a large supply of them that there is no limit or sum total, as I have taught, they must without doubt not all have the same texture as each other and be characterised by the same shape.

Moreover the human race and the mute swimming flocks of the scaly ones and the rich herds and the wild beasts and various birds, which throng the happy regions of water around the river banks, springs and lakes, and which populate the pathless woodlands as they fly through them – take any one of these from any species: you will nevertheless find that it differs from the others in shape. Nor could the offspring recognise its mother in any other way, nor the mother her offspring; which we see that they are capable of, and no less than men are known and named among themselves.

For often before the adorned shrines of the gods a slaughtered calf falls before the incense-burning altars, breathing out a warm river of blood from its breast. But the bereaved mother, wandering through the green forests, seeks the footprints pressed into the ground with cloven hooves, looking everywhere to see if she can catch sight of her lost calf anywhere, and she fills the leafy grove with her lamentations and again and again returns to the stall, pierced by longing for her calf; nor can the tender willows and grass green with dew and those rivers slipping past the tops of their banks delight her mind and take away her sudden care, nor can the sight of other calves in the rich pasture divert her mind and lighten her care: to such an extent does she seek something belonging to her and known to her.

Moreover the young kids with their trembling voices recognise their horn-bearing mothers and mischievous lambs the flocks of bleaters: thus, as nature demands, each animal usually runs to its own udders of milk.

Finally you will see that not all grains of corn are alike by kind among themselves, but that some difference in shapes intervenes [between each grain].<sup>1</sup> And in a like manner we see the race of shells painting the bosom of the earth, where the water beats on the thirsty sand of the curved shore with soft waves.

<sup>1</sup> See Avotins (2003) for this sentence.

Therefore even more is it necessary, since the first-beginnings of things exist by nature and are not made by hand to the fixed form of one, that they fly about, certain ones differing from each other in shape.<sup>2</sup>

The philosophical argumentation of *DRN* II deals with the nature and properties of atoms. In doing so, it relies heavily on arguments by analogy from the visible to the atomic levels. This form of argument was given more weight in antiquity as a method of proof than it would be in modern science.

The Epicureans used analogy from the visible to the invisible levels as a key way of arguing for the existence of atoms.<sup>3</sup> This also enabled them to eliminate the gods as an explanatory device, since at no level were the mechanical workings of atoms directed or supplemented by divine agency. Exactly how Epicurus thought that visible phenomena could be used as ‘signs’ from which to infer the invisible has been debated.<sup>4</sup> However, the basic idea is that ‘an item or process in our experience is taken as a model for a non-evident one, which is then conceived as, *mutatis mutandis*, like its evident model’;<sup>5</sup> a similar idea is expressed by Lucretius.<sup>6</sup>

Epicurus seems to have held the strong view that all explanations for a natural phenomenon whose causes were not evident to observation could be rejected by ἀντιμαρτύρησις, ‘contestation’, or demonstration that the theory would have consequences incompatible with the phenomena; but all explanations not rejected in this way were ‘objectively possible’,<sup>7</sup> and were in fact realised at some point either in our world or in another one. A corollary of this view was that an explanation of a phenomenon could be

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<sup>2</sup> Translation based on Rouse and Smith (1992).

<sup>3</sup> For analogy in Lucretius, see Schiesaro (1990); on analogy more generally, Lloyd (1966).

<sup>4</sup> For Epicurus’ account of inference and analogy in this paragraph, I follow Allen (2001): 196-205; cf. Kieve (1978): 47.

<sup>5</sup> Allen (2001): 195.

<sup>6</sup> *DRN* II.112-141.

<sup>7</sup> Allen (2001): 197.

proved true because its contradictory was rejected by ἀντιμαρτύρησις from that phenomenon; while ‘compatibility with the phenomena [was] not only a necessary but also a sufficient condition for the truth of a theory’.<sup>8</sup> It seems that all uncontested analogies drawn from our experience for a natural process with hidden causes could form valid explanations of that process.<sup>9</sup> In this way, natural phenomena could be used as signs from which hidden natural processes could be inferred, by bearing close similarities to these processes.

Analogy was thus used by Epicurus to draw true inferences from phenomena. At the subjective end of the spectrum, however, analogy generally speaking is implied simile: the drawing of connections, parallels and similarities between two things which may have nothing objectively in common, but from which a poetic meaning is generated. As Aristotle recognised, metaphor requires the perception of similarities.<sup>10</sup> So, as far as Epicurus was concerned, do the discoveries of natural philosophy.

It is striking that many of the analogies which Lucretius uses do not form part of extant Epicurean texts. Many of them are poetically effective in a way that Epicurus’ do not try to be; this suggests that they are his original contribution. However, as Schiesaro has argued, Lucretius’ innovation in analogies sometimes leads to ‘imprecision’ in his arguments and invalid results.<sup>11</sup> In what follows, I shall consider how Lucretius’ analogy functions, and how well he combines the philosophical and poetic aspects of analogy, with reference to one lesser-studied example. This is at *DRN* II.333-380, where Lucretius introduces the claim that atoms have different shapes.

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<sup>8</sup> Allen (2001): 203.

<sup>9</sup> *Ad Pythoclen* 94, with Allen (2001): 201.

<sup>10</sup> *Poetics* 1459a5-8.

<sup>11</sup> Schiesaro (1990): 41.

At II.333-341, Lucretius claims that, since there are an infinite number of atoms, as he has argued at I.1008-1051,<sup>12</sup> it is necessary that not all of them have the same shape. He goes on at 342-376 to give a list of instances of variety in animate and inanimate nature, which are, by an implicit analogy, to prove that there is also a certain amount of variety at the atomic level. At 377-80, he restates his claim that atoms have a *dissimilis figura*. At 381-477, sensations such as particular tastes, and other properties of phenomena, are explained on the basis of this atomic variety. Lucretius goes on to make further arguments based on the principle of a limited variety among atoms. I shall now consider how far Lucretius' approach at 333-380 differs from the Epicurean doctrine on which it is based, and how far the argument at 333-80 is elucidated by passages elsewhere in the *DRN*.

In *ad Hdt.* 42-3, Epicurus argues that atoms are ἀπερίληπτα ταῖς διαφοραῖς τῶν σχημάτων, 'indefinite as to the differences of their shapes', because such a variety as is found in compounds could not come ἐκ τῶν αὐτῶν σχημάτων περιειλημμένων, 'from the same limited [number of] shapes'. Those of the same shape are ἀπλῶς ἄπειροι, 'simply unlimited' in number; but the atoms are not ἀπλῶς ἄπειροι in variety, but only ἀπερίληπτοι, that is, the number of atomic shapes is 'indefinite'.<sup>13</sup> At *ad Hdt.* 56-9, Epicurus argues against the Democritean view that atoms could be of any size, including the very large; this would have the unwelcome consequence that the number of types of atoms could also be infinite. Epicurus counters this with the doctrine of the ἐλάχιστα, which Lucretius translates as *minimae partes*, the 'least parts' out of which the atoms are indivisibly formed and from which they gain their particular shapes; since the *minimae partes* can only be combined in a certain number of ways, given a limit to the size of the atom, the number of types of atom is

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<sup>12</sup> Cf. II.522 ff.

<sup>13</sup> Clay (1983): 156, with n. 77, plausibly interprets the latter term as contrasting with περιειλημμένων; for an older view, see Bailey (1947) *ad loc.* and Arrighetti (1973): 495.

also finite.<sup>14</sup> In arguing for atomic variety, Epicurus seems to be assuming a specific opposing view, that the variety of visible things could come from a finite number of atomic shapes, rather than, as with Democritus, an infinite number. Epicurus' view of finite atomic variety has been connected with Plato.<sup>15</sup>

Lucretius' presentation of the doctrine of atomic variety broadly follows Epicurus', but is less conceptually subtle. At 333-5, Lucretius introduces the idea of atomic variety, and emphasises that atoms differ *longe* in shape (*forma, figura*). It is difficult to tell the exact point being made at 336-7, not least because *parum* in 336 could modify either *multa* or *simili*. The lines follow Lucretius' didactic command to 'look how varied the atoms are in their many types of shapes' (335). Taking *multa parum* together, the translation would be, 'not that many too few [atoms] are endowed with the same shape, but that commonly all are not equal to all';<sup>16</sup> taking *parum* with *simili*, 'not that many atoms are endowed with an insufficiently similar shape...'. The first reading arguably makes the better sense, with the point then being that Lucretius is not saying that there are only a few atoms with the same shape, but rather that, among the infinite supply of atoms in the universe, not all of them have a *par filum* and *similis figura* (341); on the second reading, the contrast between lines 336 and 337 is lost. This is important because, at 522-580, Lucretius argues that there is an infinite number of atoms of any one shape; in this infinite supply, also referred to at 338-9, he anticipates and rejects the suggestion that all atoms might be the same.

Lucretius needs to leave open the possibility that some atoms do have the same shape, because he will argue at 478-521 that atoms have a finite number of shapes. While

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<sup>14</sup> For this account of Epicurus' criticisms of Democritus, see Sedley (2007): 155-63.

<sup>15</sup> See the next section. Clay (1983): 156-7, connects *ad Hdt.* 42-3; *Περὶ Φύσεως* XIV, 29, 23 (Arrighetti); Cicero, *ND* I.8.20; and *DRN* II.378-80. However, Clay does not, as I will, argue that the *DRN* passage influenced the *ND*; nor does he argue that Plato directly influenced Lucretius. For further connections between Epicurean and Platonic atoms, see O'Brien (2007).

<sup>16</sup> Rouse and Smith (1992): 121, have 'not that there are only a few endowed with similar shape, but because commonly they are not all like all'.

Lucretius does not precisely express Epicurus' technical distinction between infinite and ungraspable numbers of atoms, he succeeds in conveying a sense of the indefiniteness of the number of atomic shapes by repeating the unspecific phrase *non omnibus omnia* at 337 and 340. Again, while Epicurus argues that variety at the visible level cannot be explained by a very limited number of atomic shapes, Lucretius argues at 333-41, and again at 377-80, against the view that atoms might only have one *certa forma* (378-9), which makes a simpler rhetorical target.

Among the few scholars to have examined II.333-80 in detail, Bailey has argued that Lucretius' claim that there must be a variety of atomic shapes, because there is an infinite number of atoms (338-41), is unjustified and 'merely dogmatic', since there is no *a priori* reason why an infinite number of atoms should not have the same shape.<sup>17</sup> This granted, we might defend Lucretius on the grounds that he is anticipating his own evidence for the variety of nature, if we accept the atomic hypothesis on other grounds. A further question is whom Lucretius, and probably also Epicurus, intended to attack with this type of argument. Lines 377-80 in particular suggest that a specific opponent or doctrine is intended, otherwise the contrast between the atoms' arising from *natura* rather than being *facta manu* would seem gratuitous. I shall argue in the next section that this implied opponent is Plato.

At 342-48, Lucretius draws the reader's attention to the difference in *figurae* among different members of the same *genus*. At 349-366, he gives a long description to illustrate this point: a cow can recognise her calf from other calves to such a degree that she is inconsolable if she has lost it.<sup>18</sup> This shows, he concludes at 366, that even a cow seeks *quiddam proprium notumque*: a quality which is peculiar to the individual calf. At 367-370, he adduces the examples of kids and lambs, which, he claims, are able to recognise their own mother from

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<sup>17</sup> Bailey (1947): 859.

<sup>18</sup> On the cow 'digression' (II.352-65), see further Schiesaro (1990): 40, with n. 21; Segal (1970); Gale (2000): 105.

the flock. Finally, at 371-76, he draws two examples from inanimate nature: even among individual grains of corn, *frumentum*, and shells on the seashore, there is *quaedam distantia formis*.<sup>19</sup> This phrase is repeated from 334, where it was used of the differing shapes of the atoms; the repetition indicates that we are to see the grains of corn as differing in shape as the atoms do. Therefore, Lucretius concludes at 377-80, according to a *similis ratio*, since atoms, like animal *genera* and natural objects, are made by *natura*, some of them, *quaedam*, have a *dissimilis figura* from others.<sup>20</sup> The phrase *simili ratione* (of atomic shape) at 377 echoes *parili ratione* (of the shape of shells) at 374. This further encourages the reader to draw connections between the atomic and visible levels.

The terms which Lucretius uses for atomic shape are *forma* and *figura*, used alternately at 334, 335, 336 and 341, at 348 and 373, and again at 379-80. This careful patterning, with *forma* and *figura* each featuring four times in the passage, is aesthetically pleasing, while allowing for metrical variation. It also indicates that *forma* and *figura* are essentially interchangeable. Their standard meanings in Latin of ‘form, figure, shape’ overlap considerably, although *forma* may involve the notion of ‘appearance’, ‘outline’ or ‘beauty’ while *figura* may be extended to ‘sketch’, ‘drawing’ or ‘kind’, ‘species’.<sup>21</sup> We might thus think of *figura* as indicating the layout or configuration of the atom, while *forma* indicates its

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<sup>19</sup> Taking *formis* as a dative (‘difference as to their shapes’) with Bailey (1947) *ad loc.* On the distinction between *frumentum*, which is usually a mass noun, and its use here for the grains of corn, see Avotins (2003).

