*Cupidine Caeci:*
The Ethics of Perception in Lucretius' *De rerum natura* IV

by

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*to*

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**Abstract**

This thesis seeks to find a unity in the fourth book of Lucretius' *De rerum natura* by considering the relationship between the book's exposition of the Epicurean perceptual doctrine of *simulacra* and its concluding indictment of love and sexual desire. I suggest that for Lucretius there is a key reciprocal relationship between accurate perception and ethical disposition. While Lucretius' physical doctrine in general seems to support his governing ethical project of cultivating tranquility, in Book 4 ethics and physics support each other: mental tranquility requires accurate vision, and accurate vision requires mental tranquility. This relationship is based on Lucretius' theory of the mind's interaction with images, which is dynamic rather than static. As such, this interaction depends on a belief in the continuity of nature between perceiving subject and perceived object. In order for the mind to recognize this continuity, it must be ethically disposed to not succumb to the perceptual barriers of fear and desire. In order to perceive properly, the habit of the mind must be trained to pay attention. Without a habit of attention, the mind will be prey to the perceptual delusion that both results in and grows out of irrational fears and desires.

**List of Abbreviations Used**

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| DL | Diogenes Laertes |
| *DRN* | *De rerum natura* |

## Acknowledgements

# Chapter 1—Introduction

'How should the mind, except it loved them, clasp
These idols to herself? …

'Can I not fling this horror off me again,
Seeing with how great ease Nature can smile,
Balmier and nobler from her bath of storm,
At random ravage?'

**Alfred Lord Tennyson, "Lucretius," 1886.**

## 1.1 Overview of the Argument

Book 4 of Lucretius' *De rerum natura* poses an interpretive challenge for its
readers: namely, how to reconcile the predominant theme of the book, Epicurean
perceptual theory, with the final discourse on the dangers of love and sexual desire.[1] Cyril
Baily in his 1947 commentary notes the apparently disconnected nature of the book:

> It has not as great a unity of subject as the Third [book], but there are links
> of connexion between its parts. Its theme may be said to be the mind, and
> it deals in the first part with the psychology of sensation and thought, and
> then with certain physiological facts connected with psychological
> processes, ending up with a virulent attack on the passion of love.[2]

Baily observes that the mind is generally the subject of the book but does not
suggest this subject as a point of connection between the psychology, physiology, and
attack on love which he then enumerates. This thesis will seek to find a unity in Book 4
of Lucretius' *De rerum natura* by considering the relationship between accurate
perception and ethical disposition. William Fitzgerald agrees more broadly on the ethical
significance of Book 4 and observes that its dismissal is often owing to the fame of the

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[1] Brown (1987).
[2] Baily (1947: 1177).

passage as a stand-alone diatribe rather than as an interpretively suggestive and helpful text:

> The passage on love that ends the fourth book of Lucretius *De rerum natura* is of such intensity that it invites, and has in the past received, speculation of a biographical and psychological nature. The tendency to see it as an isolated purple passage has concealed its crucial significance for the work as a whole, about which it has more to tell us than about the psyche of the author.[3]

This thesis will endeavor to follow Fitzgerald's advice and seriously interrogate *DRN* 4 on its interpretive significance for the poem as a whole. It will look for a coherent reading of both the physics and the ethics of *DRN* 4. As such, it will consider the physical Epicurean perceptual doctrine of *simulacra* and the ethical Epicurean therapeutic doctrine of *tranquilitas,* or Greek *ataraxia*. The relationship of reciprocity between Lucretius' ethics and physics unfolds through reflection on the subject's interaction with images in perception, a process that ultimately uncovers the dynamic continuity of nature between perceiver and thing perceived. The seat of this relationship is in the mind, the locus point of continuity between seeing and thing seen. Mind relates to image through a process of recognition and verification that relies upon certain prior conditions, grounded in a habit of the mind that Lucretius calls "attention," *advertas animum.[4]* I suggest that the dynamic nature of mind and image are conveyed to the reader effectively by Lucretius through the process of reading and hearing: the reader is herself trained in ethical disposition by the poem itself. Finally, the conclusion will suggest that the nature of perception and ethical disposition finds its grounds in the nature of the atom itself.

**1.1.a Physical Doctrine in *DRN* 4.**

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[3] Fitzgerald (1984:1).
[4] *DRN* (4.812).

The fourth book of Lucretius' great hexameter poem about Epicurean philosophy introduces the perceptual theory of *simulacra,* the Latin translation of 4th-century Athenian atomist philosopher Epicurus' doctrine of *eidola,* or the material effluences that explain sense perception.[5] As a Roman student of Epicurus, Lucretius offers an account for knowledge through appearances which accords with the materialist principle that all motion must be explained by contact: bodies either touching or being touched, *tangere et tangi*.[6] According to this theory, all knowledge, either of the mind or the senses, is accounted for by the fact that the objects of perception as atomic compounds are constantly shedding "films," or very thin, tenuous likenesses, *simulacra*, of themselves, which float as thin atomic compounds through the air in an ongoing stream. These streams of images pour off bodies in a constant flow, moving with the speed of thought, and enter the eyes of the perceiving subject, where they leave an impression, *tupos* for Epicurus, and then are recognized and identified by the mind and registered as signifying discrete individual objects. These *simulacra* likewise account for mental processes: the mind itself, as an extremely fine atomic compound, is particularly susceptible to these films and may be moved by a single *simulacrum* which enters directly into the mind. For Epicurus, this susceptibility of the mind accounts for visions of gods which are otherwise inexplicable. It also accounts for notions of other things we have never seen, such as creatures of myth and fantasy.

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[5] *Hellenistic Philosophy* (1988:8) DL (10.46-53): "Further, there exist outlines which are similar in shape to solids, only much finer than observed objects. … These outlines we call 'images.'"
[6] *DRN* (5.101-103).

The consequence of this theory is that all *simulacra,* since they flow directly from the object which they represent, are true:[7] *alethes eidola* for Epicurus.[8] The obvious problem then for the Epicurean is how to explain perceptual error. For the Epicurean, all appearances are true *qua* appearances, and error enters in with the perceptual step of mental judgment.[9] Lucretius' presentation of this doctrine seeks to defend the materialist claim that the senses never lie. In order to do so, he must explain the experience of delusion and deception, cases in which the senses seem to lie. Lucretius considers a catalogue of instances of deception, in all of which he attributes error to the mind's interpretation, rather than to the senses. Lucretius' task is to explain the function of the mind and the senses in a way that protects the authority of sense perception and reinforces for the reader the purely natural causes for all appearances, protecting the reader from the fear and anxiety that come from attributing appearances to divine or supernatural interruption of the laws and patterns of nature.

Lucretius' perception theory leaves questions to be answered. Problems related to the interaction of the mind with images have been addressed by views such as those of Watson (1988) and Weiss (1976). Questions about what it means for the senses to be "true" proceed out of a long tradition of controversy and have been taken up by contemporary commentators such as Vogt (2015), Everson (1990), Sedley (1998), Asmis (1984), Glidden (1979), and Striker (1977). These conversations generally center around close analysis of what Epicurus means by "true." I suggest that these questions can be

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[7] Cf. esp. *DRN* (4.507-512).
[8] *Hellenistic Philosophy* (1997:9). DL (10.50).
[9] *Ibid.* (1997:9-10). DL (10.51).

clarified by moving beyond analysis of Lucretius' physics to include consideration of his ethical project.

**1.1.b Ethical Doctrine in *DRN* 4.**

Lucretius' perception theory (which ends up functioning as the basis for his epistemology) can be clarified by looking for a unity in Book 4 that upholds the ever-present Epicurean ethical concern with *tranquilitas* or *ataraxia.* Lucretius' poem transmits the Epicurean doctrine of tranquility as the therapeutic goal of philosophical study. Epicurus' definition of this ethical object is initially framed as a negative rather than a positive goal: "When we say that pleasure is the goal we do not mean the pleasures of the profligate or the pleasures of consumption, as some believe… but rather the lack of pain in the body and disturbance in the soul."[10] Tranquility is a state of being free from bodily and mental pain. Epicurus' *Letter to Menoeceus* reflects on the ethical goal as a divine quality of blessedness and indestructability[11] and insists that this divine quality is also the object of human endeavor. Humans seek to emulate the gods who are independent of subjection to external fear and desire. For humans, the blessed life is composed of contemplation, which is the supreme definition of "pleasure".[12]

> The unwavering contemplation of these [natural and necessary desires] enables one to refer every choice and avoidance to the health of the body and the freedom of the soul from disturbance, since this is the goal of a blessed life. For we do everything for the sake of being neither in pain nor in terror. As soon as we achieve this state, every storm in the soul is dispelled, since the animal is not in a position to go after some need nor to seek something else to complete the good of the body and the soul. …
> And this is why we say that pleasure is the starting-point and goal of living blessedly.[13]

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[10] *Hellenistic Philosophy* (1997:30) (DL 10.131).
[11] *Ibid.* (1997:28). DL (10.123).
[12] *Ibid.* (1997:29-30). DL (10.127).
[13] *Ibid.* (1997:30). DL (10.128).

Epicurus elaborates further on happiness as freedom from external contingency, or self-sufficiency: "And we believe that self-sufficiency is a great good, not in order that we might make do with few things under all circumstances, but so that if we do not have a lot we can make do with few being genuinely convinced that those who least need extravagance enjoy it most; … ."[14] Epicurus considers prudence, *phronesis*, the greatest virtue, because it demonstrates the need for virtue in a pleasant life.[15] The ideal of human virtue is an individual who has minimized her external contingencies to the greatest possible extent through her own internal virtue and her enlightened awareness of natural limitation – and who subsequently is free to contemplate life and its inherent limitedness:

> For who do you believe is better than a man who has pious opinions about the gods, is always fearless about death, has reasoned out the natural goal of life and understands that the limit of good things is easy to achieve completely and easy to provide, and that the limit of bad things either has a short duration or causes little trouble?[16]

This attention to pleasure as freedom from disturbance and contemplation of nature is taken up by Lucretius. Pleasure is both a physical and a mental freedom from pain and trouble, and awareness of this freedom and self-sufficiency is defined as the mental pleasure of contemplation:

> But nothing is more delightful than to possess lofty sanctuaries serene, well-fortified by the teachings of the wise, whence you may look down upon others and behold them all astray, wandering abroad and seeking the path of life… . In what gloom of life, in how great perils is passed all your poor span of time! not to see that all nature barks for is this, that pain be removed away out of the body, and that the mind, kept away from care and fear, enjoy a feeling of delight![17]

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[14] *Hellenistic Philosophy* (1997:31). DL (10.130).
[15] *Ibid.* (1997:31). DL (10:132).
[16] *Ibid.* (1997: 31). DL (10.133).
[17] *DRN* (2.7-19).

This ethical context brings us to Lucretius' intensive indictment of sexual passion at the end of *DRN* 4: an apparent digression from the scientific analysis of vision and sense perception into a warning about the ethical dangers of possessive attachment:

> And further, these evils are found in possessive love and in the most favorable [case]; truly in unfavorable and meager love, you are able to grasp innumerable evils with the light of your eyes shut; so that it is better to be vigilant beforehand, as I have explained, and to beware lest you are enticed.[18]

However, as is already hinted here in the reference to vision relative to desire, "evils that you can see with the eyes shut," Book 4's closing indictment of passion is anything but a digression from the main topic of perception.

**1.1.c Enumeration of Chapters**

The physical and ethical portions of the *DRN* seem to follow a division between the physical explanation and defense of the *simulacra* doctrine in 4.1-961 and then the ethical arguments about the problems of love and sexual attachment in *DRN* 4.961-1287 (the conclusion of the book). However, as I will hope to show, both physical and ethical sides of perception are dependent upon each other throughout Book 4, supporting the claim that they be understood as mutually reinforcing aspects of perception. These two sides are treated respectively in the second and third chapters: Chapter 2 deals with Lucretius' treatment of the physics of perception, specifically the *simulacra* theory and the defense of knowledge through the senses. Chapter 3 is concerned with the ethics of perception: the perceptual impediments of fear and desire and the therapeutic habit of attention which is necessary to prevent them. Thus I frame the question in terms of the

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[18] *DRN* (4.1141-1145).

relationship for Lucretius between his Epicurean physics, or scientific theory of perception; and his *ethics,* the internal disposition of the perceiving subject.

I suggest that the question of the relationship between Lucretius' physics and ethics in perception brings us in turn to question of the role of *mind* for Lucretius in perception. This is addressed in Chapter 3. For Lucretius, the mind is responsible for the reception, ordering, and interpretation of images. If the mind is responsible for accurate interpretation of images, what are the conditions or requirements for its accurate interpretation? Chapter 3 pushes this question by addressing an outstanding problem in Lucretius' transmission of Epicurean perception theory: Lucretius' account of perception leaves out the Epicurean doctrine of *prolepsis*, an indispensable element of justifying the materialist theory of perception. Lucretius' omission of this important doctrine forces us to ask why he does so and how he compensates for its absence. I suggest that Lucretius is pointing us toward the function of poetry as a tool for the reader to understand and interpret the images presented by nature. [19] Poetry itself functions proleptically in Lucretius' account of perception. Building on Thury's argument[20] that *DRN* functions as a *simulacrum* of the *rerum natura*, this chapter asks if there is a sense in which *DRN* provides the reader with an interpretation of *simulacra* that orders and interprets the appearances of the world to ethically train the perceptive faculty of the reader, thus making the poem an ordering framework for the reader's accurate perception. Attention to the poem's performative and didactic relation to the reader suggests further that the *DRN* not only offers a correct "preconception" of images in the world but furthermore

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[19] Cf. Watson (1988) and Weiss (1976) on this function in Lucretius' psychological schematic.
[20] Thury (1987).

trains the reader in the ethical disposition of tranquility necessary to receive and benefit from such an interpretation. Finally, Chapter 4 will reconsider the task of this thesis by referring back to the atom itself. Chapter 4 considers the significance of the atom as a mental entity and its function relative to images and perception. It concludes by asking how the atom itself can guide us toward understanding the relationship between Book 4's physics and ethics by exemplifying the self-related activity that is the condition for and result of correct perception.

## 1.2 Lucretius and His Poem

Titus Lucretius Carus is thought to have been born sometime around 94 BCE and to have died 51 or 54 BCE.[21] His poem *De rerum natura* (*DRN*), "On the Nature of Things," composed in dactylic hexameter, the traditional meter of heroic epic, told a philosophical and scientific epic in which *natura,* Nature, and its components of atoms and void, *corpora* or *primordia* and *inane*, rather than bronze-clad warriors, were the epic heroes. However, Lucretius' grand myth of Nature, all-encompassing in its cosmological scope, purported to both surpass, expose, and finally subvert myth as oppressive *religio* that preyed upon human imagination and fear. Lucretius' poem is a key source in the transmission of Epicureanism, a philosophical school that flourished in the Hellenistic and Roman periods. A materialist philosophy in opposition to the idealist Platonic and Peripatetic philosophical schools, Epicureanism postulated that reality was fundamentally composed of atoms and void; and it posited pleasure, understood as freedom from disturbance, as the greatest good. The atomist philosophy from which it emerged originated with Democritus, a philosopher from the mid-fourth century BCE, and found

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[21] Sedley (2004) (revised 2018).

its full expression in Epicurus, an Athenian philosopher and leader in the late 4th and early 3rd century BCE. [22] Lucretius was a dedicated student of Epicurus and is by most[23] currently considered a generally faithful inheritor and expositor of orthodox Epicurean dogma. Early Christian apologist Jerome reported that Lucretius was driven mad by a love potion and subsequently killed himself. This myth is generally considered to have been a tool for Christian castigation and denunciation of Epicurean philosophy, which was considered atheistic and hedonistic.[24] Sedley points out Virgil's praise of Lucretius, which highlights his therapeutic impact by commending his knowledge of the causes of things and his extinction of fear, fate, and hell. Sedley notes how these verses neatly capture four key themes in Lucretius' poem: "universal causal explanation, leading to elimination of the threats the world seems to pose, a vindication of free will, and disproof of the soul's survival after death."[25] The poem remains a primary source for Roman reception of Greek Epicureanism.[26]

Lucretius' poem proceeds in six books. Disagreement exists on whether he finished them or not.[27] Books 1 and 2 concern the primary physical argument of atomism: that nothing exists fundamentally apart from atoms and void, and the various ramifications of this creed. Book 3 concerns the mind and spirit, the source of life in sensate things, with a special concern to argue against the immortality of the soul. Book 4, as already outlined, concerns the process of perception and the dangers of sexual attachment. Books 5 and 6 are concerned with the broader genesis and history of the

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[22] Sedley (2018).
[23] *Ibid.* (2018).
[24] *Ibid.* (2018).
[25] *Ibid.* (2018).
[26] Cf. Sedley (1988).
[27] Cf. Bailey (1947) and Sedley (2018).

world and human society. The six books proceed in pairs of two that describe increasingly complex levels of reality: Books 1 and 2 detail the subvisible level of atoms, Books 3 and 4 the visible unit of the human individual, and Books 5 and 6 the cosmological level of earth and society. In each level, as Sedley observes,[28] the fundamental reality of atoms and void is affirmed: cosmos and society themselves mimic the life and behavior of atoms, just as does the human individual of which the social and cosmic worlds are compounded.

Different commentators take different stances on the question of the completeness of the work. Sedley considers that the books are in a certain state of incompletion, though one that fairly closely approximates Lucretius' intended finished work. Bailey alternately views even the ordering of the books as a mistake and an accident of time that does not accord with Lucretius' discernible goal for his work. My argument finds a close logical relationship between Lucretius' perception theory in Book 4 and his theory of human mind and psychology in Book 3; thus this thesis will adopt the view that the order of the books is key to Lucretius' own argument.

The last word about Lucretius must be about his poetry, not his system of ideas, since as a poet in the epic didactic tradition,[29] his approach though literary techniques must stay front and center. While previously literature has tended to find an inconsistent tension between Lucretius' Epicurean philosophy and his poetic means of elaborating that philosophy, commentators now are increasingly interested in the tight relationship between the actual substance of Lucretius' argument and the poetic vehicle through

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[28] Cf. Sedley (1998).
[29] Cf. Volk (2002).

which he conveys it to his reader. Commentators such as Monica Gale,[30] Eva Thury,[31] Brooke Holmes,[32] Myrto Garani,[33] and others see Lucretius not as contradicting his honoured predecessors but, as he himself says in the beginning to Book 4, "traversing a new path," one not yet trodden, *avia Pieridum peragro loca nullius ante / trita solo.*[34] While he speaks of himself as an oracle of orthodox Epicurean doctrine, Lucretius nonetheless does claim that Epicureanism lays an onus on its disciples to "look into" its teachings for themselves and to discover ideas which lie hidden implicit within Epicurus' explicit teachings. This notion will be explored in greater detail in Chapters 4 and 5.

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[30] Gale (1994).
[31] Thury (1987).
[32] Holmes (2005).
[33] Garani (2008).
[34] *DRN*. (4.1-2). Cf. Classen (1968).

## Chapter 2—The Physics of Perception: *DRN* 4.1-961

While the basic outlines of Lucretius' theory of perception have already been sketched, this chapter will lay out the details of the theory, consider the underlying premise of the truth of appearances, and then explore Lucretius' defense of Epicurean philosophy against skepticism. This thesis has posited that Lucretius' understanding of perception, especially that of vision, rests upon his understanding of ethical disposition: a self-sufficient tranquility that is minimally dependent upon external contingencies.

### 2.1 Lucretius' *simulacra*

Before Lucretius begins his argument, he refers back to the theory of the soul in Book 3. He reiterates his governing contention: the soul, just like the body, is mortal and destructible.