<sup>20</sup> Rouse and Smith (1992): 125, are surely correct in seeing the *quaedam* at 380 as restrictive, implying that ‘there are some similar [atoms] as well as some different’; cf. Bailey (1947) *ad loc.*

<sup>21</sup> LS s. v. *forma, figura*.

general appearance.<sup>22</sup> These verbal parallels also serve to strengthen the links between the nature of the atoms and visible phenomena.

Lines 333-80 thus highlight the limited differentiation between atoms and, by analogy, between visible things, through an accumulation of examples<sup>23</sup> and a carefully directed use of key words. It has been objected that if the section were read as implying that atoms differ among themselves in the same way as cows or humans do, ‘the natural deduction would be that each individual atom within the various species of shape would differ slightly from every other’.<sup>24</sup> Lucretius might thus be accused of having ‘read the phenomenon badly’, that is, of having misinterpreted the evidence of his senses, or misdirected his analogy.<sup>25</sup> Bailey and Schiesaro argue that this conflicts with Lucretius’ claim at 478-521 that there are a limited number of types of atoms.<sup>26</sup>

Certainly, Lucretius does not want his analogy to imply that there is an infinite number of different types of atoms; and, on my reading of II.336-337, he makes this point explicitly before giving his list of analogues of atomic variety. Arguably, however, there is another reading of his analogy, which is not liable to the above objections. In the context of the argument at II.333-380, Lucretius is trying to prove, not that atoms have a limitless number of shapes, but that they do have a very large number, because the view which he is

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<sup>22</sup> Schrijvers (1970): 223, suggests that Lucretius is applying ‘the Aristotelian classification of *genus* and *species*’ to the atoms, with the class of atoms as the *genus*, and their individual forms as the species. He argues (223-4) that *forma* is ‘ambiguous’ at 333-80 between ‘species’ and ‘shape’. However, it is unclear that *forma* is used any differently from *figura* here, or that it denotes anything more than ‘shape’. Moreover, while *genus* is used of the different animal races, it has no atomic parallel, since the atoms are divided solely by types of *forma* and are not subdivided further into individual ‘species-members’.

<sup>23</sup> Marković (2008): 98.

<sup>24</sup> Bailey (1947): 859; cf. Schiesaro (1990): 39, ‘non è altrettanto vero che l’unicità di ogni individuo permette di postulare l’unicità di ogni singolo atomo’.

<sup>25</sup> Schiesaro (1990): 39, ‘Lucrezio ha ‘letto male’ il fenomeno’.

<sup>26</sup> Contrast Clay (1983): 155, on II.478-80: ‘here Lucretius is establishing the relation between his argument for a great variety of atomic shapes and sizes (2.333-41, 342-477) and its essential theoretical qualification that there must be some limit to the variety of atomic shapes, or a “limited reckoning of shapes”...Lucretius never speaks of atoms as having the same shape: rather they have like or similar shapes.’

particularly opposing is that they only have a very limited range of *formae*. Therefore he uses the contrast between species and their individual members to show that, while experience might suggest that there is only a finite number of species – and analogously of atomic *formae* – in fact, there are differences between members of the same species.

The conclusion which we are to draw from Lucretius' argument is therefore not that there is an infinite number of atomic types, but rather that there is a much greater variety than would be the case on the analogy between species types and atomic shapes. That Lucretius thought of the number of species as finite is shown in *DRN V*, where he confirms that all the species (*genera*) of both animals and plants which are present today arose in their fixed, current form in the earth's infancy.<sup>27</sup> In his point that no two members of the same species are alike, Lucretius may also be drawing on Stoic thought. In the *Academica* (II.56), Cicero mentions the argument, which he attributes to the Stoics, that no two items in the world are completely identical, drawing on the example of the Servilii, twins who could be told apart by their family, even though not by the wider public.<sup>28</sup> It could therefore be argued that, by drawing on a non-Epicurean tradition which has its basis in everyday experience, Lucretius gives his analogy from visible to atomic variety additional credibility.

At II.532-540, in contrast, Lucretius uses the example of the *genus* of elephant to show that atoms of the same type all exist in limitless numbers.<sup>29</sup> In this case, the type of atom is analogous to the *genus* of the animal. However, this passage aims to prove something different from lines 333-380, in which, arguably, we should not see the *genus* of the animal as analogous to the type of atom, but rather as a false analogue, used by Lucretius' opponents to claim a very limited number of atomic types. The true analogy in this passage is between the individual species members and the types of atoms. As discussed above, Epicurus considered

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<sup>27</sup> V. 857-61, 916-23.

<sup>28</sup> Cf. *Acad.* II.85; Rackham (1933): 538-9.

<sup>29</sup> On this passage, see Sedley (2007): 157.

that all uncontested explanations of a phenomenon were in fact true somewhere or at some point in the universe. Similarly, one might think, there would be no reason why the same phenomenon could not be used in two different analogies about a hidden part of nature, since it might exhibit two different structural features, both of which were also present at the invisible level.

On this reading, therefore, Lucretius has not read the phenomena badly. Rather, using the insightful observation that there is variety even within classes of apparently indistinguishable objects, such as ears of corn and shells, he presents the argument that, although nature contains fixed species and therefore fixed types of atoms, the variety within species allows us to infer that there is a similarly wide, though not infinite, variety at the atomic level.

A more serious objection, however, is that the analogy between species members and atomic types is unacceptable by Lucretius' own account of atoms, because, as he says at II. 661-729, different natural *genera* may contain some of the same atoms, and variety at the visible level is determined not just by type of atom, but also by weight, motion and other properties of the way in which the atoms are combined in a particular compound. If visible variety is not determined simply by the type of atom involved, then the inference from intra-species variety to atomic variety fails, to the extent that intra-species variety could depend upon the way in which the same atoms within the species member were combined, rather than on the types of atoms involved.

The *DRN* provides no obvious solution to this objection. Lucretius leaves himself vulnerable to it through his compartmentalisation of stages in the argument, by which he attempts to convince the reader of every doctrinal point as he goes along without necessarily linking all of them together with sufficient attention to logical coherence.<sup>30</sup>

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<sup>30</sup> For Epicurus' dislike of logic, see Allen (2001): 204.

Regarding the purpose of the analogy at II.333-380, at this stage in the argument, Lucretius wants to impress upon the reader that there is a large number of different types of atoms, which goes beyond the very limited number there would be if types of atoms were analogous to the *genera* of animals, plants, and other natural objects. He does this by arguing that types of atoms cannot be analogous to natural *genera*, because members of each *genus* differ from each other; therefore there is greater variety than would be the case if all members of a *genus* were identical. However, as noted above, this variety could be due to the way in which atoms were combined, rather than to a difference in type of atom between the members of one species. The failure to consider this point means that Lucretius' analogy is, in terms of his own theory, unsound.

Before responding to this point, I shall look in further detail at other passages on the issue of variety at the atomic and visible level in the *DRN*, in order to show how II.333-380 fits into Lucretius' wider argument and poetic purpose.

#### **4.2.2 Atomic and phenomenal variety in the *DRN***

The arguments on atomic and phenomenal variety in the first two books of the *DRN* may be divided into two main categories. Firstly, those explaining variety at the visible level in terms of the atomic shape, or other properties, of a compound's constituent atoms; and secondly, those explaining visible variety in terms of the way in which atoms in a compound combine and interact. It is important, in order to understand II.333-380 more fully, to consider the relative emphasis which Lucretius places on variety between atoms as opposed to variety in combinations of atoms as an explanation for variety at the perceptible or phenomenal level.<sup>31</sup>

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<sup>31</sup> For the connections between II.333-990 and Book I, see Schrijvers (1970): 222-5.

To begin with the first category. The main arguments at 478-521 are that if the atoms were of infinite types of *figurae*, they could be of infinite size, which they are not; and that, in view of their formation from *minimae partes*,<sup>32</sup> if they are small, there is only a limited number of ways in which they can be combined. This passage is linked verbally to 333-80 through variations on the phrase *uariata figuris* (335), at 480, 484, 491, and 494. The phrase *distantia formis* at 334 is echoed at 497.<sup>33</sup> These phrases serve to underline the connection between the arguments in both passages. At 333-80, however, in each case in which these phrases are used, it is the positive variety of the atoms which is highlighted, while at 478-521, it is the claim that this variety is not infinite; so, for example, *differre figuris* of 348 becomes *finitis differre figuris* at 514.

The word most frequently used for atomic shape in lines 478-521 is *figura*.<sup>34</sup> However, *forma* is used at 495, directly after *figura* (494), without apparent change in meaning; similarly, *[non] infinitis distantia semina formis* (497) seems to convey exactly the same idea as *[primordia] finita uariare figurarum ratione* (480).<sup>35</sup> The evidence thus suggests that Lucretius uses *forma* and *figura* of essentially the same atomic feature in this passage as at 333-80. His alternation between the two terms seems to be for poetic variety, as well as, perhaps, to convey slightly different aspects of the idea of atomic shape. Epicurus, in Book XIV of the *Περὶ Φύσεως*,<sup>36</sup> as well as *ad Hdt.* 42-3, primarily uses *σχῆμα* for atomic shape; Lucretius' alternation between *forma* and *figura* thus seems to be his own innovation.

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<sup>32</sup> The *minimae partes* are introduced at I.599-634; see *ad Hdt.* 56-59.

<sup>33</sup> These two phrases are combined at III.32: *quam uariis distantia formis* (of the atoms). On II.333, see Reid (1911): 33.

<sup>34</sup> II.480, 484, 491, 494, 514.

<sup>35</sup> The same idea of 'shape' is also referred to by *figura* at 524 and *forma* at 526; cf. 778-84; IV.456, identified by Reid (1911): 33, as a tautology. Clay (1983): 156, interprets the latter phrase as translating Epicurus' ἀπερίληπτα.

<sup>36</sup> Book XIV was identified by Arrighetti (1973) as fr. 29.

His use of *figura* and *forma* in the same way in both the above passages further links the passages together verbally and conceptually.

At 483-4, Lucretius declares that it is not possible for the atomic *figurae* to *uariare* very much among themselves *in eadem una cuiusuis iam breuitate*. This presents the atoms as extremely small shapes which cannot incorporate many *minimae partes*. At 485-490, he asks the reader to imagine an atom made of three *minimae partes* or ‘a few more’ (*paulo pluribus*), and observes that from such an atom, only a limited number of combinations of the *miminae partes* would be possible. In lines 491-99, he continues the thought experiment: to vary the shapes of the atoms more, *uariare figuras*, it will be necessary to add further parts to the atom. Thus the increase in size is a consequence (eventually) of new atomic shapes made by the addition of new *minimae partes*. Therefore the atoms may not have an infinite number of differing shapes, since otherwise they would become extremely large. At lines 500-514, Lucretius argues that if there were no limit to the variety of shapes of seed, then there would be no limit to the variety of phenomena which can arise at the visible level; but this is contrary to our experience that there is a *certa finis* for all visible things.

The problem with lines 478-521 is that Lucretius nowhere states the precise extent to which the atoms can vary in shape. If they only have a small number of *minimae partes* and therefore can only vary within a small range of permutations, this appears problematic for Epicurus’ claim that the number of atomic shapes is ungraspable. However, Lucretius does not specify exactly how many combinations are possible from the *minimae partes*, and therefore leaves open the possibility of considerable variation between them. That there is such variation is suggested by lines 442-3, in which Lucretius argues that the atomic *formae* must be ‘widely different’ (*longe distare*) from each other in order to produce the variety of sensations which we perceive. Moreover, lines 500-21 acknowledge that there is considerable variety at the visible level and that this is dependent upon variety at the atomic level, even if

this has certain, unspecified limits. The relation of atomic to visible variety is further complicated by what follows.

At 581-88, Lucretius introduces the claim that all visible compounds are formed of more than one type of atom. The more different things a compound can do – the greater its number of *uis atque potestates* (586-7) –, the more types of atoms and *uariarum figurarum* it must contain within itself. After his elaborate description of the festival of the Magna Mater and her relation to the earth, Lucretius returns at 661-679 to the point that there is a *materiai dissimilis ratio*, that is, a different ‘account’ or perhaps ‘grouping’ of atoms, in all visible compounds. He argues that this must be the case from the observation that sheep, horses and cattle eat the same grass and drink from the same rivers, yet are different animals, each containing a multitude of different organs which do not resemble the food their possessor eats. Such organs, because they are *distantia longe* from each other, must be *dissimili perfecta figura principiorum* (672). Rouse and Smith translate this phrase as ‘made of first-beginnings that have dissimilar shapes’;<sup>37</sup> more literally, it is ‘made up from a diverse shape of atoms’. Rouse and Smith’s interpretation that *dissimili figura* must apply to the individual atoms is convincing, since it would then match the analogy with the diversely shaped organs. Equally, Lucretius continues, flammable compounds conceal the type of matter in themselves that will emit fire, light and sparks (673-6).

*Distantia longe* at 671 echoes *longe distare* of the atoms at 442. Lucretius’ use of the same vocabulary at the atomic and visible levels once again encourages the reader to view the two levels as conceptually similar. Lucretius anticipates that, using a similar approach (*consimili mentis ratione*) to that described at 661-76, the reader will discover that many compounds conceal *multarum semina rerum* and *uarias figuras* within them (677-9). While we have seen *similis* and *parilis ratio* used previously of the manner in which atoms resemble

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<sup>37</sup> Rouse and Smith (1992): 147.

visible objects, Lucretius' use of *consimilis ratio* here for the way in which the mind is to understand the relationship between phenomena and atoms suggests that part of the process of identifying appropriate similarities is to adapt one's mind to the analogical way of thinking. The question to which he does not provide an answer is whether this way of thinking is justifiable independently of the assumption that there are relevant analogies between the atomic and the visible levels, and that, indeed, there are atoms at all, since they were by the Epicurean definition imperceptible to the senses. This assumption is one which Lucretius simply takes as doctrine, leaving it vulnerable to challenge by a hostile reader. This is perhaps an inevitable risk of his didactic approach.

How Lucretius conceives of the relationship between atomic and phenomenal variety is returned to again at lines 718-29. Here, he argues that, just as all compound *res* are *tota natura dissimiles*, different from each other in their nature as a whole, so they must be made from a *dissimili figura principiorum* (722). This line is almost an exact repetition of 672, quoted above; it is followed by the principle of limited variety (723-4) repeated from 336-7 and echoed at 692-4. Schrijvers well describes this as an example of Lucretius' construction of arguments 'according to the method of cyclical composition', which 'underlines the cohesion of his thought'.<sup>38</sup> In the latest occurrence of this repetition, however, Lucretius draws the further conclusion that the atoms in different compounds, such as animals, the earth, the sea and the sky, will vary not only in shape but also in other properties such as weight and motion (726-7). These properties separate (*seiungunt*) the bodies of animals from each other, and also divide (*secernunt*) the earth and sea and keep apart (*retentant*) the earth from the sky (727-9). These three verbs of separation emphasise the idea of difference between visible objects, based on the properties of their constituent atoms. This passage gives the impression that it is the properties of the constituent atoms *per se* which determine the

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<sup>38</sup> Schrijvers (1970): 223.

properties of the visible objects. This could be interpreted as implying a one-to-one correspondence between the types of atoms in a visible object and the properties of that object, with each type of object having a completely different set of atoms.

In contrast, the second category of arguments considers not only the variety of types of atoms but also the combination of atoms as responsible for variety at the visible level. Lucretius continues his point about the relationship between atomic and phenomenal variety (661-79) with particular reference to the objects of the senses (680-87): colour, taste and smell act in different ways on the body and therefore differ in their atomic shapes (682, 685). Therefore compound objects which have colour, taste and smell must be made from *dissimiles formae* and *permixtum semen*; that is, from differently-shaped atoms. Lucretius illustrates this point with the topos of the atoms-letters analogy (688-99): it is not that very few letters are shared by different words (*non quo multa parum communis littera currat*), or that two words may not have exactly the same letters, but usually *non paria omnibus omnia constant*, ‘not all are like all’. The echo at 692 and 694 of the principle of atomic variety expressed at 336-7 indicates a continuity of thought between the two passages. This implies that 333-80 should not be understood as allowing limitless atomic variety, but rather enough to produce the multitude of forms perceptible to the senses.

The prolonged play on the notions of similarity and difference throughout Book II, particularly towards the beginning and end of 333-80, functions at both the aesthetic and conceptual levels. It links the passages together verbally, and it encourages the reader’s thought to shift constantly between atomic and visible levels and to compare phenomena with theory.<sup>39</sup> In this way, Lucretius’ use of language stimulates closer observation of phenomena and deeper reflection on them, but in an associative rather than strictly logical way. At the same time, by imposing verbal patterns on his poem, he makes the reader see corresponding

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<sup>39</sup> The words used include *similis*, *dissimilis*, *par*, *distantia*, and *differre* (lines 334, 336, 337, 341, 348, 372, 373, 374, 377, 380).

patterns in nature. The way in which disparate phenomena are linked and organised is a source of aesthetic pleasure; such attention to the harmony of structure further distinguishes the *DRN* from an Epicurean prose treatise on the same subject.

Lucretius then argues that many perceptible objects (*res*) share many types of atoms in common with each other, but they vary one from another in their *summa*, that is, the overall nature and properties of the compound, like the word as opposed to its letters (695-99). Hence, because the *summa* is different from its constituent parts, the human race, crops and trees may be said justifiably to be composed ‘from different things’ (*ex aliis*).

The importance of combination and order in compounds, however, emerges more clearly at lines 865-85.<sup>40</sup> Here, during his discussion of the emergence of sensation in animals, Lucretius argues that all things, animate and inanimate, naturally change into one another. Nature changes food into living bodies, just as it turns wood into flames (879-82). This echoes the argument at I.897-914, whose conclusion also appears at 673-6, that flammable objects such as wood contain seeds of heat, rather than actual flames, which flow together when wood is rubbed to create fires. Lines 907-910 of this passage are closely echoed by II.883-5.<sup>41</sup> Lucretius’ argument in both cases is that it matters in what *ordo* the atoms are arranged in compounds and with what other atoms they give and receive movement (883-5). This, like the atoms-letters analogy which follows at I.912-4, indicates that variety at the visible level is determined not only by simple variety at the atomic level, but also by the way in which different atoms are combined in different arrangements.

A similar argument about the importance of atomic positioning and movement to visible variety is made at I.803-829, again using the atoms-letters analogy. In particular, at lines 814-6, Lucretius emphasises that *multa modis communia multis/ multarum rerum in*

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<sup>40</sup> Rouse and Smith (1992): 164-5, speculate that Lucretius is attacking Anaxagoras at II.865-85, as at I.907-10; cf. Schrijvers (1970): 222-3.

<sup>41</sup> Cf. I.817-9; II.1007-9.

*rebus primordia mixta/ sunt*: granted there are many atoms in visible things, many of these are ‘common’ to different compounds, and part of the variety comes from the ‘many manners’ of their arrangement. As Lucretius concludes, *ideo uariis uariae res rebus aluntur*: the variety of visible matter depends on the variety of atoms, but this is not to say that the same type of atom may not be found in more than one compound.<sup>42</sup>

At 827-9, Lucretius also argues that the potential for variety based on different compounds of atoms is greater than the variety of words which can result from different letters, since the atoms can *plura adhibere...unde queant uariae res quaeque creari*: that is, they can contribute more types of particles than there are letters, and, presumably, produce additional variety by their movements and spatial location, while the elements can only produce variety by their individual shapes and linear *ordo* (827).<sup>43</sup> This type of argument recurs at II.991-1022, once again with the atoms-letters analogy, but this time in support of the claim that the same matter, through the birth, death, conglomeration and dissipation of atoms, and their different *conkursus motus ordo positura figurae* (1021), produces the different *formae* and *colores* of phenomena.

#### 4.2.3 The associative presentation of doctrine

Taking the above passages together, Lucretius’ main points are, firstly, that the atoms vary widely in shape; that, however, there is a limit at some unspecified point to the number of possible atomic shapes; that other atomic qualities than shape are also important in determining the nature of compounds; and that variety at the atomic level is multiplied at the

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<sup>42</sup> Cf. II. 581-88, 661-79.

<sup>43</sup> Similarly at II.1017-8.

perceptible level by the manner in which different types of atoms are mixed and arranged in different compounds.

In structural terms, it is striking that while Lucretius employs the principle of atomic variety in several sections of his argument, no one section reveals the complete picture, and, indeed, some sections might be taken as confusing or even contradictory. The care with which his arguments have had to be extracted from their disparate occurrences in the poem in order to piece together the overall model shows one of the difficulties of attempting to read the *DRN* as a philosophical-scientific treatise like the *Περὶ Φύσεως*, or its summaries in Epicurus' letters, rather than a work of poetry and rhetoric based on such a treatise.<sup>44</sup>

Lucretius' reader is not presented with a complete system; many of the technical details, such as the precise extent to which atomic shape is limited by the number of *minimae partes*, are left unanswered. Instead, his way of introducing the reader to the principles of Epicurean physics is more intuitive than methodically straightforward. To show that the same atomic principles may explain different phenomena, he relies on verbal repetition and allusion as much as explicit demonstration, and gradually uncovers connections through long analogies and descriptions interspersed with relatively short sections of theory. The reader is thus required to think imaginatively and associatively in order to piece together different aspects, in a way which is not characteristic of Epicurus' writing.

In light of this almost impressionistic manner of proceeding, we should not be surprised to find that II.333-80 gives an incomplete picture of atomic variety with an analogy which may even mislead. The analogy has the effect of making Lucretius' point that there is a large variety among atomic types very vivid. It also forms part of the poem's drive to make the reader see the world in terms of a visible nature which somehow depends for its qualities,

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<sup>44</sup> Asmis (1983): 55-6, shows how Lucretius anticipates doctrines which he has not yet proved. She argues that his departures from Epicurus' order of subjects reveal his 'contribution of...rhetoric to Epicurus' philosophy'.

such as variety, upon the properties of invisible atoms. In addition, it rhetorically undermines the view that the atoms have a very limited number of shapes, in a polemical spirit appropriate to a writer in the natural philosophical tradition, as we saw in Chapter 3. Finally, as I shall show further below, it is poetically pleasing, and contributes to Lucretius' ambitious survey of the whole range of natural phenomena.

The analogy at II.333-380 thus serves poetic, rhetorical and didactic purposes better than the demands of philosophical rigour. This is only a criticism of Lucretius' method in so far as his reader demands argumentative consistency, and is not willing to sit back and be converted by the beauty and force of his words. Just as the *puerorum aetas* at I.939-42 is tricked but not trapped, *decepta non capiatur*, so the ideal Lucretian reader will absorb the correct Epicurean doctrine, that the atoms are not all of one *forma*, through Lucretius' poetic and rhetorical techniques, without needing to be subjected to the unadulterated bitterness of abstract theory. The *DRN* does not have the technical detail or the lengthy engagement with rivals to be found in Epicurus' *Περὶ Φύσεως*.<sup>45</sup> Ultimately, because the doctrines which Lucretius presents are, as far as he is concerned, true, it does not matter that his particular arguments for them are incomplete or imperfect, provided that the reader is induced, one way or the other, to accept them.

#### 4.2.4 *DRN* II.371-6: Science and poetry

The relationship between scientific and poetic elements in Lucretius' approach can be elucidated by a closer examination of *DRN* II.371-376. As shown above, the motif of diversity among animals and inanimate natural objects recurs through *DRN* I-II to illustrate a number of different points about the nature of atoms. At II.342-376, as elsewhere, Lucretius

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<sup>45</sup> This is not to say that no rivals are alluded to by Lucretius; see below.

includes both animate and inanimate *exempla* from nature to show that his argument that variety at the visible level implies variety at the atomic level is supported by phenomena from all areas of nature.

The language at lines 371-373 underlines the point that grains of corn, and by extension other plant species, exhibit variations in each individual specimen. The contrast between grains as a whole, *omne*, and each particular member, *quidque*, echoes similar contrasts at 337, 340, 347, and 370. The contrast between the *genus* as a whole and its individual members is repeated from 342 and 347.<sup>46</sup> The terms *simile* and *distantia formis*, as discussed above, are also repeated a number of times at 333-380 and elsewhere. This concentration of repeated ideas links the *exemplum* of grains closely to the previous animal *exempla*, and thereby brings out the common pattern between them.

The repetition of the motif of seeing at the end of lines 372 (*uidebis*) and 374 (*uidemus*) also links the *exempla* of the grains of corn and the shells (374-376) to that of the cow and her calf, since *uidemus* is used in this context at the end of line 350. It is appropriate that the sense of sight should be highlighted here, since Lucretius' language in his description of the *concharum genus*, the final example in his list of visible analogues for atomic variety, is particularly sensuous. The description of the shells as 'painting the bosom of the earth' (*pingere telluris gremium*, 375) conjures up the image of the bosom of a beautiful woman adorned with jewels or makeup; this is reinforced by the reference to the 'curved' shape of the shore in the following line (*litoris incurui*).<sup>47</sup> In addition to sight, the sense of touch is also appealed to through the description of the water 'beating' (*pauit*) on the sand with 'soft waves' (*mollibus undis*). The sand, with typically Lucretian vividness, is personified as 'thirsty' (*bibulam*).

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<sup>46</sup> Schrijvers (1970): 223, observes the 'striking' repetition of *genus* in these lines.