> And now, because I have explained the nature of the mind, what it is, and from what things it grows strong when arranged with the body, and how, when torn away, it goes back to its first beginnings, now I will begin to handle for you what pertains emphatically to these things, that there are those things which we call likenesses of things;… .[35]

Understanding the "likenesses" is intimately related to understanding the natural mortality of all atomic compounds. Lucretius immediately reminds us of what he has spent the whole of Book 3 arguing: because the soul is mortal (an atomic compound which will return to its *elementa* after it is separated from the body), we need not fear death or afterlife. In Book 3, Lucretius argued that death means nothing to us because our souls do not persist after the dissolution of the body. Now in Book 4, Lucretius will argue

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[35] *DRN* (4.26-30).

that death means nothing to us because the ghosts we fear and other apparitions of the

afterlife are merely images which the mind has misinterpreted. Lucretius tells us that

> And these same [likenesses], meeting us in wakeful hours, frighten our minds, and also in sleep, when we often have view of marvelous shapes and likenesses of those absent from life (dead), which have often roused us from listless sleep in horror; lest perhaps we think that spirits flee from Acheron or ghosts fly around among the living, or that anything of us is able to be left behind after death, when the body and the nature of the mind at the same time destroyed, scattered, have surrendered each into its own beginnings. I say therefore that images and thin shapes of things are sent from things, from the outermost surface of the body.[36]

Lucretius' first argument claims that, because various visible bodies throw off

either films or effluences from themselves, such as smoke from wood, heat from fire,

coats from cicadas, or cauls from calves at birth; it is therefore conceivable that bodies

also analogously throw off "likenesses" from themselves: "because these things occur, a

thin image must also be sent off from things, from their outermost surface."[37] This kind

of reasoning is routine for Lucretius throughout the *DRN*; his logic is to conclude that

what happens on the visible level, because it directly grows out of the invisible level,

must therefore proportionately reflect atomic behavior on the microscopic level. This

argument means, curiously, that it can be difficult at times to distinguish between when

an instance from the visible world is functioning as an analogy and when it is an example

– simply the visible manifestation of the invisible atomic action.[38] Ultimately there is no

real difference, since the fundamental reality of atoms and void is common to all things.

Therefore there are no bodies that may *not* be related to each other in this respect.

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[36] *DRN* (4.33-43).
[37] *DRN* (4.63-64).
[38] Cf. Asmis (1984).

For Lucretius, the effluences fall off their originating bodies both from their outermost surface and from their inner essence. The effluences that account for vision are shed from the surface, "protecting the shape of the form, and far more quickly, since because they are few and placed in the front rank, they are less vulnerable to being impeded."[39] This assertion serves to further support Lucretius' claim about the extreme speed of the likenesses. Effluences that arise from the inner essence help to account for the senses of touch and smell, and because they proceed from within, they are less tangible when they arrive at the surface (outside their object) and so dissipate much more readily than the effluences of visibility: "All odor, steam, heat, and other similar things therefore overflow from objects diffused, because having arisen from within, from the depths, while they come up they are torn up in their winding way, neither are there straight entrances to the paths from which, having arisen, they compete to escape."[40] But visible films that convey information such as colour arise off the surface of bodies and hence retain themselves much better: "But conversely when a thin skin of surface colour is thrown off, there is nothing which is able to rend it, because it is located in view in the front rank."[41]

Lucretius' next argument in support of the *simulacra* posits their extreme thinness, or rarity. This is key for Lucretius to explain and defend, since the invisibility of the *simulacra* themselves is a complication for the student of a school of thought that asserts all knowledge must come through and be verified through the senses. Lucretius refers to the tiniest animals, the whole of whom we can only barely see, and which we are

[39] *DRN* (4.69-71).
[40] *DRN* (4.90-94).
[41] *DRN* (4.95-97).

forced to admit must have parts – organs, limbs, mind and spirit, etc. – which are too miniscule to admit of being seen with the naked eye.[42] He also refers to the invisibility of the particles of herbs and spices, which are clearly emitted when the herb is crushed and the scent pours out, but which themselves are invisible.

Having established the relationship between images and the bodies that emit them, Lucretius then mentions a different phenomenon in which images arise spontaneously in the air. These images, unlike the former ones, seem to hold no relationship to an originating body.

> But so that you do not suppose that these likenesses which wander off from bodies are the only likenesses that slip away, there are others which spontaneously are born and are constituted themselves in this part of the sky called the air; which having been formed in many ways are carried high in the air: as we sometimes discern clouds quickly thickening above and violating the serene face of the world, stroking the air with their motion.[43]

For Lucretius, these spontaneous images, which reflect no originating body, account for certain delusions. Myths and legends or other harmful kinds of superstition may arise from seeing what appear to be fantastical creatures but which have no grounding in an original body:

> … for sometimes the faces of Giants seem to fly over and to lead their shadows far and wide, sometimes great mountains and rocks wrenched from mountains seem to go before and to pass by the sun; after them some monster seems to haul and drag other clouds. They never stop changing their shapes, dissolving away, and turning themselves into the appearances of various forms.[44]

This point is echoed later in 4.724 and the ensuing passage, where Lucretius reflects on the source of dreams and night visions: these come from *simulacra* which are even more

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[42] *DRN* (4.116-122).
[43] *DRN* (4.129-136).
[44] *DRN* (4.136-142).

fine than those which account for normal vision through the eyes, instead "penetrating through the rarities of the body."[45] These also, because of their tenuousness, "are easily joined together in the air when they meet, being like spider's web or goldleaf."[46] These images arise in the air when *simulacra* meet as they wander through the air and their component parts become merged.

Finally, unlike perception through the senses, the mind is able to see a single *simulacrum* rather than just streams/flows. Lucretius says that just "one slender image," *una …. subtilis imago,*[47] is able to stir the mind. This is because the mind itself is also comprised of an extremely rare compound which thus corresponds to the images which it receives.

> So we see Centaurs, and the members of Scyllas, and faces of Cerberus-like dogs, and likeness of those, having died, whose bones rest in earth's embrace, since various likeness are being carried everywhere, some that come about in the air spontaneously, others that slip off from various things, others that are constructed from a figure of these.[48]

Of course, says Lucretius, since Centaurs are not real, an image does not stream off of an atomic compound that is a Centaur, but when the likeness of a man meets the likeness of a horse "by accident," *casu,* they readily combine because of their thin, rare texture. Thus other combinations occur in a similar way[49]

For Lucretius, this abundance of images wandering around in the air is accounted for by the fact that images stream off bodies continually in an unceasing stream. Because of this, there is an almost infinite availability of images, a fact that, as we will see in

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[45] *DRN* (4.728-729).
[46] *DRN* (4.726-727).
[47] *DRN* (4.747).
[48] *DRN* (4.732-739).
[49] *DRN* (4.732-748).

Chapter 3, is ethically problematic for the perceiver. Lucretius exclaims at how "easily,"

*facili,* and "quickly," *celeri,* these images are born, unceasingly flowing from things and

sliding away, "for something is always overflowing from the top surface of things for

them to throw off."[50] This constant availability of images is demonstrated by the

phenomenon of a mirror, which, no matter how it is angled or how quickly an object is

placed before it, never fails to throw back the image upon the gaze of the viewer.[51]

      Lucretius next argues for the exceedingly great speed of the motion of the images.

For Lucretius the speed of the images is a direct consequence of their fineness and rarity:

anyone can notice that "light and minute things," *levis res atque minutis,* are "swift,"

*celeris.*[52] This argument echoes Epicurus' point in *Letter to Herodotus* 47, where again

the fineness of the *eidola* explain their speed:

> Next, none of the appearances testifies against [the theory] that the images
> have an unsurpassed fineness; and that is why they have unsurpassed
> speed too; since they find every passage suitably sized, for there being no
> or few [bodies] to resist their flow, whereas there is some [body] to resist a
> large or infinite number of atoms.[53]

      Lucretius refers to the speed of the sun's light and heat, which are made of

"minute components," and which race so quickly through the air that there is no

perceivable break between light and light, heat and heat. These elements arise from

within the sun rather than its exterior surface; thus if they are still able to proceed so

quickly, the *simulacra* of visibility, which fall from the surface of bodies, must proceed

with an unimaginable speed.

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[50] *DRN* (4.143-146).
[51] *DRN* (4.147-167). Cf. also Ch. 5.
[52] *DRN* (4. 182-183).
[53] *Hellenistic Philosophy* (1997:8-9). DL (10.47).

Lucretius supports his argument about the continual flow of images with reference to the constancy, durability, and predictability of various sounds, smells, and tastes. Rivers are reliably cold, sun rays are reliably warm, ocean waves reliably "surge." We generally experience salt in our mouths when we walk on the seashore, and we generally experience bitterness in our mouths when we see wormwood being mixed with water. Thus different qualities flow off from objects, "in a flow," *fluenter,* and "are sent away in every direction around; neither do delay nor rest ever interrupt the flow, because we are constantly sensing, and one may anytime see all things, smell them, and hear their noise."[54] Furthermore this reliability is also supported by the one external cause of various sensations of an object: since the visible shape of an object can be verified by touching and handling it even in darkness.[55]

One key characteristic is that each *simulacrum* proceeds one by one, and individually they encounter the sense organs of the eyes, but since these discrete images pour forth one after another in a stream, they are never perceived themselves individually. Rather the mind understands the whole at once. Lucretius tells us not to wonder that we are never able to see a single image because, similarly, even though we never see wind or cold, we feel the effect of the whole. Just as we do not feel every single particle that comprises a blast of cold air, but instead we experience the whole at once as one sensation, so also we experience the multiple atomic "blows," *plagas,* as the impact of one object on the body."[56] This characteristic of the *simulacra* will be key in exploring the problems of how the mind relates to these images.

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[54] *DRN* (4. 225-229).
[55] *DRN* (4. 230-238).
[56] *DRN* (4. 259-264).