<sup>47</sup> Segal (1970): 113, draws a contrast between the natural beauty of the shells and the artificial beauty of the *textilibus picturis ostroque rubenti* of ll.35.

In this highly descriptive passage, Lucretius appears to be so carried away with his poetry that he omits to make explicit the analogy between shells and atoms which is the philosophical reason for its inclusion. Arguably, however, this omission is not a result of Lucretius' taking his eye off the argument. Rather, the shift away from the argumentative to the poetic observation of nature illustrates the way in which Lucretius deliberately encourages the reader not just to consider visible phenomena as evidence for the invisible world of atoms, but also to appreciate the aesthetic qualities of the natural world for their own sake. At the same time, the presence of these aesthetic qualities at the visible level provides reassurance that they do not disappear upon an atomic reading of the world; in this way they also lend psychological support to the atomic doctrine.<sup>48</sup>

While the underlying doctrinal point is important as part of the didactic function of the *DRN*, passages like II.371-376 indicate that the purpose of the *DRN* is not just to persuade the reader of a particular point of view, but also to celebrate the natural world in a way which gives the poem literary value. This illustrates how, in devoting so much care to conveying the principle of atomic variety through visual images, and leaving only a few lines for the principle itself, Lucretius transforms Epicurus' doctrine about the physical structure of the world into an aesthetic appreciation of the world as seen from Lucretius' perspective. This unique perspective is achieved by Lucretius' eye for the appreciation of similarities, which simultaneously incorporates an interest in the structures of natural phenomena and their possible relationship to the unseen, and a poetic appreciation of the beauty of the detail and variety in nature, as well as a pleasure in understanding the world better through an all-encompassing explanatory system.

In addition to exhibiting literary qualities, lines 371-6 may also indicate their place in a philosophical tradition beginning with Democritus. Democritus is reported to have

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<sup>48</sup> Cf. Wardy (1988).

illustrated his famous principle of like being drawn to like<sup>49</sup> by adducing, among other examples, different types of pebbles which can be seen (ὁρῶνται) together on the seashore, and beans and chick-peas gathering together with their own kind in a sieve, as well as jackdaws which perch by other jackdaws.<sup>50</sup> The same principle is attributed to Democritus in DK 68B 164. Here, the examples include both animals (ζῷα) which herd together, such as doves and cranes; lifeless (ἀψύχος) things, such as grains of barley, lentil and wheat which are sifted apart; and pebbles on the beach.

At *DRN* II.371-6, the theme of the likeness or unlikeness of grains of corn and of shells lying on the seashore is perhaps an allusion to and correction of Democritus' examples. Rather than using these examples to illustrate the like-to-like principle, Lucretius makes them show not the grains' and shells' likeness, but rather their detailed unlikeness within a broader similarity. As at DK 68A 128, which describes its examples as being 'alike in shape', ὁμοιοσχῆμονα, so the focus in the *DRN* passage is on the dissimilarity specifically in the shapes, *formae*, of the grains of corn; it should be remembered that *forma* is one of Lucretius' translations of Epicurus' term σχῆμα, of the shape of the atoms. Lucretius also includes these *exempla* from the plant world and inanimate objects after a list of *exempla* from the animal world, which includes three lines on the variety of birds (344-6). A similar order is followed in the fragments of Democritus, which begin by listing living examples of the like-to-like principle, particularly birds, and then go on to pebbles and cereals, which are apparently all considered inanimate.

By borrowing a pattern of analogies from the natural world from Democritus, but adapting it to his own ends, Lucretius gives his argument structure and the credibility of the atomic tradition. At the same time he corrects Democritus, while presenting an atomic theory

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<sup>49</sup> DK 68A 128.4.

<sup>50</sup> DK 68A 128.4-7.

which was in many ways very similar to the latter's. Epicurus had been accused of plagiarising Democritus; he therefore made a point of criticising and altering the details of Democritus' atomism.<sup>51</sup> In his borrowing and redirecting of Democritus, therefore, Lucretius demonstrates his own loyalty to Epicurus.

At the same time, Lucretius' tactic of implicit rather than explicit polemics, adaptation of a predecessor's claims to make the reverse point, and aestheticising of the prosaic through linguistic skill, is less close to Epicurus' methods than to those which, as shown in Chapter 3, were deployed by Plato against the natural philosophers. Unlike Plato, however, Lucretius does not parody Democritus' argument to amuse his audience and undermine their belief in the reality of the perceptible world. Rather, the effect of his adaptation is to compel the reader to look more closely at this world and understand it in a new, Epicurean light.

### 4.3 The topos of intelligent design

#### 4.3.1 Lucretius, Epicurus and Plato on intelligent design

##### Epicurus, fr. 29, 23 (Arrighetti)

|                                 |    |
|---------------------------------|----|
| πῶς ἄν τις ὕδωρ ἢ ἀέ[ρ]α δια-   |    |
| νοηθείη ἢ πῦρ, ἐπεὶ οὐδ' ἄν     |    |
| γῆν στερεὰν καὶ ἀδιάλυ-         |    |
| τον διανοηθείη τις, μὴ ὅτι      |    |
| ταῦτα,                          | 5  |
| ἄλλως τ<ε> καὶ κ[ινδυνεύων εἰς] | 6b |
| [ἄ]πειρον ἕκασ[τον αὐτῶν τέ-]   | 7b |
| μειν ὥσπερ οἱ ταῦ[τα]           | 8b |
| ἀποφαινόμενοι τέ-               | 5  |
| μνουσιν. εἰ γὰρ μὴ στερεὸν      |    |
| ἕκαστον τούτων νοηθήσε-         |    |
| τ[α]ι, πολλὰς καὶ παντοίας κα-  |    |
| τ[ὰ] τὰς τομὰς φαντασίας πα-    |    |
| ρασκευαῖ σχημάτων καὶ ο[ὕ]      | 10 |

<sup>51</sup> For example, in Epicurus' addition of the *clinamen* to counter Democritean determinism: Sedley (2007): 164-165.

τ[ρ]ίγωνα [ο]ὐδε πυραμίδας  
 οὐδὲ κύβους οὐδ' ἄλλο οὐθὲν  
 ὠ[ρ]ισμένον σχῆμα. ο[ὐθ]ὲν  
 γ[ὰ]ρ πιθανὸν ἔχειεν [ἄ]ν λέ-  
 γειν ὡς μᾶλλον τι [τὰ] ὀρώ-  
 μενα ταῦτα [τὰ] τ[έτ]ταρα  
 [εἶ]δη ἐ[σ]τι[ ] 15

... How could someone think that water or air or fire [were indivisible], since no-one would think the earth solid and indestructible, let alone the others, especially since he would run the risk of dividing each thing up limitlessly as those who do divide them up explicitly. For if each of these things is not considered solid, it will provide many various appearances of shapes in its divisions and not (just) triangles or pyramids or cubes or any other defined shape. For they could not say anything convincing as to how these visible things are the four forms (of the elements rather than those many diverse ones into which these four can be divided)...<sup>52</sup>

### Epicurus, fr. 29, 26 (Arrighetti)

τα αὐτῶ τρίγωνα ἐξ ὧν  
 καὶ τὰ λοιπὰ συμπλέκει  
 σχήμ[α]τα. εἰ μὲν ἄτομα  
 ὑφείληπτο εἶνα[ι] τί οὐχὶ  
 ἐποίησατό τινα ἀπόδειξιν  
 ὡς ἔστιν ἄτομα [σ]ώματα ; 5

εἰ δὲ μὴ ἄτομα τ[ί] ἂν ἐκ τού-  
 των νομίζοι τις συνίστα-  
 σθαι τὰ λοιπὰ ἃ συμπηγνύ-  
 ει ἐξ ἄλλων ὧν δήποτε ; 10  
 ἀλλὰ γὰρ αὐθὶς που ταῦτα μηκυν-  
 θήσεται. νῦν δὲ [ἐ]κεῖνο ἰ-  
 [κ]ανὸν εἰπεῖν ὅτι συνέβα[ι]-  
 [ν]ε γελοίως τὸν ἄνδρα τοῦ-  
 [τον ἄμ]α [μ]ὲν ὅμοιον εἰ[π]αί 15  
 πως τᾶ[λλ]α καταζημ[ιοῦν πάν]-  
 τα τ[ἄ] μ[υ]ρία [τῶ]ν σχη[μά]τω[ν]  
 [κατάληπ]τα [γ]εγεν[ημ]έν[α δι']  
 [αἰσθήσε]ων, ἅμα δὲ κατα-  
 [λέγειν σχήμ]αθ' [ἄ] μ[ηθ]ὲν δυ[νη]σό- 20  
 [μεν' ἐπιλ]ογί[ζεσθ]α[ι] κα[τὰ] τὸ  
 [ἡμῖν] προ[σζητ]οῦμ[ε]νον.

... his triangles from which he weaves together the other shapes. If he thought they were uncuttable why did he not make some proof that there are indivisible bodies? But if instead he thought they were not indivisible why would one think that the remaining [shapes] would be composed from these, when these [the triangles] are formed from other shapes? But these things will be discussed at length another time. Now it is sufficient to say this, that it is ridiculous for that man no sooner to condemn

<sup>52</sup> I follow the text and (approximately) the translation of Arrighetti (1973) *ad loc.* In fr. 29, 23, the final section of translation in curved parentheses is Arrighetti's supplement.

all the thousands of shapes perceptible through the senses, than to enlist shapes which we shall never be able to comprehend, according to our previous investigation...

We have seen how Lucretius may have been reworking a Democritean trope at II.371-6, while, in line with Epicurus, he criticises Democritus' idea of very large atoms at II.478-521. Arguably, lines 333-80, and in particular 377-80, also engage in a direct polemic with Plato. My claim for 333-80 hinges on the point made above, that, in these lines, Lucretius' argument is primarily directed against the view that atoms are *facta manu...unius ad certam formam* (378-9).

The criticisms of the intelligent design of the universe made by Epicurus and his followers seem likely to have been directed primarily at the *Timaeus* and its Platonist interpreters. Lucretius' criticisms of intelligent design, therefore, would have been targeting the *Timaeus*, whether directly, or indirectly through Epicurus.<sup>53</sup> What makes Lucretius' direct engagement with Plato more likely is that the combination criticised by Lucretius of the universe's initial fabrication by a divine agent and indestructibility occurs before him only in the *Timaeus*.<sup>54</sup>

At II.378-379, Lucretius draws a contrast between the atoms' arising by nature (*natura constant*) and being artificially made by hand. Admittedly, no god is directly mentioned in these lines, so *facta manu* could in theory refer to a human craftsman. However, the atoms could not have literally been made by a human craftsman, although they could have

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<sup>53</sup> For Epicurus and the *Tim.*, see Sedley (1998): 75-78; (2007): 139-154; Reinhardt (2004): 39. I cannot agree with Sedley that Epicurus was not responding to the *Tim.* directly on the issue of the intelligent creation of the world, even if he was also responding to its interpretation by his contemporary Platonists. My reading of Περὶ Φύσεως XIV below suggests that Epicurus was responding to the account of the geometrical solids in the *Tim.* Moreover, Epicurus speaks of 'him', i.e. Plato, and not just 'they', his interpreters.

<sup>54</sup> De Lacy (1983): 305. Cf. Clay (1983): 156, on II.378-80: 'these lines seem to point distantly to a conception of a world composed of a limited number of geometrical solids by the demiurge of Plato's *Timaeus*'. Bignone (1973): 88-9, with *Tim.* 28c ff., argues that Lucretius' argument is directed at the *Tim.*, but was suggested by Aristotle's *De Philosophia* (on which see below). For the combination of indestructibility and divine craftsmanship, see e.g. *Tim.* 33a6-b1, 37c6-d7.

been either by nature or a divine craftsman; thus the contrast works better assuming a craftsman god for *facta* in contrast to nature, his impersonal substitute.

As we have seen, at 341, Lucretius argues that not all atoms have a *par filum*, ‘like contour’, and a *similis figura*. This seems to presuppose an opponent who thinks that all atoms do have the same shape. The use of *filum*, a rare word in Lucretius,<sup>55</sup> together with *figura*, indicates that at the centre of the argument is the physical shape of the atoms. When we come to 378-9, this point is reinforced by the use of *certa forma* and the regularity in shape implied by making the atoms by hand. This leads to the problem of how exactly to translate *facta manu...unius ad certam formam*. Rouse and Smith translate ‘made by hand after the fixed model of one single atom’.<sup>56</sup> Bailey translates ‘to the fixed shape of a single pattern’; he thus takes *unius* as referring to a pattern rather than to an atom as such.<sup>57</sup> It seems clear that *unius* must modify *formam* rather than *manu*, since it would add little significance to the latter, and would be awkward in terms of the verse structure. The emphasis in lines 341 and 379 on the shape and, moreover, on the specific, fixed nature of the *forma*, *figura* or *filum* suggests that Lucretius has a particular theory in mind in which the shape is of primary importance. Rouse and Smith’s translation of *unius* as ‘one single atom’ is preferable to Bailey’s translation as ‘pattern’, in so far as the *primordia rerum* are present as the subject in the rest of line 379, and there seems no other obvious noun for *unius* to refer to; *unius* should thus be seen as a basic constituent of things, like the Epicurean atoms.

If one were to think of an ancient theory of matter in which the most fundamental parts were all the same and characterised primarily by their shape, the one which springs

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<sup>55</sup> The adverb *filatim*, apparently a hapax, appears at II.831 of wool being pulled apart. *Filum* recurs at III.383 of cobwebs; at IV.88 of the shapes of the *effluvia* from objects; and three times in Book V, of the shapes of the sun, of objects in general and of fires seen through the air from far away (572, 581, 589).

<sup>56</sup> Rouse and Smith (1992): 125.

<sup>57</sup> Bailey (1947): 865.

naturally to mind is Plato's in the *Timaeus*, in which the basic constituents are triangles and the geometric shapes from which they are formed. There are three considerations which support this reading of *DRN* II.377-80, and with it the idea that the whole passage from 333-80 has an anti-Platonic slant. The first of these depends on the remaining fragments of Epicurus' *Περὶ Φύσεως* XIV; the second on other remarks in *DRN* II and the rest of the poem; and the third on a possible reference to *DRN* II.377-80 in Cicero's *De Natura Deorum*. I shall deal with the first in this section, and the remaining two in the sections which follow.

Arrighetti, in his edition of Epicurus' fragments, has argued convincingly that most of the preserved columns of *PHercl* 1148, which contains *On Nature* XIV, include a critique of the geometrical atomism of the *Timaeus*, as evinced by fragments 29, 20-27, even though Plato and the *Timaeus* are not mentioned by name in what survives.<sup>58</sup> Another target of Book XIV appears to have been theories such as Empedocles' of the four elements.<sup>59</sup> However, it is clear that in fragments 29, 23 and 29, 26, Epicurus distinguishes Plato's geometrical atomism from other theories and criticises it specifically.<sup>60</sup>

In fragment 29, 23, which seems to be half-way through a proof, Epicurus first questions the claim that water, air, fire or earth, the Empedoclean elements, could be considered solid and unable to be broken up (lines 1-5). If the elements could be broken up, they would risk being infinitely divisible, as some people claim; this could be a reference to Aristotle (lines 6b-9).<sup>61</sup> If, however, Epicurus continues, the four elements are not thought solid, it makes more sense that they should be divisible into *πολλὰς καὶ παντοίας ... φαντασίας σχημάτων*, 'many and various appearances of shapes', and not triangles, pyramids,

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<sup>58</sup> Arrighetti (1973): 602-3, has argued that fr. 29, 20-27 are all part of Epicurus' criticism of Plato's geometrical atomism; however, only fr. 23 and 26 explicitly discuss geometrical shapes.

<sup>59</sup> Arrighetti (1973): 605 with fr. 29, 22; Garani (2007): 5, 260 n. 78.

<sup>60</sup> Sedley (1976): 133, suggests that Epicurus in this papyrus might be refuting all rival physical systems, and not just the element-theory of the *Tim.*; cf. Edwards (1990): 468.

<sup>61</sup> Arrighetti (1973): 606, with fr. 29, 23.

cubes or any other ὠ[ρ]ισμένον σχῆμα, ‘bounded’ or ‘definite shape’. This must be a reference to the geometrical atomism of the *Timaeus*, at 53c-62c, which operates with a three-tier system of, firstly, the four elements, secondly, the pyramids (for fire), the cubes (for earth) and the other regular solids out of which they were composed, and, thirdly and most fundamentally, the triangles which formed these solids.<sup>62</sup> Epicurus then argues that his opponents cannot account plausibly for why there should be four forms, τ[έτ]ταρα [εἶ]δη, at the visible level (ὀρώμενα), rather than, presumably, an indefinite number. Arrighetti plausibly translates εἶδη as referring to the four Empedoclean elements, which were also those first formed, each from one type of the geometrical shapes in the *Timaeus*.<sup>63</sup>

In fragment 29, 26, which begins mid-sentence, Epicurus also mentions τρίγωνα (line 1), out of which his unnamed opponents derives the other σχήματα. It seems clear that the opponent is Plato in the *Timaeus*, in which the theory is first propounded that the basis of matter is solid geometrical σχήματα which are constructed from triangles.<sup>64</sup> Epicurus then criticises Plato for not being clear whether the triangles are indivisible (ἄτομα), as Epicurus’ atoms were. Plato gives no proof for their indivisibility, and on the other hand, if he thinks they are divisible and therefore themselves made up of other shapes, there is no reason for τὰ λοιπά, the other atomic shapes, to be formed from them. The scholiast to this passage identifies λοιπά as the regular solids, pyramids (tetrahedra), cubes, octahedra, dodecahedra and icosahedra, out of which the συνθέτης pressed together the four στοιχεῖα (elements), their εἶδη and their πάθη.<sup>65</sup> The scholiast’s comments unequivocally refer to the *Timaeus* and the

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<sup>62</sup> For analysis of this passage and its reference to the *Tim.*, cf. Clay (1983): 156-8.

<sup>63</sup> Arrighetti (1973): 266.

<sup>64</sup> See *Tim.* 50b2, 54c8, 55c2.

<sup>65</sup> For the text and translation, see Arrighetti (1973): 270. At 608-9, he attaches the scholiast’s remarks on λοιπά to the λοιπά in line 2 rather than line 9; on the interpretation adopted here, however, λοιπά refers in both cases to the geometrical solids constructed out of atoms. The scholiast obscurely includes the cube twice, as the κυβοειδές and ἑξάεδρον.

formation of the four elements by the Demiurge (συνθέτης) out of geometrical shapes;<sup>66</sup> he too has evidently identified the τρίγωνα as Platonic. Epicurus' first criticism of Plato here is thus that it is arbitrary to posit triangles as the primary units of matter, and so, presumably, the geometrical shapes which follow.

Epicurus then seems, in what are very corrupt lines, to turn to another criticism: it is ridiculous that Plato should condemn [πάν]τα τ[ὰ] μ[υ]ρία [τῶ]ν σχη[μά]τω[ν] [κατάληπ]τα [γ-]εγεν[ημ]έν[α] δι' αἰσθήσεων, all the countless shapes which can be grasped by the senses, and instead to choose [σχήμ]αθ' [ἃ] μὴθὲν δυ[νη]σό[μεν] ἐπιλογί[ζεσθ]α[ι], shapes which cannot be taken into account.<sup>67</sup> This seems to attack Plato's decision to opt for geometric shapes as his atoms, rather than shapes which more nearly resemble those at the visible level. Epicurus' argument against Plato thus looks as though it is based on an analogy between perceptible objects and invisible atoms, and on a rejection of a geometric basis to nature.

Epicurus uses σχήματα here of the shapes of atoms, as he did in *ad Hdt.* 42-3, as well as of things at the visible level. His characterisation of the geometric shapes in 29, 23.13 as having a ὠρισμένον σχῆμα arguably sheds light on what he means by ἐκ τῶν αὐτῶν σχημάτων περιειλημμένων in *ad Hdt.* 42, quoted above: the contrast in both cases is between the Platonic atoms, which have a restricted number of clearly defined shapes, and Epicurus' atoms, the variety of whose shapes, as 29, 26 seems to indicate, mirrors the variety of the visible world.<sup>68</sup>

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<sup>66</sup> The Demiurge is not called συνθέτης in the *Tim.*; however, at 33d2, he is called ὁ συνθεῖς (cf. 74c7); the same verb is used at 69d6 and 72e5 of the subordinate gods creating humans.

<sup>67</sup> For the meaning of ἐπιλογίζομαι see Sedley (1973): 27-34, who translates ἐπιλογισμός as 'something like "reasoning based on empirical data"'; reference in Fowler (2002): 131.

<sup>68</sup> For this point, cf. Clay (1983): 156-8. For σχῆμα of atomic shape in Epicurus see further Arrighetti (1973) frs. 29, 8.3; 29, 17.3; 29, 20.3-4.

Arrighetti has claimed that Epicurus' fragments criticising the *Timaeus* closely follow Aristotle's criticisms of the same in *De Caelo*, both in content and order.<sup>69</sup> However, at least in what survives, Epicurus' arguments omit the mathematical detail of *De Caelo*. For example, in 29, 23.6-17, Epicurus' argument is that there is no reason for the four elements to be divided, at the level of the invisible, into geometrical solids rather than other forms (presumably Epicurus' own atoms), nor why there should be four elements precisely. This is a fairly straightforward argument and does not depend on an analysis of the properties of geometrical shapes as such. In contrast, in none of the passages which Arrighetti refers to from *De Caelo*<sup>70</sup> is this argument made. Rather, Aristotle's argument is based, *inter alia*, on the more technical objection that none of the elements can be formed from one geometrical solid, because otherwise, if the individual solids were themselves divided, something would be left which was not one of those solids and therefore not a part of that particular element. Thus even if Epicurus is following Aristotle's criticisms rather than just criticising Plato, the evidence suggests that, firstly, Epicurus greatly simplified a long and complex Aristotelian discussion, and, secondly, adapted it so as to leave room for his own atomic theory.

Regardless of Aristotle, the above passages from Epicurus, when compared with *DRN* II.333-80, strongly suggest that Lucretius' unnamed adversary in this passage, like Epicurus' opponent in *Περὶ Φύσεως* XIV, is Plato in the *Timaeus*. Both Lucretius and Epicurus argue from the variety of the visible world to atomic variety. Epicurus' ὀρισμένον σχῆμα is reflected in Lucretius' *certa forma*. While Epicurus does not mention a divine craftsman of the atoms, unlike his scholiast, he does accuse Plato, in similarly metaphorical language to Plato's own, of 'twining together' (συμπλέκει) the other geometrical forms out of

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<sup>69</sup> Arrighetti (1973): 603, 607-8. Schmid (1962): 700, argues that, in *Περὶ Φύσεως* XIV, Epicurus criticised both Plato and Democritus through Aristotle and possibly Theophrastus. On *Περὶ Φύσεως* XIV, Theophrastus and the *Timaeus*, see further Baltussen (2011): 56-60.

<sup>70</sup> *Cael.* 304b2 ff., 305b31 ff., 306a30 ff.; Arrighetti (1970): 607.

the triangles (29, 26.2).<sup>71</sup> Lucretius' *facta manu* can therefore be explained as a reference to Epicurus' polemic against the Platonic divine craftsmanship. At the same time, the phrase strongly suggests that Lucretius was aware for himself of the nature of the Platonic doctrine which Epicurus was attacking. There is no parallel for *facta manu* in the extant writings of Epicurus;<sup>72</sup> nor is any required, since Lucretius' contrast at 378-9 between the work of nature and a divine hand depends on a personification of *natura* which is an integral part of his own poetic methods of argument. The idea of being made 'by hand' to a single *forma* might even suggest the careful procedure of geometrical constructions, in contrast to the haphazard procedures of nature, emphasised at 380 by *uolitare*, a verb which is used here as elsewhere in the *DRN* of the random motions of the atoms.<sup>73</sup>

#### 4.3.2 The *DRN* and *Timaeus* on intelligent design

Lucretius' reference to Plato at 378 comes in the context of a wider engagement in the *DRN*, particularly in Books II and V, with the teleological world view and the idea of intelligent design, particularly as presented in the *Timaeus*. Scholars have detected a number of echoes of the *Timaeus* in the *DRN* which would support this.

De Lacy, following Solmsen's analysis of the parallels between *DRN* II and the *Timaeus*, regarding the principle of the growth and decay of organisms, the controversy over the universe's destructibility, and the cycle of cataclysms attributed to the world by both works, argues convincingly that Solmsen underrates Lucretius' abilities when he assumes that Lucretius could not have thought up the reversals of Platonic arguments which actually

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<sup>71</sup> Cf. *Tim.* 80c6-7, 83d6.

<sup>72</sup> A TLG search on the corpus of Epicurus' works, and a search in the index of Arrighetti (1973), bring up no relevant results for χείρ or χερ-, ἀριστερά or δεξιὰ.