## 2.2 The Defense against Skepticism

Lucretius' sketch of the *simulacra* theory gradually moves into an explanation of delusion and perceptual error. Delusion is the principle problem with the Epicurean perceptual theory. If all appearances are "true," in so far as they proceed physically from bodies and enter physically into the sense organs of perceivers, how does error occur? Vogt (2016) suggests that this claim, that "all sense perceptions are true," is an effort to "depart from relativism while preserving its insights."[57] Vogt suggests that this critique is not a dismissal of Skepticism but rather a serious interaction with its intuition and a rigorous reflection on what adherence to appearances means. Vogt interprets the claims that "all sense perceptions are true" in a "factive" sense, meaning that it simply asserts that all sense perceptions exist. While Striker, Everson, and Asmis consider that only propositions, not senses, can be "true," this is not Lucretius' claim. Rather, "Epicurus' core argument is that perceptions are true insofar as each impression is the product of something existent."[58] The consequence of this is neither propositional nor simply existential, but factive, meaning that knowledge must relate to fact, as Parmenides and Plato demonstrate. The insight of relativism is to recognize the phenomenal quality of sense experience: as Vogt says, to say, "the wind is cold," is essentially to say, "the wind is cold to me now." Thus relativism brings into focus the fact that at least present-tense perceptions "occur in such a way as to make talk about them being true plausible, *and* in such a way as to make talk about them being false implausible."[59] This phenomenal quality of perception, even when regarding factive knowledge, is what underlies both the

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[57] Vogt (2016:1).
[58] *Ibid.* (2016:6).
[59] *Ibid* (2016: 11).

*truth* of the senses and their *illusion.* Furthermore, it points to the role of the perceiver, which Lucretius is concerned to bring out, while still safeguarding the senses themselves.

Lucretius introduces the discussion of optical illusion with a discussion of mirror reflection. A mirror image "certainly seems to be far withdrawn," *nam certe penitus remmota videtur,*[60] but Lucretius, who contends that depth perception is accounted for by the air that is pushed ahead of the image on its way to the eye, argues that this seeming distance is simply the consequence of the *two* "airs" that hit the eye in mirror reflection: first the air that is pushed by the image on its way toward the mirror surface, and then the air that is pushed ahead of the same image on its journey rebounding back from the mirror to the eye. This rational explanation should, Lucretius tells us emphatically, satisfy us.[61] Lucretius then seeks to account for other optical illusions through his theory: bright objects burn the eyes because the fiery "seeds," *semina,* within them burn the eyes.[62] Jaundiced persons see in yellow because yellow seeds flow out from their bodies to meet the images,[63] foursquare towers from a distance appear round because the stream of *simulacra* are "buffeted" by the air as it travels, forcing it to become blunt.[64] Shadows appear to follow moving bodies because the bodies simply block out the light of the sun as they proceed.[65]

Having listed these illusions, Lucretius asserts that the eyes nonetheless do not themselves *see wrongly.* It is not the fault of the eyes but of the mind which interprets the information provided by the eyes. Here we have the first declaration of the determining

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[60] *DRN* (4. 270).
[61] *DRN* (4.289-291).
[62] *DRN* (4.329-331).
[63] *DRN* (4.332-336).
[64] *DRN* (4.353-362).
[65] *DRN* (4.363-378).

role of the mind and its potential to misinterpret or add to the evidence of the eyes: "However, we do not concede that the eyes are deceived in the least," *nec tamen hic oculos falli concedimus hilum.*[66] It is the job of the organs of the eyes to admit light and darkness, but it is the task of the mind to determine the identity and difference of light and darkness: "… this should the mind alone must determine, neither are the eyes able to recognize the nature of things. Therefore do not attribute the fault of the mind to the eyes," *proinde animi vitium hoc oculis adfingere noli.*[67]

Lucretius then offers an extended catalogue of various delusions, attributing them all to the mind rather than to the senses: a moving ship appears to its passenger to stand still, stars appear fixed in the sky, mountains divided by a stream appear from a distance to be joined, children think the room revolves around them after they have been spinning around, a shallow puddle of water shows stars buried beneath it, a horse stuck in a river seems to be pushed in his middle, tall columns appear to contract and vanish where they meet a roof or ceiling, sailors think the sun rises and sets in the water, oars under water seem bent and broken, stars on a windy night seem to move against clouds, pressing one's eye underneath makes one see double, and finally when we sleep and dream we think we are awake and moving around in the world.[68] In all of these and similar cases Lucretius warns us to hold to the reliability of our senses and scrutinize our minds. All these delusions tend to "violate the trust in the senses," *violare fidem … sensibus,*[69] and this deception must be fought off. The deception comes not from senses but from the

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[66] *DRN* (4.379).
[67] *DRN* (4.379-387).
[68] *DRN* (4.387-461).
[69] *DRN* (4.462).

opinions of the mind which we impose on the objects, with the result that "things are seen which have not been seen by our senses," *visis ut sint quae non sunt sensibu' visa.*[70] The mind deceives itself into perceiving absent objects as present. "For nothing is harder than to discern clear things from unclear things which the mind of itself adds immediately," *nam nil aegrius est quam res secernere apertas / ab dubiis, animus quas ab se protinus addit.*[71]

However, Lucretius tells us we should not let such illusions confound us into questioning the possibility of real knowledge. To deny the possibility of knowledge is to be inconsistent, since he who denies knowledge claims that he knows there is no knowledge.[72] Lucretius says, "So I will not bother to make a case against a man who has stuck his head in his own footsteps," *hunc igitus contra mittam contendere causam, / qui capite ipse sua in statuit vestigia sese.*[73] Lucretius claims that the notion of truth itself comes from the senses: the senses are the standard, the criterion, against which false and true things are measured.[74] For Lucretius, the unity of the witness of the senses testifies to their reliability: taste never contradicts touch or smell; ear never contradicts eye. This is Lucretius' support for his claim that reasoning grows out of the senses. The implication seems to be that reasoning is a reference to each of the senses and a discovery of their consensus. Lucretius asks how false reasoning could somehow disprove the evidence of the senses when the faculty of reason itself is "arises entirely from the senses," *tota ab sensibus orta est*? For Lucretius, the integrity of reason is dependent upon the integrity of

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[70] *DRN* (4.463).
[71] *DRN* (4.462-468).
[72] *DRN* (4.469-470).
[73] *DRN* (4.471-472).
[74] *DRN* (479-4485).

the senses: "For if they [the senses] are not true, then also all reason is false," *nisi sunt very, ratio quoque falsa fit omnis.* "… Therefore, what has seemed to these at any given time, that is true," *proinde quod in quoquest his visum tempore, verumst.*[75] Lucretius even contends that it is better to misinterpret the evidence of the senses than to lose trust in the senses themselves. One must keep a firm on the "holdfast of the obvious," *manifesta,*[76] and not "violate the trust from which all first comes, and uproot the bases on which life and safety rest," *violare fidem primam et convellere tota / fundamenta quibus nixatur vita salusque.*[77] To deny the senses is not only to deny knowledge but also to deny the very fabric of reality: "For not only would all reason be ruined, but life itself would immediately perish, unless you dare to trust in the senses, avoiding abysses and other such things that must be avoided, and following contrary things," *non modo enim ratio ruat omnis, vita quoque ipsa / concidat extemplo, nisi credere sensibus ausis / praecipitisque locos vitare et cetera quae sint / in genere hoc fugienda, sequi contraria quae sint.*[78] Lucretius compares the evidence of the senses to the "original rule," *regula prima,* for the construction of a building: if the senses are false, then the whole building will be out of proportion and fragile: "So therefore your reasoning about things must be crooked and false whenever it emerges from false senses," *sic igitur ratio tibi rerum prava necessest / falsaque sit, falsis quaecumque ab sensibus ortast.*[79]

For Lucretius, if the senses do not convey the reality of the "nature of things," then there is no reality and no coherent intelligibility. The reliability of the senses cannot

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[75] *DRN* (4.499).
[76] *DRN* (4.504), Rouse (1992:316).
[77] *DRN* (4.505).
[78] *DRN* (4.507-512).
[79] *DRN* (4.513-521).

be cut off from the reliability of the rest of the world: the two go together. *Simulacra* are not simply "representations" of real objects, but they themselves are composed of the same atomic combination (albeit finer and faster) as the bodies from which they stream. And furthermore they interact atomically with sense organs because both images and sense organs share compatible atomic structures and motions. The senses follow the same logic of *tangere et tangi* that explains all other atomic motion and interaction. The senses are reliable because they tangibly connect the perceiver to the perceived, not merely in the manner of subject and object, but in the manner of what is common between perceiver and perceived object. Through the senses the perceiving subject does not only see a "representation" of the world, but she experiences her own common nature with the world and so comes to know it as a part of it: as part of the entire *rerum natura.*

## 2.3 The Truth of Appearances

Having defended Epicureanism against the challenges of skepticism, Lucretius goes on to reflect further on the nature of the senses and their mediation between perceiver and world. These reflections support Lucretius' affirmation of the truth of appearances and the reliability of the senses. Here we have more details on the actual mechanism by which the Epicurean account of images and sensation works. Lucretius considers images which impinge directly on the mind, what Epicurus and Aristotle refer to as *phantasia,* the thin, tenuous images which are particularly susceptible to delusion. Lucretius insists that both sense and mental images are accounted for by *simulacra,* but the explanation of mental images requires more consideration.

### 2.3.1 Sense perception

Having explained visual sensation though *simulacra,* Lucretius expands the scope

of his consideration to include the senses other than vision: beginning with sound.

Lucretius' first observation in 4.524 is to reiterate the *bodily,* physical, corporeal nature

of sound: sound, just like sight, touch, and the other senses, follows the logic of *tangere*

*et tangi.* Here Lucretius resorts to his characteristic language of "striking," *pepulere*[80] and

*inpellere*[81] and "blows," *pulsus:* sounds strike the sense organs and thus leave an

impression. This reinforces the physical nature of sensation: "For we must confess that

voice and sound also are bodily, since they can strike upon the sense." *corpoream quoque*

*enim vocem constare fatendumst / et sonitum, quoniam posunt inpellere sensus.*[82]

Lucretius observes that after speaking for a long time a person loses her voice: this also

suggests to him that sound involves particles of body, of which a man can be depleted:

> Nor does it deceive you also how much body is carried away, what is
> drawn away from the very muscles and vigor of a man, but a speech which
> continues from the emerging brightness of dawn to the shadows of dark
> night, especially if it is uttered with a loud volume. Therefore it is
> necessary that the voice is based upon the body, since when he speaks
> much a man loses a part of his voice,"
>
> *Nec te fallit item quid corporis auferat et quid / detrahat ex hominum nervis*
> *ac viribus ipsis / perpetuus sermo nigrai noctis ad umbram / aurorae*
> *perductus ab exoriente nitore, / praesertim si cum summost clamore*
> *profusus. / ergo corpoream vocem constare necessest, / multa loquens*
> *quoniam amittit de corpore partem.*[83]

Lucretius explains the phenomenon of echoes by positing that since, when the voice

leaves the throat, it divides itself into many voices which fall separately upon different

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[80] *DRN* (4.525).
[81] *DRN* (4.527).
[82] *DRN* (4.525-526).
[83] *DRN* (4.540-541.).

ears. Thus in a solitary place one cry can give back six or seven cries, as different voices rebound.[84] His readers are cautioned against letting sensation lead them into superstitious belief, as empty places are often in folklore and legend populated by various fantastical creatures.[85] Lucretius accuses the propagators of such tales of *resentment.* They live in uninhabited places and are offended to think that their wilderness has been abandoned even by the gods!

But, Lucretius repeats, "one need not wonder how, through places where eyes are not able to perceive clear things, through these places voices go and provoke the ears," *non est mirandum qua ratione, / per loca quae nequeunt oculi res cernere apertas / haec loca per voces veniant aurisque lacessant.*[86] The voice is "dispersed around in all parts," *praeterea partis in cunctas dividitur vox*[87] as opposed to visual images, which tend to proceed in a straight line. However, none of these points negates the central point: that voice like vision is physical and reliable.

Lucretius explains that the very same arguments serve to explain the sense of taste and the perception of flavor:[88] we "squeeze out" flavour, *exprimimus,*[89] from food by chewing, and smooth particles are perceived as pleasant when they slide easily through the pores and passages of the tongue, while rough particles prick and tear the pores. This varies among creatures of different species and sometimes even individuals within species.[90] In taste as well as in sound and vision, particles shed or extracted by pressure from originating bodies enter pores or passages of sense organs and so create sensation.

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[84] *DRN* (4.572-579).
[85] *DRN* (4.580-589).
[86] *DRN* (4. 595-597).
[87] *DRN* (4. 603).
[88] *DRN* (4. 615-616).
[89] *DRN* (4. 618).
[90] *DRN* (4. 633-672.).

Scent functions likewise, but it is less distinct because it arises from the depths of bodies and moves very slowly in contrast to sound and especially sight.[91]

In all these passages, Lucretius relies heavily upon the evidence of the visible world to defend the reliability of knowledge of the invisible world. Gale (2001) notes how reasoning from sense to theory underlies both Epicurus' philosophy and Lucretius' poetry: "It is particularly important in the case of phenomena which – for one reason or another – are not directly available for empirical inspection … ."[92] Gale outlines how phenomena that are invisible because they are prehistorical, too small for the naked eye, and too distant for observation (treated respectively in Books 5, 1-2, and 6) are all compared to visible phenomena: "In this way, Epicurus and Lucretius are able to claim that their reliance on empirical experience extends even into areas where empirical experience is not directly possible."[93]

### 2.3.2 Mental Images

After addressing each sense, Lucretius considers a different kind of perception: that in which images enter the mind directly rather than through the senses. These are the most thin and fine of the *simulacra* and enter through the apertures of the pores of the body:

> To begin, I say that many likenesses of things wander about in many ways and various directions, thin, which are easily joined in the air among themselves, when they meet, being like spiderweb or gold veneer. In fact these [likenesses] are significantly thinner in structure than those which the eyes perceive and provoke the vision, because these [likenesses] enter through the rarities of the body, and arouse the thin nature of the mind within, and provoke the sense on the inside.[94]

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[91] *DRN* (4. 687-705).
[92] Gale (2001:15).
[93] Gale (2001:15).
[94] *DRN* (4. 724-731).

*Principio hoc dico, rerum simulacra vagari / multa modis multis in cunctas undique partis tenvia, quae facile inter se iunguntur in auris, / obvia cum veniunt, ut aranea bratteaque auri. / quippe etenim multo magis haec sunt tenvia textu / quam quae percipiunt oculos visumque lacessunt, / corporis haec quoniam penetrant per rara cientque / tenvem animi naturam intus sensumque lacessunt.*

Because these images are the most thin and thus the most speedy, the images which tend either to arise spontaneously in the air or to combine in the air from the vestiges of previous images are also the images which Lucretius says enter the mind directly in sleep. Lucretius insists that the mechanism of perception in this case differs in no way from that of perception through the eyes: the mind might be moved by the image of, perhaps, a lion or any other object, just as the eyes are moved; the mind simply differs in its capacity to see "what is much more thin," *quod mage tenuia*.[95] Lucretius argues that mind would not be alert when the body is asleep if it were not stimulated by these images.

Importantly the mind tends to be deluded *when the body is asleep,* precisely because the senses are not available to check and correct the "more thin" images that invade the mind. Schrijvers, commenting on the relationship between sleep and death at the end of *DRN* 4, qualifies the relationship by observing that mind is still "awake" when the rest of the body is asleep:

> Jedoch muss auch Lukrez im 4. Buch zugeben, dass, wenn auch die Glieder im Schlummer sich strecken, die geistige Kraft noch wach bleibt (*mens animi vigilat).* Die drei oben erwahnten Stellen durften ein Hauptmerkmal der lukrezischen Beweisfuhrung illustrieren, namlich die selective, d.h. die rhetorische Weise worauf er eine – meistens traditionelle – Analogie … mehrmals anwendet ohne die Koharenz innerhalb des ganzen Lehrgedichts zu berucksichtigen.[96]

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[95] *DRN* (4.752-756).
[96] Schrijvers (1980:

Normally the eyes or the sense of touch would be able to corroborate what the mind offers, but in sleep the mind is vulnerable. "Nature forces this to occur, because the senses are all blocked and lie quiet throughout the body's members, neither are they able to conquer the false with true things."[97] Not only are the senses not available to the mind, but memory also is absent and so unable to correct false perceptions in the mind: "… in sleep memory lies inactive and is sluggish, neither does it  dissent that the one whom the mind thinks it sees alive has long since been in the power of death and ruin," … *meminisse iacet languetque sopore / nec dissentit eum mortis letique potitum / iam pridem, quem mens vivom se cernere credit.*[98] Thus Lucretius is pointing us to the faculties of the senses and of memory as the key correctives to mental delusion.

Rouse cites Diogenes of Oenanda:

> When we are asleep, with all the senses as it were paralysed and extinguished [again in] sleep, the soul which [still wide] awake [and yet is unable to recognize] the predicament and condition of the senses at that time, on receiving the images that approach it, conceives an untested and false opinion concerning them, as if it were actually apprehending the solid nature of true realities; for the means of testing the opinion are asleep at that time. These are the senses; for the rule and standard [of truth] with respect to [our dreams] remain [these].[99]

Lucretius finds himself burdened with many objections to answer in positing this mental relationship with images. The first is the objection of the relationship between will and mind: in *imagination,* the mind sees images of what is not immediately before it, as opposed to *sensation,* when the image is conveyed to the mind directly from the object it images. The problem is how the mind can summon up images at will. Lucretius acknowledge the problem of why the mind may at any time think of whatever it wishes to

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[97] *DRN* (4.762-763).
[98] *DRN* (4.766-768).
[99] Rouse (1992:336).

think of. "Do likenesses watch for our will, and as soon as we want, does an image run to us, whether sea, earth we desire, or heaven?" *anne voluntatem nostram simulacra tuentur / et simul ac voumus nobis occurrit imago, / si mare, si terram cordist, si denique caelum?*[100] In Aristotle this is the question of *aesthesis,* sensation or perception, contrasted with *phantasia,* or imagination. Imagination seems to have a life that is more independent than that of sensation, since sensation requires its object be immediately present, whereas imagination, *phantasia,* can exist independently of the object. Lucretius is also concerned with how images seem to move in dreams: this is a related problem, because Lucretius has already explained that the continuous motion of images is explained by the rapid succession of images one right after the other, much like a role of film.[101] How are the images immediately available to the mind? Lucretius claims that, owing to the very great number of the images and the great speed at which they move, there is always a great store of images available which the mind can peruse at will: "at one point in time … many times lie waiting, which reason discovers to be," *quia tempore in uno / ... tempora multa latent, ratio quae comperit esse.*[102] Why is it that all these images are not immediately obvious? The mind does not automatically see every image that is available to it: rather it only sees those images which it first prepares itself to see, *ad quae se ipse paravit,*[103] and which it then exerts itself to attend to, literally to "turn the mind toward," *advertas animum.*[104] Rouse observes that, while Lucretius explains that the mind only sees what it directs its attention to purposively, he still does not explain what

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[100] *DRN* (4.777-787).
[101] *DRN* (4.768-776).
[102] *DRN* (4.794-799).
[103] *DRN* (4.804).
[104] *DRN* (4.812).

leads the mind to do so.[105]  That is the question which this thesis takes up: how the mind is prepared to see. What Lucretius emphasizes here is the element of preparation: what is done before the mind encounters the image: "Since the likenesses are faint, the mind cannot discern any likenesses sharply, unless it stretches itself out; so all other likenesses perish except those for which it has prepared itself. It prepares itself and hopes that it will see what follows an individual object: therefore that does follow," *ipse parat sese porro speratque futurum* / *ut videat quod consequitur rem quamque; fit ergo.* [106]

Along with preparation, attention is what enables the mind to discriminate among the images to which it intends. Lucretius compares this to the squinting of the eye: when the eyes try to perceive something difficult, they "prepare themselves" by squinting. "And yet even in things you are able to clearly see, if you do not turn your mind, in the same manner it is as if the whole time the object were separate and removed a long way," *et tamen in rebus quoque apertis noscere possis,* / *si non advertas animum, proinde esse quasi omni* / *tempore semotum fuerit longeque remotum.*[107]

For Lucretius, this failure to attend is what accounts for delusions and mistakes. If the mind identifies one image but fails to observe the sequence of images that follow it and properly belong to it, then it will misinterpret the image. The mind will necessarily miss everything except that to which it attends. The consequence will be drawing conclusions that are quite unwarranted based on the image itself.  "Then we adopt large assumptions from small signs, and ourselves put ourselves into fraud and deception,"

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[105] Rouse (1992: 339).
[106] *DRN* (4. 800-806).
[107] *DRN* (4.807-813).