<sup>73</sup> E.g. *DRN* II.1055; cf. II.329, *circumuolitant* of the *equites* who are analogous to atoms.

appear in the *DRN*.<sup>74</sup> It is strange that Solmsen finds it more plausible that Epicurus should have been responsible for the doctrinal reversals found in the *DRN*, when to a large extent they depend on an imagistic rethinking more characteristic of Lucretius than Epicurus. According to Censorinus, writing in 238 AD, Aristotle may have mentioned a fiery ἐκπύρωσις and watery κατακλυσμός at the close of the astronomical *annus maximus*, perhaps in the *Protrepticus* or *De Philosophia*.<sup>75</sup> However, only Lucretius and Plato associate these natural disasters with the myth of Phaethon, and present them in terms of reports of what has already occurred in the past.<sup>76</sup>

Like Solmsen, Sedley and Garani have identified points of resemblance between the *DRN* and *Timaeus*, but assumed an intermediate or alternative source. Sedley finds several structural and thematic references to the *Timaeus* in *DRN* V, on the topic of the ‘mortality of the world’, and considers that lines 126-234 ‘look like a co-ordinated response’ to *Timaeus* 29e-30c. However, Sedley assumes that ‘there is no reason to doubt that this topic occurred at just the same position in [Epicurus’] *On nature*, even if we happen to have found no independent attestation of the fact’.<sup>77</sup> The problems with this view are, firstly, the fragmentary state of Epicurus’ Περὶ Φύσεως, whose syllabus is reconstructed by Sedley,<sup>78</sup> and secondly, that even if Lucretius was following Epicurus in spirit, that does not tell us exactly how he adapted the Timaeian theme of the mortality of the cosmos.

Garani acknowledges a number of aspects of the *DRN* in which the *Timaeus* or other Platonic works are one in a chain of sources, but prefers to see Empedocles as having the

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<sup>74</sup> Solmsen (1953), also (1951): 12, 22-3; Kleve (1978): 64; De Lacy (1983): 293-7, 305, esp. 296.

<sup>75</sup> Sallmann (1988): 6, 129.

<sup>76</sup> *Tim.* 22c-e; *DRN* V.380-415.

<sup>77</sup> Sedley (1998): 152-3.

<sup>78</sup> Sedley (1998): 136, inserts the topic of the world’s mortality into Περὶ Φύσεως XI at the place to which he believes it would correspond with its treatment at *DRN* V.55-415; however, Lucretius does not, even according to Sedley’s chart, always follow Epicurus’ ordering.

more direct influence. While Empedocles is undoubtedly an important model for Lucretius, however, Garani is sometimes too eager to see his influence where a Platonic one would be more appropriate. Although fragment 29 of Περὶ Φύσεως may indeed present ‘Epicurus’ treatment of Plato’s use of Empedocles’ four elements’, the way in which Lucretius treats this passage and ones like it reveals a polemic which is directed against Plato’s Demiurge and his regular atomic solids, with which Empedocles has nothing to do.<sup>79</sup> As I shall now show, while Lucretius was very likely conscious of Epicurus’ criticisms of the *Timaeus* and followed them in spirit, there are nonetheless reasons to see his poetic engagement with Platonic imagery as his own response to the *Timaeus*.

One key way in which the *Timaeus* has influenced the *DRN* is through language and imagery alluding to the idea that the world was created by a divine craftsman. This fits in with the image of atoms which are *facta manu* at II.378-9.<sup>80</sup> Lucretius arguably attacks the Platonic image of the divine craftsman through his own image of a personified Nature as creator.<sup>81</sup>

At II.1048-66,<sup>82</sup> Lucretius describes the world being made by nature, *natura factus*, in terms of the chance assembly of atoms, in a striking series of adverbs emphasising the fortuitousness of the process.<sup>83</sup> The characterisation of nature as an agent thus deliberately jars with the description of the random process which is what being ‘made by nature’ really means. This contrast emphasises that *natura* is not to be identified with a rational process or

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<sup>79</sup> Garani (2007): 5 with 260 n. 78; 162-3.

<sup>80</sup> With *facta manu*, compare VI.866, where the earth is described as contracted by cold, *tamquam compressa manu sit*; this near-personification of the forces of nature is clearly divorced from any idea of the ‘hand’ of a divine agent.

<sup>81</sup> As Lloyd shows (1966: 285-6), Aristotle also uses the image of Nature as an artisan in the *GA* and *PA*. However, it is uncertain whether Epicurus read these works; judging by Barnes (1997), it would seem less likely that Lucretius was familiar with them than with the *De Philosophia*.

<sup>82</sup> Cf. Asmis (1984): 266, n. 19, on II.377-80 and II.1058-63.

<sup>83</sup> See esp. 1058-60: *cum praesertim hic [mundus] sit natura factus, et ipsa / sponte sua forte offensando semina rerum / multimodis temere incassum frustra que coacta...*

guiding intelligence, but with its opposite, the combinations made at random by impersonal atoms.

The same passage argues that our *mundus* is only one of many; this contrasts with the doctrine at *Timaeus* 31a-b that our world is unique.<sup>84</sup> Lucretius also tells us that the doctrine that space is infinite is something which *res ipsa uociferatur, et elucet natura profundi* (1051-2). Thus (the nature of) space itself, and matter, *res* (as opposed to space), become the teachers, instead of the gods, about the real character of the universe. The conjunction of *natura* with *profundi* further emphasises Nature's impersonality: ultimately, *natura* is empty space and the matter which fills it. This passage thus illustrates how Lucretius, while personifying *natura*, at the same time discourages the reader from viewing it simply as another name for 'god'. By replacing Plato's Demiurge with Nature, Lucretius does not merely replace one divine power with another. Rather, he repeatedly reminds us that *natura* is not divine, nor personal, nor with benign intentions towards humanity, but merely another word for the mechanical laws and blind processes of the universe.<sup>85</sup>

The freeing of nature from the control of the gods, or rather of people's perception that it is so controlled, is reminiscent of Epicurus' freeing of people's minds from *religio* at I. 62-79. It also echoes the argument developed at II.251-93, as part of the doctrine of the *clinamen*, that people have free will, *libera...fatis auolsa uoluntas* (257), because the atoms initiate a motion by swerving which 'breaks the bonds of fate', *fati foedera rumpat* (254). The repetition of *fatum* twice within the space of four lines, as something from which the human will and the atoms are forcibly separated, closely links the free workings of nature

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<sup>84</sup> For Epicurus' infinite worlds theory, see *ad Hdt.* 45, 73-4; further references in Rouse and Smith (1992): 176-7. Aristotle and some of the Stoics also held that our world is unique: Philo, *De Aet.* 20-4; Fowler (2002): 236.

<sup>85</sup> For Nature's bleak laws, cf. *DRN* III.944-51.



The use of *manu* in II.1096, as at 378, is a reference to the hypothetical divine hand which, Lucretius contends in both passages, would be dwarfed by the power of *natura*. The picture of a god holding the reins of the cosmos is reminiscent, in spirit if not in detail, of another Platonic myth on the divine control of the universe, which is closely related to that of the *Timaeus*. In the *Politicus*, the god is described as τοῦ παντὸς ὁ κυβερνήτης, who, during the change from one cosmic cycle to another, ‘having as if let go of the handle of the rudder, retired to his own vantage point’.<sup>88</sup> While Plato uses the image of the helmsman to underline the god’s control of the universe, Lucretius challenges us with the idea that the ‘reins’ of infinite space, the *profundum*, are too powerful for any being to control with his ‘hand’. At 1097, Lucretius goes on to ask, *quis pariter caelos omnis conuertere?* This, and its ironic echo at V.915, where he observes that humans cannot *manibus totum circum se uertere caelum*, are also sarcastically reminiscent of Platonic cosmology, in which the heavens are turned by a god, or have their movements imparted by him.<sup>89</sup>

Lucretius uses the image of the helmsman steering the boat at IV.901-4 to describe how the atoms of the mind can move the whole body: despite the mass of the boat,

... manus una regit quantouis impete euntem            903  
 atque gubernaculum contorquet quolibet unum.

The sentiment here is the opposite of that at II.1095-6: Lucretius focuses on the single hand which can control a whole boat by turning the rudder. However, the fundamental difference is that, while in images like that of the *Politicus*, the universe is controlled by a divine helmsman, Lucretius’ image is an analogy for an entirely atomic, mechanistic process, where

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<sup>88</sup> *Plt.* 272e3-5: οἶον πηδαλίων οἴακος ἀφέμενος, εἰς τὴν αὐτοῦ περιωπὴν ἀπέστη.

<sup>89</sup> *Plt.* 269e-270a; *Tim.* 40a7-8. In the Myth of Er, the three Fates, daughters of ἀνάγκη, help to spin the ‘whorls’ of the heavens (*Rep.* X.617c5-d1).



one of only four occurrences in the *DRN*,<sup>92</sup> is also reminiscent of the *Timaeus*,<sup>93</sup> where *μηχανάομαι* is used repeatedly of the gods' construction of the human body,<sup>94</sup> as well as of making fragrant ointments, where the neutral base from which they are made is an analogy for the receptacle.<sup>95</sup> Lucretius, perhaps not coincidentally, uses the same motif of the artisan who makes fragrances at II.847-853, where the neutral base is an analogy for the atoms' lack of secondary qualities.

The idea of the *mundus* as Nature's creation is implied at V.92-6, where Lucretius prophesies the collapse of the world in terms of the collapse of an enormous building: *sustentata ruet moles et machina mundi*. The unusual word *machina* echoes *machiner* at III.944.<sup>96</sup> This echo, together with the impression of bulk created by the linking *m*-alliteration in the line, emphasises the irony of describing the world in terms of craft, when in fact the only 'artisan' is the random and limited force of nature. This effect is enhanced by the memorable phrase *tria talia texta* at 94, of the three elements of earth, sea and sky: they are 'woven together' or 'fabricated' as if by a craftsman. However, the craftsman (or woman) is Nature, an impersonal force, under whose rein the universe is governed without any divine involvement, and with a fixed term for the lifetime of all things, as Lucretius has just made very clear (64-90). It thus follows that neither earth, sea, nor sky will escape dissolution (95-96).

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<sup>92</sup> The other two are at IV.906, of a literal machine for hoisting weights, and 1119, of the devices which lovers seek to relieve their agony.

<sup>93</sup> Cicero translates δι' ἡγντινα αἰτίαν γένεσιν καὶ τὸ πᾶν τόδε ὁ συνιστὰς συνέστησεν of *Tim.* 29d6-e1 with *quae [causa] impulerit eum, qui haec **machinatus** sit*.

<sup>94</sup> *Tim.* 44e4, 45b6, 70c4, 73c2, 74b4, 75e1, 77a3.

<sup>95</sup> *Tim.* 50e5-8.

<sup>96</sup> The use of *moles*, however, is a contemporary touch, reminiscent of Roman engineering feats; cf. Horace, *Ode* III.1.33-4, which moralises against the hubris of man-made works which challenge nature.



### 4.3.3 The place of Aristotle's *De Philosophia*

Taken together, the images of the divine craftsman, Plato's most frequent image for god,<sup>101</sup> and of the world as divine artefact, both of which are attacked by Lucretius' own imagery, are strongly reminiscent of the *Timaeus* in particular and Platonic thought in general.<sup>102</sup> Since, however, it has been argued that Lucretius' attacks on intelligent design are directed against Aristotle's *De Philosophia* and influenced by its criticisms of the *Timaeus*, it is worth examining how far the image of the craftsman was used by Aristotle in this context, with the caveat that the *De Philosophia* itself engaged closely with Platonic imagery. Of those passages usually considered fragments of the *De Philosophia*, three are relevant to the image of the god as artisan and world as artefact: section 10-11 from Philo's *De Aeternitate Mundi*, and Cicero's *Academica* II.119 and *ND* II.95.<sup>103</sup>

The *De Aeternitate Mundi*, written in the early decades of the first century AD, draws on both the *De Philosophia* and the *Timaeus*.<sup>104</sup> However, the precise extent of the influence of the *De Philosophia* is difficult to ascertain. Philo distinguishes between Aristotle's position of an uncreated universe and Plato's position of a created but immortal one. However, he nowhere refers to the *De Philosophia* as such, or indeed to any other work of Aristotle's by name. Runia, in discussing *De Aet.* 20-44, acknowledges that it is debatable whether Philo drew his Aristotelian material directly from the *De Philosophia*, or whether he depended upon an intermediary source, such as a 'Peripatetic treatise' against the Stoics. He notes the extent

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<sup>101</sup> The craftsman-god image occurs repeatedly in the dialogues: see Pender (2000): 100-2; Lloyd (1966): 265-85, esp. 277: 'the *Timaeus* is the first Greek document in which the fashioning of the world as a whole is attributed to a craftsman-deity'.

<sup>102</sup> I leave aside the attack upon the intelligent design of the world at *DRN* II.167-82, since it does not use the metaphor of craft. The passage has been variously read as targeting the *Tim.*, the *De Philosophia* and the Stoics: Fowler (2002): 237-60; Schmidt (1990): 152-3.

<sup>103</sup> *De Philosophia*, frs. 18, 21, 22 and 12 (Rose) respectively.

<sup>104</sup> For the dating, see Runia (1983): 1, with n. 3.

to which Philo's style and language seem to be his own rather than Aristotle's.<sup>105</sup> Philo also intersperses his argument with quotations from the *Timaeus*, and phrases such as those in section 41 are notably Platonic in style.<sup>106</sup> We are left with a work which may or may not accurately represent some of the arguments and language of the *De Philosophia*, and which was written a good fifty years after the *DRN*. With these reservations, I turn to the text.