*deinde adopinamur de signis maxima parvis / ac nos in fraudem induimus frustraminis ipsi.*[108]

For Lucretius, correct perception is not an automatic process. Verification through the senses and the memory is necessary for correct discernment, and this is complicated if the body is relaxed in sleep or other states of being unstrung. There is an activity proper to perception: preparation and attention. The mind prepares itself ahead of time to see its object, and then it attends to its object, discerning the sequence of images that follow from the original image. Rouse says, "The mind directs its powers to see some image, and then determines to see the series belonging to it which follows: therefore this series does follow, the irrelevant ones being unnoticed."[109] Rouse comments on the conclusion about large deductions from small indications that "the idea here seems to be that the mind's tendency to make the mistake of drawing sweeping conclusions from slight evidence is proof that much escapes its notice." This process of discrimination among images is both necessary for perception but also a problem for perception, since so many images are necessarily left out. Only with preparation and attention can the mind make accurate choices. As we will see in the next chapter, the mind's tendency with images is to imbue them with a duration and durability beyond their proper nature. The accuracy of the images and their almost infinite availability seems to invite the mind to endow the images with an infinite capacity for either gratification or oppression, pleasure or pain, desire or fear. This is what Deleuze calls a "false sense of infinite."[110] The mind must be properly trained in awareness of both its own limits and the limits of external objects in

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[108] *DRN* (4.814-817).
[109] Rouse (1992: 4.806).
[110] Deleuze (1990:277).

order to perceive such objects correctly. This awareness of limits is a significant part of what constitutes Epicurean tranquility. Such tranquility is the ethical disposition necessary to achieve accurate perception.

**Chapter 3—The Ethics of Perception: *DRN* 4.962-1287**

Book 4 takes a turn after the discussion of sleep to reflect on sexual arousal and

consequently the dangers of possessive romantic attachment. This marks – in one sense –

a transition to what can be characterized as an ethical rather than scientific concern. The

distressing picture of the lover who is subjected to desire for the object of passion

functions as a warning example of the consequences for those who fail to perceive and

adopt the truth about nature. Lucretius seeks to impress us with these consequence by

making them the object of an indictment of sexual desire that culminates in a piercing

satire of love. Gale suggests that such satire has a productive function in various passages

throughout *DRN* since it reveals the incoherence of that which it ridicules.

> Some of the most memorable passages in his poem might be put under the
> heading of satire: like later writes such as Juvenal, he attacks particular
> patterns of behavior by showing us how laughable or at least absurd they
> really are. In such passages as the proem to Book 2 and the so-called
> "diatribe' against the fear of death at the end of Book 3, he condemns the
> vices of ambition, greed, and irrational fear by revealing the self-
> contradictions inherent in them.[111]

**3.1 Ethics in Book 4**

As *DRN* 4 approaches its conclusion, Lucretius' focus shifts. The subject of sleep

and dreams, another instance of visual apparitions that requires explanation in the

Epicurean paradigm, leads Lucretius to discuss the relationship between images and

sexual desire, which brings him into his final lengthy indictment of Love, a force that

wounds and destroys the mind through a desire that is ultimately deceptive: "This is our

Venus," declares Lucretius,[112] *haec Venus est nobis:* "For if that which you love is

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[111] Gale (2001:30-31).
[112] *DRN* (4.1058).

absent, nevertheless its likenesses are at hand waiting, and the sweet name appears before

your ears, / But it is right to flee from likenesses, to drive away the food of love, and to

turn the mind in another way… ." *nam si abest quod ames, praesto simulacra tamen sunt*

*/ illius, et nomen dulce obversatur ad auris, / sed fugitare decet simulacra et pabula*

*amoris / absterre sibi atque alio convertere mentem … .*[113] For Lucretius, possessive love,

*amore … proprio*,[114] or desire that seeks to possess its object in real union, is ultimately

based on a delusion, since the perceiving subject only ever actually interacts with a

*simulacrum* of desire, rather than with the object itself. The remainder of the book

provides a warning to the Epicurean disciple to avoid the emotional turbulence of Love,

the most powerful detraction from the philosophical goal of *ataraxia,* and to channel

sexual desire so as to avoid mental upheaval and obsession.

While Bailey observed that Book 4 seems disjointed, split between the physical

treatment of the theory of perception in the first approximately 1,000 lines and the ethical

treatment of desire in the last roughly 300 lines, ethical considerations on one level

pervade Book 4 from beginning to end. Throughout Book 4, the reader is warned about

two primary threats to self-sufficient tranquility: fear and desire, or what Deleuze termed,

"avidity and anguish." Both fear and desire are simply the two sides of the lack, or

insufficiency, that characterizes the neediness that is the opposite of *ataraxia*. We see

perhaps the most classic description of tranquility in *DRN* in the opening lines of Book 2:

*suave, mari magno turbantibus aequora ventis / e terra magnus alterius spectare*

*laborem; no quia vexari quemquamst iucunda voluptas, / se quibus ipse malis careas*

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[113] *DRN* (4.1061-1064).
[114] *DRN* (4.1141).

*quia cernere suave est:* "Sweet it is, when the winds disturb the water on the great sea, to contemplate from the shore the great labour of another: not because it is a joyful pleasure for any man to be vexed, but because to perceive what troubles you are free from yourself is sweet."[115] Here[116] we see the meteorological connotations of the Epicurean technical term *ataraxia:* lack of storm, calm weather. Epicurus in his definition in *Letter to Menoeceus* also builds on the weather reference: "As soon as we achieve this state [freedom from being in pain or terror], every storm in the soul is dispelled, since the animal is not in a position to go after some need nor to seek something else to complete the  good of the body and the soul."[117]

In order to proceed with the argument, it is necessary to briefly but carefully establish the real nature of the Epicurean goal. It is easy for readers of Epicurus and Lucretius to conclude that Epicurean pleasure is a state of needing as little as possible. However, what this entails is a theory of mental happiness that considers the dispositions for pleasure and pain as inherently limited, a human psychological capacity that is grounded in both the mortal limits of the human psyche as detailed by Book 3 and in the mortal limits of the capacity for external objects to produce either pleasure or pain for the subject. This mortal limit is the underlying commonality between man and world as both parts of Nature. In order to live correctly, a person must acknowledge both the mortal limits of both her own nature and the corresponding mortal limits of the rest of the world and its objects in nature, in order to not invest any of those components with an irrational potential for gratification or oppression. Thus a more specific understanding of *ataraxia*

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[115] *DRN* (2.1-4).
[116] Gale (2007).
[117] *Hellenistic Philosophy* (1997:30). DL (10.128).

must emphasize its characteristic of self-sufficiency. Tranquility is correspondingly weaker to the extent that it relies on contingencies outside of itself for its security. As Epicurus elaborates further on the self-sufficient nature of this pleasure, he reflects on the inherent and so self-confirming availability of natural, limited pleasure:

> And we believe that self-sufficiency is a great good, not in order that we might make do with few things under all circumstances, but so that if we do not have a lot we can make do with few, being genuinely convinced that those who least need extravagance enjoy it most; and that everything natural is easy to obtain and whatever is groundless is hard to obtain; and that simple pleasures provide a pleasure to equal to that of an extravagant life-style when all pain from want is removed, and barley cakes and water provide the highest pleasure when someone in want takes them.[118]

A feeling of being disturbed arises from the *simulacra* because, in their nature of being an image, they give rise to a false sense of infinity, something Deleuze suggests arises because of the speed and constancy of the movement of the images.

As Lucretius took unremitting pains to reinforce to us in Books 1 and 2, nothing is of infinite duration or durability apart from atoms and void: all follows from this fundamental reality, and all compounds and configurations of atoms and void will inevitably dissipate and dissolve back again. Significantly Lucretius closed Book 2 with a somber reflection on the necessary end of the world – its limit of both duration and durability – a necessary consequence of growth and increase: objects in the world pass away and deteriorate because the images flowing off of them deplete the store of atoms within, while at the same time atoms striking from outside likewise cause a decrease in the atoms contained within. Thus all objects are subject to the "blows" of atomic collision.[119] Lucretius continues: "So therefore the walls of the great world similarly will

[118] *Hellenistic Philosophy* (1997:30). DL (10.130-131).
[119] *DRN* (2.1139-1143).

be stormed all around, and shall collapse into crumbling ruin," *sic igitur magni quoque circum moenia mundi / expugnata dabunt labem putrisque ruinas.*[120]

However, while the rest of nature follows its course and obeys its own limits, humans will fail to recognize these natural limits of duration and durability.  At the end of Book 2, the aging farmer is an example of the ignorance of human nostalgia: he complains of how inferior the present time is to the "olden days:"  he remembers that piety was greater in the old days, work was easier, land was greater, but he is ignorant of this natural course of things, the inherent limitation of nature which one must recognize with one's mind: "and he does not comprehend that all things dissolve little by little, and go to the reef of destruction, exhausted by the ancient length of time," *net tenet omnia paulatim tabescere et ire / ad scopulum, spatio aetatis defessa vetusto.*[121]

Why do humans fail to recognize their limits? After he has explained and defended the mortality of the soul in Book 3, the natural limits which should bound and restrict human fear and desire, Lucretius in Book 4 observes how fear and desire themselves restrict the mind's perceptive ability. The nature of the *eidola* further complicates this. Because the images stream off bodies in an unceasing stream at the speed of thought, they purport to portray objects with durable identity and by implication a capacity for either (in the case of love) supplying and satisfying an unrestricted desire for gratification or (in the case of fear) for posing a threat that is unrestricted by the natural limits of mortality. In Deleuze's interpretation, ironically, it is the *accuracy* of the appearance itself (apart from the mind's interpretation) that ultimately is responsible for

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[120] *DRN* (2.1144-1145). Thus there seems to be a link between visibility and decrease over time, as the atoms sloughing off their original compounds that carry the *simulacra* gradually wear away the compound.
[121] *DRN* (2.1173-74).

its misinterpretation.[122] The quickness of the succession of images creates an appearance that acquires a stability that actually undercuts the less stable reality of the atomic compound it is understood to represent. Fear and desire always arise from the irrational and unstable beliefs that images occasion: images present bodies to our minds that we then think we can achieve true union with, or alternately they terrify us with the conviction that we are in danger of harm from monsters or punished by divine authorities which we must placate with sacrifices.

Deleuze claims:

> Et, de même que le clinamen inspire à la pensée de fausses conceptions de la liberté, les simulacres inspirent à la sensibilité un faux sentiment de la volonté et du désir. En vertu de leur rapidité qui les fait être et agir en dessous du minimum sensible, *les simulacres produisent le mirage d'un faux infini dans les images qu'ils forment, ... .*[123]

For Deleuze, this false infinite has two consequences on the relationship of the mind to the image: the fearing mind is subjected to a terror of pain that has no limit, and the desiring mind is subjected to a lust for possession of its object which likewise has no limit. Deleuze says, "… et font nâitre la double illusion d'une capacité infinie de plaisirs et d'une possibilité infinie de tourments, ce mélange d'avidité et d'angoisse, de cupidité et de culpabilité si caractéristique de l'homme religieux."[124] That is: the mind comes to believe, if it does not scrutinize the images, that the images of objects of desire can have unlimited or essentially infinite capacity for desire-fulfillment, or alternately that pains and privations may be likewise unlimited and infinite. In both cases, the irrational belief is predicated upon a belief in the unlimited nature of both a) the image of the source of

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[122] Deleuze (1969:321-335).
[123] *Ibid.* (1969:321).
[124] *Ibid.* (1969:321).

the fear or desire and b) the human capacity to participate in it. As we will see later, it is only through appropriating limits and recognizing the common and *mutually limited* nature of both perceived and perceived thing that the perceiving subject is able to divest herself of the blinding tyranny of both fear and desire and to begin to see clearly. Of course, Lucretius insists in 4.379 that "still we do not concede that the eyes are deceived in the least," *nec tamen hic oculos falli concedimus hilum,* in the case of the optical illusion of the shadow. But this does not deny the fact that the very accuracy of the *simulacra* themselves presents a challenge which the mind must meet with intention and discernment.

## 3.2 Fear and Anxiety

Book 3, as already discussed, outlines the nature of the mind and soul and its mortality. Book 3's purpose is to expunge the fear of death, the fear of continued existence in the afterlife. Thus it is a fear of the gods and a fear of punishment that underly the fear of death. True tranquility comes from coming to understand mortality, that there is no sensation after death, that non-existence offers no cause for fear. Thus "death is nothing to us," *nil igitur mors est ad nos.*[125]

However, fear is a theme in Book 4 as well, as was claimed at the beginning of the chapter: present in the first ten hundred lines of the book as well as the last three hundred. Lucretius' concern with fear throughout Book 4 is part of what compels us to find continuity between the ethical and physical tasks of these lines.

Lucretius begins Book 4 with his familiar refrain for his project, hearkening back to the beginning of Book 1, "when human life lay before the eyes of all foully upon the

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[125] *DRN* (3.830).

ground, crushed under heavy superstition," *humans ante oculos foede cum vita iaceret / in terries oppressa gravi sub religione*;[126] he is "releasing the mind from the close knots of superstition," *religionum animum nodis exsolvere pergo.*[127] Lucretius announces at the beginning of Book 4 his own hitherto unique role[128] in the therapeutic task of Epicurean philosophy as he understands it, using one of the most notable analogies for the relationship of poetry and philosophy and for understanding philosophy as medicine. While Lucretius' sublime poetry is the "honey on the rim" of the cup of bitter medicine, Epicurean philosophy is the healing, albeit bitter, "juice of wormwood,"[129] which will "restore" those to whom it is applied and enable them to "regain health,"[130] *sed ... tali pacto recreata valescat.* Lucretius' poetry is, importantly, offered for the purpose of "engaging the mind," *si tibi forte animum tali ratione tenere / versibus in nostris possem,*[131] and here he speaks in the second person directly to his reader: "… while you are learning to understand the whole nature of things and perceive its utility." *... dum percipis omnem / naturam rerum ac persentis utilitatem.*[132] Clearly Lucretius is telling his reader through this programmatic declaration to look in Book 4 for a further dose of Epicurean remedy: even in the physical doctrine of the *simulacra* the reader must seek her own edification.

This is confirmed by Lucretius' introduction of the subject of *simulacra.* Lucretius asserts that the subject of images is of importance for the subject of the mind, precisely because they have a tendency to cause the mind fear and anxiety:

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[126] *DRN* (1.62-63).
[127] *DRN* (4.6-7).
[128] Cf. *DRN* (4.3-5).
[129] *DRN* (4.15).
[130] *DRN* (4.17).
[131] *DRN* (4.23-24).
[132] *DRN* (4.24-25).

> … because I have taught the nature of the mind, what it is, from what things it grows strong when combined with body, and how, having been wrenched from the body, it returns to its first beginnings, I will begin now to handle what emphatically relates to these matters, that there are what we call likenesses of things; which, like films torn from the top surface of objects, fly here and there through the air; … . [133]

Such phantoms are the cause of both sleeping dreams and waking nightmares, which often subject men to a particularly oppressive and superstitious kind of *religio* by bringing them to believe in roaming spirits and ghosts which can somehow break free from Hades to torment the dead. Here Lucretius reminds his readers of what has been established in Book 3, the mortality of the soul, and so lays out the inherent relationship between the ethical ramifications of Book 3's psychology (that is, the assertion of the mortality of the soul) and the physical exposition of the process of vision and perception. What appear to a restless sleeper as ghosts escaped from the underworld are no more than mental images. The Epicurean student must internalize this teaching lest he imagine that it is possible for spirits of the dead to escape from Hades, or that any part of the human mind or body has any life after their separation and dissolution.[134]

This concern is taken up again later after the notion of *simulacra* has been introduced. Lucretius brings up again illusions seen in the day, which when perceived become the basis of beliefs in the existence of monsters or other strange and fantastical creatures. However, these visual mistakes are due not only to the initial mental mistake of the viewer: the *simulacra* themselves can be misleading (although of course they are always technically faithful to what the senses promote), since they themselves, in their movement through the air, may become entangled with each other, creating the visual

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[133] *DRN* (4.26-32).
[134] *DRN* (4.33).

monstrosities of folklore and legend. This kind of illusion is dangerous for weak minds, which are particularly susceptible to the fear which may be struck by such apparitions. Returning again to the meteorological associations with the concept of tranquility, Lucretius describes these illusions as disruptions of the sky, when images "are born spontaneously, " *sponte ... gignuntur,*[135] in the air, as clouds join together in the sky and, as Lucretius says, "violate the serene face of the world," *mundi speciem violare serenam.*[136] This kind of convergence of parts of different *simulacra* in the air through collision and entanglement explains phenomena such as the belief in centaurs, which again arise in and pass through "the air."[137]

## 3.3 Desire

In the latter part of Book 4, desire in addition to fear is a barrier to accurate perception. While fear drove the seeing subject to imagine dreams, the afterlife, the gods, and all sorts of fictional monsters and to invest them with dire consequences for herself; attachment likewise causes her to invest objects of desire with a potential for desire-fulfillment which is never possibly theirs according to their natural limits. The fundamental error of all erotic love is the assumption that it can be satisfied by its object, since the materialist premise is that the subject never actually contacts the object but rather the stream of similitudes that touch the vehicles of her senses. This concern is what leads Lucretius initially into his argument of the *simulacra.*

According to the argument of this thesis, Lucretius posits a reciprocal relationship between the ethical orientation of the subject – that is, how self-sufficient, unattached it is

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[135] *DRN* (4.131).
[136] *DRN* (4.129-142).
[137] *DRN* (4.740).

– and its perceptual accuracy. The subject must be unattached in order to see properly, and in turn proper, accurate perception of the *rerum natura* will promote proper ethical orientation and tranquility. As we have sketched out, there are two primary forms of attachment for Lucretius which pose dangerous impediments to proper perception and ethical orientation: fear and desire. These are related in so far as desire extends the subject's estimation of its own capacity and duration such that fear of loss and pain arises. Fear and desire both involve a blurring of the proper boundary lines for what belongs to the subject; thus, "avidity and anguish" are a loss of self-collectedness. We have considered already cases in which fear in Book 4 causes this lack of self-collectedness. We will now consider the movement into the discussion of desire toward the end of the book.

It is after his discussion of the relaxation of the mind in sleep and its vulnerable state, unprotected by memory, preparation, and attention, that Lucretius turns from the perceptual barrier of fear to that of desire. As he has asserted many times in his discussion of the images, it is their fineness and speed which renders them so powerful and so compelling to the human mind: a potency which can be problematic when it suggests to the human mind an identity and sturdiness of the image which does not belong to it.

Lucretius' discussion of desire opens with a biological account of male puberty and adolescent arousal. His account is very typical of Roman and Hellenistic depictions of Love as a kind of pathology. Love is a wound that strikes its victim and damages with its blow. (Interestingly the language of striking and blows is also the language Lucretius uses frequently, especially in *DRN* 1 and 2, to describe atomic interactions: the formation

of atomic compounds, just like other forms of copulation and aggregation, are effects of Venus.)