At *De Aet.* 10-11, Philo reports that Aristotle, whom he explicitly names, condemned those who τῶν χειροκμήτων οὐδεν ᾤθησαν διαφέρειν τοσοῦτον ὄρατὸν θεόν, ἥλιον καὶ σελήνην καὶ τὸ ἄλλο τῶν πλανήτων καὶ ἀπλανῶν ὡς ἀληθῶς περιέχοντα πάνθειον. Their blasphemy, in other words, was to consider the visible universe no different from a 'product wrought by hand' (χειρόκμητον). Aristotle is reported to have said that he no longer feared for the destruction of his house (οικία) but was more afraid of those who 'destroyed the whole cosmos by an argument'. This seems like a riposte to Plato, and his Demiurge-constructed universe, discussed in Chapter 3; if ὄρατὸν θεόν are Aristotle's words, they could also be a sarcastic echo of *Timaeus* 40d4, where the planets are described as θεοὶ ὄρατοί.<sup>107</sup> Moreover, Philo argues in the sections which follow that Aristotle supported the reading of the *Timaeus* in which Plato intended his world to be created in fact by the Demiurge and not in theory (13-16).

*De Aet.* 10-11 seems to find some parallels in *DRN* V.<sup>108</sup> In particular, in lines 114-125, Lucretius tells the reader not to fear that a punishment awaits those *qui ratione sua*

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<sup>105</sup> Runia (1983): 161.

<sup>106</sup> Cf. §38; Runia (1983): 163-4. *De Aet.* 39-43 has also been considered a fragment of the *De Philosophia*. Whether it is or not, Philo presents it as a defence following immediately from the argument of the *Tim.* against the world's destructibility (38). *De Aet.* 39-43 repeats the Timaeian image of the god of the universe as a δημιουργός who designed the world for the best with τέχνη. Philo mentions Plato eight times in the *De Aet.*, and Aristotle four times.

<sup>107</sup> Cf. 30d3, 92c6-7 (of the universe). I suspect that Aristotle took Plato's craftsman-metaphors too seriously; as argued in Chapter 3, at least part of Plato's account of the construction of the world should not be taken literally.

<sup>108</sup> Clay (1998): 184.

*disturbent moenia mundi*. As Clay observes, this resembles Aristotle's reported words at *De Aet.* 11, that he was more afraid πρὸς τῶν τὸν ἅπαντα κόσμον τῷ λόγῳ καθαιρούντων.<sup>109</sup>

However, Lucretius' reference to the giants in V.117-8 has no explicit parallels in extant fragments of the *De Philosophia*, but rather seems to come from *Sophist* 246a4-6, which speaks of a γιγαντομαχία among those philosophers who dispute over Being. Clay admits that the gigantomachy motif is 'only implicit' in Aristotle;<sup>110</sup> but the point is that this motif does not appear in the fragments of the *De Philosophia* at all, while it does in Plato. In sympathising with his reader's difficulty in imagining the end of the world in the previous section, Lucretius says that the reader cannot *iacere indu manus* on this *insolitam rem*, which makes it more difficult to comprehend, because touch is the *uia munita fidei proxima* of human belief (102-3).<sup>111</sup> In the same passage of the *Sophist*, the materialists 'drag everything down to earth, grasping rocks and trees with their hands'.<sup>112</sup> Lucretius' emphasis on touch here might thus be a show of sympathy towards Plato's materialists, who are certainly not the heroes of the Visitor's epistemological 'battle'.

Thus *DRN* V.92-125 contains a mixture of language, imagery and underlying argument, parts of which may echo the *De Philosophia* and parts the *Timaeus*, while the image of the cosmos as a structure made by a creator is one which Plato endorsed and Aristotle criticised.<sup>113</sup>

It should also be noted that Philo often combines Plato's and Aristotle's arguments, or supplements one by another.<sup>114</sup> This double treatment, if Philo is not considered original in

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<sup>109</sup> Clay (1998): 184, n. 14.

<sup>110</sup> Clay (1998): 185-186.

<sup>111</sup> On using one's hands to grasp hold of sensory proof, cf. *DRN* IV.500-6.

<sup>112</sup> 246a8-10: εἰς γῆν ἐξ οὐρανοῦ καὶ τοῦ ἀοράτου πάντα ἔλκουσι, ταῖς χερσὶν ἀτεχνῶς πέτρας καὶ δρῶς περιλαμβάνοντες.

<sup>113</sup> Cf. Furley (1966): 29-30.

<sup>114</sup> Runia (1983): 152-64.

his approach,<sup>115</sup> gives evidence of a tradition of reading the *De Philosophia* and *Timaeus* together, in which Lucretius, writing perhaps a century earlier, could also have been participating.

There is an argument that the rare word χειρόκμητον ('hand-wrought'), found in the Presocratics but not in Plato, is directly quoted from Aristotle.<sup>116</sup> It appears in the *De Caelo* of a 'manufactured product', which is less 'well-rounded' (ἔντονος) than the cosmos; this may be a passing dig at the Platonic view of the cosmos as constructed by a divine carpenter. Aristotle also uses χειρόκμητον elsewhere of man-made structures.<sup>117</sup> Diogenes Laertius mentions that Aristotle divided things into the χειρόκμητα and the natural.<sup>118</sup> In light of these parallels, the use of χειρόκμητα in *De Aet.* 10 could be interpreted as Aristotle's sarcastic comparison of the universe to something far inferior to it. Outside Aristotle, χειρόκμητον may have been used by Democritus, but is otherwise only found in post-classical authors.<sup>119</sup> On the other hand, it is a favourite word of Philo, who uses it twenty-one times. It could thus be argued that the appearance of χειροκμήτων in the *De Aet.* is due not to Aristotle but simply to Philo. It is not possible to reach a decisive verdict either way.

If, however, χειροκμήτων at *De Aet.* 10 does come from the *De Philosophia*, this is of interest for Lucretius, since it is a closer parallel to his *facta manu* than anything in the *Timaeus*. Lucretius' contrast of *facta manu* with *natura* in II.378 could also reflect the Aristotelian distinction between manufactured and natural products. While *facta manu* might seem a mundane phrase, its appearance without an agent or owner of the *manus* might suggest that it is conceived as an adjectival phrase to parallel χειρόκμητον. Lucretius, like Aristotle, is

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<sup>115</sup> Runia (1983): 2: 'it is highly improbable that Philo should have read the *Timaeus* without being aided and affected by the interpretations of the work circulating in his day'.

<sup>116</sup> LSJ s. v. χειρόκμητος.

<sup>117</sup> *Cael.* 287b16; *Mete.* 353b26 (of reservoirs), and 381a31 (of roasting apparatus).

<sup>118</sup> DL V.33.

<sup>119</sup> According to a TLG search, 20 May 2012.

criticising the view that natural phenomena are designed by a divine craftsman. However, while Aristotle, if he does, applies χειροκμήτων to the universe, Lucretius applies *facta manu* to the atoms, and, as argued above, specifically to the Platonic geometrical atoms, in the context of an argument about the atoms' true nature, and within a larger context of opposing a materialist explanation of the cosmos and an impersonal nature to the handiwork of a divine creator. Outside the *DRN*, the only surviving instances of the image of the craftsman-god forming atomic shapes are to be found in the *Timaeus*.

The possibility cannot be ruled out that Aristotle criticised the atoms for being 'manufactured' in the *De Philosophia*. However, on the current state of evidence, it is unnecessary to assume that he did, or, if so, that this influenced Lucretius. Rather, Lucretius' criticism of a theory in which atoms are *facta manu unius ad certam formam* reflects, on the one hand, a tradition of Epicurean (and possibly Aristotelian) criticism of the geometrical atoms of the *Timaeus*. At the same time, it forms part of Lucretius' wider engagement with that dialogue's intelligent design argument, through the image of the craftsman-god implied in *facta manu*. Lucretius' poetic innovation is in using the image of *natura* as a quasi-Demiurge to counter the image of the Platonic Demiurge as creator of the universe. The play between this image and counter-image in the *DRN* would have much less force without the *Timaeus* as an intertext, since only in that dialogue, and not in the *De Philosophia*, is the Demiurge the central creative power and 'cause' of the cosmos.<sup>120</sup>

The evidence above supports an interpretation of *DRN* II.378-80 as a response to the *Timaeus* which is both creative and based on Epicurean criticism, as well as, possibly, on Aristotle's criticism of Plato in the *De Philosophia*. The *Timaeus* makes a particularly fitting rival for the *DRN*, since, as discussed earlier, these two works stand out in ancient philosophy as presenting an account of the entire universe explained according to a particular

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<sup>120</sup> *Tim.* 29a5-6; contrast *DRN* I.154-155; II.174-81.

philosophical system. If Lucretius was aware of the Aristotelian tradition, he may also have known Aristotle's description of Plato's writing, echoed in later ancient critics, as between poetry and prose.<sup>121</sup> As such, Plato would, I speculate, have presented a particularly attractive challenge to the poet of the *DRN*.

#### 4.3.4 Cicero and Lucretius on Intelligent Design

The suggestion that Lucretius is responding to the *Timaeus* and possibly the *De Philosophia* in his divine-craftsman imagery is supported by the evidence of Cicero. Clay has argued convincingly that Cicero, while discussing Aristotle's *De Philosophia* in the *De Natura Deorum*, uses words and phrases which echo Lucretius.<sup>122</sup> In particular, at *ND* II.95, Cicero, apparently translating Aristotle, says that those who saw the heavenly bodies for the first time would believe in the gods and their creations: *perfecto et esse deos et haec tanta opera deorum esse arbitrantur*. Clay compares this with *DRN* I.158, where Lucretius anticipates teaching the reader that the laws of nature work *opera sine diuum*.<sup>123</sup>

If Cicero is echoing Lucretius here, the question is whether he is acknowledging an Aristotelian equivalent in Lucretius, or whether he is merely introducing a Lucretian phrase without particular Aristotelian connotations as a final rebuff to the *DRN*. It should first be noted that *opera deorum* is misleading; as we have seen, Aristotle opposed the idea that the gods had in any way created the world, which he claimed was ungenerated. This makes the phrase seem more likely to be a Ciceronian gloss. On the other hand, a much more specific

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<sup>121</sup> DL III.37; cf. Bignone (1936): 383.

<sup>122</sup> *ND* II.93-5; (Clay 1998): 175-81.

<sup>123</sup> Clay (1998): 176.

use of this imagery is found in a passage explicitly referring to Plato: *De Natura Deorum* I. 18-20, written in about 45 BC.<sup>124</sup>

“Audite” inquit [Velleius], “non futilis commenticiasque sententias, non opificem aedificatoremque mundi, Platonis de *Timaeo* deum, nec anum fatidicam Stoicorum Pronoeam, quam Latine licet Providentiam dicere, neque uero mundum ipsum animo et sensibus praeditum, rotundum, ardentem, uolubilem deum, portenta et miracula non disserentium philosophorum, sed somniantium. quibus enim oculis animi intueri potuit uester Plato fabricam illam tanti operis, qua construi a deo atque aedificari mundum facit; quae molitio, quae ferramenta, qui uectes, quae machinae, qui ministri tanti muneris fuerunt? quem ad modum autem oboedire et parere uoluntati architecti aer, ignis, aqua, terra potuerunt? unde uero ortae illae quinque formae, ex quibus reliqua formantur, apte cadentes ad animum afficiendum pariendosque sensus? longum est ad omnia, quae talia sunt, ut optata magis quam inuenta uideantur; sed illa palmaria, quod, qui non modo natum mundum introduxerit, sed etiam manu paene factum, is eum dixerit fore sempiternum. hunc censes primis, ut dicitur, labris gustasse physiologiam, id est naturae rationem, qui quicquam, quod ortum sit, putet aeternum esse posse? quae est enim coagmentatio non dissolubilis, aut quid est, cuius principium aliquod sit, nihil sit extremum?”

“Hearken,” said Velleius, “To doctrines neither futile nor false – not to that craftsman and builder of the world, the god of Plato’s *Timaeus*, nor to that old prophetic woman, the Stoics’ ‘Pronoia’, which may be translated into Latin as ‘Providence’, nor indeed to a world itself endowed with soul and senses, that round, fiery, revolving god; these are the monstrosities and marvels not of discoursing philosophers but of dreamers. With what eyes of the soul, then, could your Plato contemplate the fabrication of such a great work, through which, he claims, the world was constructed and built by a god? What labour was there, what tools, crow-bars, engines, what agents of so great a construction? Moreover, how were air, fire, water, earth able to obey and comply with the will of this architect? Whence indeed arose those five forms out of which the rest are formed, occurring appropriately to work their effect on the mind and to impart sensation? It is a long task to discuss everything [in the Platonic system] which is such as to seem rather wishful thinking than discovery. But the crowning point is that he who has introduced a world which is not only generated but even, as it were, hand-made, has claimed that it will last forever. Do you think that this man has, as they say, had even the merest taste of ‘physiology’, that is, the explanation of nature, when he thinks that anything which has come into being can last forever? What compound is not capable of dissolution? Or what is there which has a beginning, but not an end?”<sup>125</sup>

In Book I of the *ND*, the Epicurean Velleius, in his discussion of the nature of the gods, criticises the view that the universe is divinely created for the best and that the gods participate in human affairs. As de Lacy has observed, Velleius here ‘not only gives arguments similar to those of Lucretius against the view that the universe was constructed by

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<sup>124</sup> On the date, see Clay (1998): 174.

<sup>125</sup> In translating this passage, I have made use of the translation in Rackham (1951): 21-2.

a divine builder and is eternal, but assigns this view specifically to the *Timaeus*'.<sup>126</sup> De Lacy argues that this gives a strong reason for seeing the influence of the *Timaeus* on the *DRN* in the imagery of the artisan of the world and of the world as product of craft. In what follows, I shall develop de Lacy's observation by looking closely at the above passage and its verbal parallels with Lucretius.

Velleius begins by dismissing the Timaeian idea of the divine craftsman, the *opifex aedificatorque mundi*, along with the Stoic Providence (*πρόνοια*).<sup>127</sup> He elaborates on the metaphor of the world as edifice, asking what *machinae* and other instruments could be used to construct it. As we have seen, Lucretius also uses terms from engineering to describe the world, and in particular calls it a *moles et machina mundi*; and, like Velleius, he plays on the irony of the idea that a work of architecture is least likely of all to be indestructible. At *ND* 20, Velleius describes the world as a *coagmentatio*, whose cognate is used by Lucretius at II. 1060 (*coacta*), of the atoms gathering together by chance. Velleius defines Epicurean *physiologia* as the *naturae ratio*: the latter phrase is one of Lucretius' key terms to describe his own explanation of the workings of nature.<sup>128</sup> Even Velleius' style, of a series of sarcastic rhetorical questions imagining how a god might have constructed the world, finds several parallels of a similar type of counterfactual imagining in Lucretius.<sup>129</sup>

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<sup>126</sup> De Lacy (1983): 305.

<sup>127</sup> I leave open the question of whether, like Cicero (discussed in Ch. 1), Lucretius was at any point responding to Stoic teleology as well as Platonic. The arguments against the divine construction of the world in Diogenes of Oenoanda, NF 127 and 182, are primarily directed against the Stoics, though Diogenes could also have had the *Timaeus* in mind (Hammerstaedt and Smith 2010: 11; 2011: 87). These fragments suggest that the Timaeian language of divine craftsmanship was also used by the Stoics, and that there was an Epicurean tradition of criticising the Stoics in these terms. This would not, of course, prevent Lucretius from having Plato as a target, especially if Epicurean criticism of the Stoics was developed primarily after Epicurus' death – perhaps in the terms in which he attacked Plato. On the Stoic reading of the Timaeian creation, cf. Montarese (2012): 135.

<sup>128</sup> On *ratio* in Lucretius, see further Edwards (1993): 74.

<sup>129</sup> *DRN* II.1095-1104; VI.387-422. Effe (1970): 157-62, shows how Velleius' criticisms of Aristotle are superficial and do not do justice to his argument. In making Velleius argue in this way, Cicero may have intended to caricature Lucretius' (as well as Epicurus') argumentative style.

Velleius also tries to discredit *illae quinque formae, ex quibus reliqua formantur*: ‘those five shapes, from which everything else is formed’. In this context, *formae* must refer to the five regular geometrical solids used by the Demiurge in the *Timaeus* (53c-55c), which were the basis for the four elements and thereby for everything in the physical world. In this context, it is surely significant that, shortly afterwards, Velleius expresses his incredulity that a world could be eternal which is *non modo natum...sed etiam manu paene factum*, that is, not having arisen by nature or chance, but made by a god. Not only does Lucretius play with the idea of the world’s having been ‘born’,<sup>130</sup> but, as we have seen above, he uses the phrase *facta manu* to criticise the idea that the atoms might have been deliberately designed *ad certam formam*, as the Platonic atoms were.

It therefore seems plausible to argue both that Cicero had Lucretius in mind in these lines, and that he recognised that Lucretius was attacking the *Timaeus* in his criticisms of atomic design and of the world as a divine rather than natural structure.<sup>131</sup> Cicero’s omission of Lucretius’ name is no more surprising than Lucretius’ omission of Plato’s, if in both cases we suppose hostility mingled with an assumption that a cultivated reader would have recognised the allusions.<sup>132</sup>

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<sup>130</sup> See *DRN* V.65-6, 235-46.

<sup>131</sup> In later parts of *ND I*, Cicero seems to have been following Philodemus’ *De Pietate* – or possibly a lecture of the Epicurean Zeno followed by Philodemus – closely (Obbink 1996: 96-7; Montaresse 2012: 32-5); for more on contemporary Epicurean sources, see Dyck (2003): 7. However, no source is known for the lines of *ND* quoted above; Dyck (2003): 8, rejects the idea that they could come from the *De Pietate*. As Dyck notes, the style is more polemical than Philodemus or typical doxographies, with rhetorical questions of the kind found in both Lucretius and Diogenes *NF* 127, and also reminiscent of Cicero’s defence speeches, suggesting that Cicero may have taken considerable liberties with any source he was following. The vocabulary of mechanically building the world is common to the *Timaeus*, Lucretius and Cicero, but not to Philodemus; Diogenes scarcely develops it beyond the use of δημιουργέω and the Stoic idea of the universe as a πόλις. In any case, it would be sufficient for the argument of this chapter to accept that, regardless of other sources, Cicero was aware of Lucretius and echoing him in these lines.

<sup>132</sup> Cicero’s *Aratea* (esp. 298-307) inserts teleology and intelligent design of the universe into his version of Aratus’ *Phaenomena*; see Gee (2001): 526. Whether Lucretius was responding to the *Aratea* here is beyond the scope of this thesis.

#### 4.4 Conclusion to Chapter 4

This chapter has shown that it is plausible to see Lucretius as being directly influenced by Plato in his use of craft imagery to describe the universe and the forces at work in it, and in particular his discussion of the variety of atoms at II.378-9. At the same time, this and the previous chapter have used detailed analysis of sections from Plato and Lucretius to examine the way in which they combine scientific, philosophical, and literary ways of thinking. From this investigation, it emerges that both writers engage with their predecessors, including, in Lucretius' case, with Plato, on the level of imagery as well as argument. In doing so, they rework earlier attempts to understand the world to fit with their own new perspective.

There is, however, an important difference between Lucretius and Plato in regard to the proto-scientific ideas discussed in these two chapters. Plato does not take the perceptible world around him seriously, but treats it as a game or riddle from which to interpret the purpose of the gods and the obligations of the soul. There is no truth to be gained from this world as such, since the only truth and source of knowledge is in the invisible world of the Forms. Lucretius, in contrast, directs his readers' attention to the phenomena of this world as the only acceptable proof for the existence of the underlying reality of atoms and void. Lucretius claims that his arguments about the physical world are correct and offer a better explanation of how it actually is; while Plato refuses ever to commit to the truth of his explanations about this world.

More important for either writer than the correct explanation of the physical functioning of the world is the value which they attach to the world and human life as seen through their new descriptive explanation of it. In order to appreciate this, the precise language and imagery which both authors use is of ineradicable importance. The

philosophical arguments themselves often cannot be understood without paying attention to the allusion and associations created between different works and between different passages within the same work. It is this inextricable interdependence of abstract thought and concrete imagery, argument and value, which makes it appropriate to speak of the *Timaeus* and the *DRN* as philosophical literature. Regarding the *DRN* in particular, to say, as many scholars do, that Lucretius' poetry contributes to the persuasiveness of the doctrine he presents, is only half the story. Lucretius fuses Epicurean dogma with artistic imagery, often drawn from poets and other poetical opponents, to create literature, which gives a wider, more lasting significance to the technical philosophical debates on which it is based.



## Conclusion

This study has argued that Plato's dialogues and Lucretius' *De Rerum Natura* can be best understood and appreciated as philosophical literature: that most intellectual of art forms, which fuses poetic language with abstract reasoning, and stimulates and delights by revealing the imaginative potential of science and philosophy. As such, the works of Lucretius and Plato can be distinguished from less literary philosophy, such as Aristotle's esoteric works, as well as from less philosophical literature, such as the elegies of Ovid or the odes of Pindar.

This study has also argued in Chapters 1 and 4 that, given the evidence, Plato seems very likely to have influenced Lucretius directly. In many cases, to see Lucretius as reacting against Plato improves our understanding of the way in which Lucretius' arguments are structured, as well as the force of his imagery. Lucretius' engagement with Plato's philosophical literature thus shapes his own poem on both a literary and philosophical level. One technique which both authors adopt, as discussed in Chapters 3 and 4, is that of borrowing their opponents' ideas and parodying or otherwise undermining them from the inside. This is a literary approach to polemic, which relies on humour and allusion, at least as much as a philosophical one, which relies on the direct criticism of arguments.

Regarding Plato specifically, it was argued in Chapter 2 that the *Phaedrus*, read in conjunction with other dialogues, gives some indications that we should value these written works more highly than the character of Socrates might suggest. A theory of philosophical literature was extracted from the *Phaedrus*, as an art form which engages us in a contemplation which is both aesthetic, emotive, and intellectual. Passages from the *Republic* were also analysed to illustrate how these elements work together in practice, and it was argued that Plato's prelude form, which prepares the reader intellectually and emotionally for

the pursuit of philosophical argument or the reception of doctrine, can itself be seen as a type of philosophical literature.

This study raises a number of questions which merit further investigation. If it is accepted that Plato influenced Lucretius, there are more links to be explored between the two. For example, as mentioned in Chapter 1, there is room for a more detailed comparison between Lucretius' image of the soul and body as vessels and the Platonic image of the soul-vessel and of pleasure as filling up. There are further connections to be made between both of these and other Epicurean treatments of pleasure. Plato's hunting image at *Republic* 432 could be fruitfully compared with Lucretius' hunting image at *DRN* I.398-417, which outlines the poet's attitude to his teaching. This could be set against the contrast between Epicurus' conception of teaching in a community with Lucretius' more isolationist approach to both teaching and poetry.

There is also more to do on the relationship between Plato's 'flight of the soul' image for the pursuit of knowledge and Lucretius' idea of the sublime vision of the Epicurean poet, especially since 'Longinus' sees Plato as a sublime author, while Ovid calls Lucretius *sublimis*.<sup>1</sup> This relates to the question of the place of philosophical contemplation in human life in the two authors. Plato often speaks as though the contemplation of the Forms is the highest pleasure, indeed the highest activity possible for the soul. Lucretius, in turn, says that true piety is *pacata posse omnia mente tueri*.<sup>2</sup> This raises the question of whether Lucretius, like Plato, actually considers the intellectual and aesthetic activity of philosophical contemplation to be higher than all other human activities, and if, in doing so, he values such contemplation more highly than Epicurus does.

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<sup>1</sup> Περὶ ὕψους XII.2-3, XIV.1; Ovid, *Amores* I.15.23-4. For the sublime in Lucretius, see Porter (2003), (2007); on the flight of soul, *Theaet.* 172c-177c; *DRN* I.66-79, II.1044-7; Jones (1926); de Lacy (1983): 292-3; Edwards (1990); Rue (1993).

<sup>2</sup> *DRN* V.1203.

Beyond Plato and Lucretius, references to the debate between the Epicurean and Platonic schools of thought by other writers in the first century BC and after, and Lucretius' place in this, may also prove fruitful. Virgil's allusions to the *Phaedo* and Lucretius in *Aeneid* VI, mentioned in Chapter 2, could be a starting point. As was argued in Chapters 1 and 4, Cicero also consciously engages with Lucretius as an Epicurean opponent of Platonism; there is further to do on the connections between them.

In all four chapters, the analysis of Plato and Lucretius has revealed something of their literary excellence, even in allegedly more technical passages from *DRN* II or the *Timaeus*. As such, this study may be of interest to literary critics and aesthetic philosophers considering in which qualities the value of philosophical literature resides. It also presents a point of comparison for readers of more recent works of philosophical literature, many of which have been inspired, directly or indirectly, by Plato or Lucretius. Lucretius also influenced the development of the scientific poem,<sup>3</sup> and there is a case to be made for parallels, even if accidental ones, between his evangelising approach to atomism and the works of modern popular science writers such as Richard Dawkins.<sup>4</sup>

Finally, this study has analysed two examples of how philosophical literature might work in practice. At the heart of this type of writing is the productive tension between the analytical and creative, the imaginative and argumentative. In the Introduction, a number of works of philosophical literature were mentioned which span the centuries between Lucretius and us. In an age of rapid scientific advancement, thriving philosophical debate, and burgeoning literary talent around the world, there is an abundance of possibilities for new ones.

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<sup>3</sup> See Baker (2007); Priestman (2007).

<sup>4</sup> Cf. Campbell (2003): 181 ff., 256.



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