> The body seeks the source from which the mind is wounded with love. For all generally fall toward a wound, and the blood spurts out toward the blow by which we are struck, and if nearby, the red fluid overtakes the enemy. So therefore, one who is wounded by the blows of Venus … from where it strikes, toward that he extends himself, and desires to unite and to throw the fluid from body into body; for his mute desire signifies pleasure.
>
> *idque petit corpus, mens unde est saucia amore; / namque omnes plerumque cadunt in vulnus, et illam / emicat in partem sanguis unde icimur ictu, / et si comminus est, hostem ruber occupat umor. / sic igitur Veneris qui telis accipit ictus, … / unde feritur, eo tendit gestitque coire / et iacere umorem in corpus de corpore ductum; / namque voluptatem praesagit muta cupido.*[138]

This, Lucretius declares devastatingly, is our Venus; this cruel oppressor is the source first of "Venus' sweetness," and then afterwards "freezing care." The great danger of the *simulacrum* is its independence from its object: the image of the beloved is held in the mind when the object itself is absent. But this must be rejected: Lucretius urges us to channel sexual desire and not allow images to engross the mind: "For if that which you love is absent, nevertheless its likenesses are at hand waiting, and the sweet name appears before your ears, / But it is right to flee from likenesses, to drive away the food of love, and to turn the mind in another way… ." *nam si abest quod ames, praesto simulacra tamen sunt / illius, et nomen dulce obversatur ad auris, / sed fugitare decet simulacra et pabula amoris / absterre sibi atque alio convertere mentem … .*[139] Practice and activity are necessary to stem the sickness and keep the wound from growing: "For the wound comes to life and becomes established by feeding, daily the madness swells and the affliction brings pollution , if you do not confound the first wounds with new blows …  or

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[138] *DRN* (4.1045-1057).
[139] *DRN* (4.1061-1067).

draw the mind in another motion,"[140] *ulcus enim vivescit et inveterascit alendo, / inque dies gliscit furor atque aerumna gravescit, / si non prima novis conturbes volnera plagis / ...  aut alio possis animi traducere motus.*[141] Lucretius reminds us that even in the throes of passion, Love is still painful and unsure: lovers are unsure and hesitant at the same time as they grow frenzied, grasping the desired object, biting and inflicting pain even as they seek to enjoy each other's embrace. Lucretius returns to the old sea metaphor of *ataraxia,* observing how turbulent sexual passion may be.[142] Most ironically the lover succumbs to the great fallacy of thinking that the cause of suffering can somehow be its cure. The lover strains toward the object of desire, thinking that such effort will staunch the pain, when it only incurs more pain. "For here lies the hope that the fire may be extinguished from the same body that was the origin of the burning, which nature contrariwise denies out and out to be possible; and this is the only thing, for which the more we have, the more fierce burns the heart with fell craving."

The most crushing revelation Lucretius draws here from Epicurean doctrine is that the lover never actually makes contact with the object of love. Lovers only ever see an image; they only ever touches a film shed from the body of their beloved. Food and water, says Lucretius, are actually absorbed into the body of the one who consumes them, but lovers, as much as they desire to become one with the beloved, only ever encounter the *simulacrum,* no matter how much they grasp at each other's bodies*:*

> But from man's aspect and beautiful bloom nothing comes into the body to be enjoyed except thin images; and this poor hope is often snatched away by the wind. As when in dreams a thirsty man seeks to drink, and no water is forthcoming to quench the burning in his frame, but he seeks the image of water, striving in vain, and in the midst of a rushing river thirsts while he

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[140] *DRN* (4.1068-1072).
[141] *DRN* (4.1068-1072).
[142] *DRN* (4.1084).

> drinks: so in love Venus mocks lovers with images, nor can bodies even in real presence satisfy lovers with looking, nor can they rub off something from tender limbs with hands wandering aimless all over the body.[143]

While lovers seek in intercourse to achieve this union, they hold each other frantically: "they cling greedily close together and join their watering mouths and draw deep breaths pressing teeth on lips … ."[144] Lovers imagine that they can somehow achieve a real union, somehow join themselves to each other: but, "they can rub nothing off, nor can they penetrate and be absorbed body in body; for this they seem sometimes to wish and to strive for: so eagerly do they cling in the couplings of Venus, while their limbs slacken and melt under the power of delight."[145] After intercourse, they experience a brief relief. But the unremitting oppression of Venus never stays away but still returns. Lovers irrationally succumb to this repeated wound with a mindless insatiability. Lucretius calls this "madness," because while lovers should learn that they can never experience infinite satisfaction of an infinite desire, they nonetheless abandon themselves to the pursuit of a union which can only be a fantasy.

> Finally when the collected desire has burst from their sinews, there is a brief pause for a little while in the furious burning. Then the same frenzy comes back, and the madness returns, when they seek to lay hands on that which they desire, but they are not able to invent a scheme by which they can overcome the evil: in such uncertainty do they continuously waste away with a secret wound.
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> *tandem ubi se erupit nervis conlecta cupido, / parva fit ardoris violenti pausa parumper. / inde redit rabies eadem et furor ille revisit, / cum sibi quod cupiunt ipsi contingere quaerunt, nec / reperire malum id possunt quae machina vincat: / usque adeo incerti tabescunt volnere caeco.*[146]

Lucretius concludes that all is pointless.[147]

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[143] *DRN* (4.1099-1104).
[144] *DRN* (4.1108-1109).
[145] *DRN* (4.1110-1114).
[146] *DRN* (4.1117-1120).
[147] *DRN* ( 4.1110).

However, not only do men live in madness, constantly seeking to achieve a gratification which is not proper to their natures, but their vain pursuits blind them. Lucretius next describes how sexual passion corrupts men's vision and causes them to bestow virtues and beauties on the women they love which have no basis in reality. These evils, Lucretius says, are found in a "possessive love," *atque in amore mala haec proprio summeque secondo invenientur.*[148] Desire and blindness are integrally related, but ironically the problem should be inescapably obvious: "in adverse and helpless [love], you are able to apprehend innumerable evils with your eyes shut," *in adverso vero atque inopi sunt, / prendere quae possis oculorum lumine operto, / innumerabilia; … .*[149] However, lovers deliberately blind themselves. Lucretius emphasizes the self-destructive quality of this passion: lovers stand in their own way and deliberately refuse to see the defects in their object of desire. Lucretius tells the lover that he can escape unless he begins by "passing over all faults first of mind and also of body in the one whom you aim at and desire," *praetermittas animi vitia omnia primum / aut quae corpori sunt eius, quam praepetis ac vis.*[150] Blindness is the consequence of such willful self-destruction. "For they commonly do this, men when they are blinded with desire, and they attribute to women advantages which are not truly theirs. Thus we see that women who are in many ways misshapen and ugly are often favorites and achieve highest honour," *nam faciunt homines plerumque cupidine caeci / et tribuunt ea quae non sunt his commoda vere. / multimodis igitur pravas turpisque videmus esse in deliciis summoque in honore vigere.*[151]

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[148] *DRN* (4.1141).
[149] *DRN* (4.1141-42).
[150] *DRN* (4.1151-1152).
[151] *DRN* (4.1153-1156).

In the ensuing lines, Lucretius gives the famous catalogue of female faults, which has inspired so much modern reception. However, if we simply appreciate it as a "purple passage," as Fitzgerald reminded us, we may fail to take seriously how it informs our reading of the rest of *DRN* 4 and the rest of the poem in general. Lucretius here exposes the many ways in which women deviously seek to mask their faults in order to manipulate the affections of their lovers, but, while the catalogue reads in many respects like an egregious if amusing instance of misogyny, the crucial point remains: the fault, the real blindness, belongs to the lover whose vision has been compromised by possessive love. Lucretius reminds us that apparent female charms mean nothing: "all in vain, because you are still able in your mind to drag all things into the light, and inquire the cause of all the ridicule … " *nequiquam, quoniam tu animo tamen omnia possis / protrahere in lucem atque omnis inquirere risus … .*[152] Here as in his discussion of religion, atoms, and superstition, Lucretius relentlessly seeks to drag the truth out into the light and throw off the oppression of darkness. However, the lover's ability to see will depend on the degree to which tranquility is achieved and possessive desire is eradicated.

## 3.4 Attention

If fear and desire are not only ethical but epistemic obstacles, what is the Epicurean to do? Epicurus and Lucretius do not leave their students hopeless. Instead they propose a certain discipline of the mind, which, if engaged in regularly, proposes to create a certain habit of the mind which will fortify it against fear and desire, teach it to recognize its shared nature with its objects of thought ( a nature that is limited in its capacity for desire and satisfaction), and enable it to thrive in a self-sufficient state of contemplative

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[152] *DRN* (4.1188).

happiness. This habit has an unmistakable element of virtue ethics in it, in which practice

and habit produce the conditions for proper thinking, suggesting that Epicurus' doctrine

here resonates with that of his fellow Athenian, the peripatetic Philosopher.

Epicurus' affirmation of the mutual dependence of virtue and pleasure comes, if not

all the way, then very close to the Aristotle's affirmation that happiness is the virtuous

activity of the soul. For Epicurus, active virtue is an indispensable part of the happiness that

is self-sufficient tranquility. Virtue as a strength or excellence for Epicurus is the very

ability to be self-contained and to live without dependency on external contingencies. Thus

for Epicurus prudence is king of the virtues. While Epicurus' phrasing might seem to

reduce prudence to an instrumental means for promoting pleasure, it simultaneously seems

ties the very activity of prudence with happiness as tranquility. What Epicurus emphasizes

is the ongoing and continuous nature of the activity. Epicurus says:

> Prudence is the principle of all these things and is the greatest good. That is
> why prudence is a more valuable thing than philosophy. For prudence is the
> source of all the other virtues, teaching that it is impossible to live
> pleasantly without living prudently, honourably, and justly, and impossible
> to live prudently, honourably, and justly without living pleasantly. For the
> virtues are natural adjuncts of the pleasant life and the pleasant life is
> inseparable from them.[153]

Epicurus advocates a practice for implementing rational tranquility: memorization

of precepts in the context of friendship. This again reminds us of Aristotle's friendship of

virtue, in which both parties will the good of the other, and their relationship is grounded in

their common end. For Epicurus, though, the friendship of virtue will also hold friendships

of utility and friendships of pleasure within itself. Such a context of friendship enables one

to live a life "worthy of the gods." Epicurus enjoins his followers: "Practice these and the

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[153] *Hellenistic Philosophy* (1997:31). DL (10.132).

related precepts day and night, by yourself and with a like-minded friend, and you will never be disturbed *either when awake or in sleep*, and you will live as a god among men."[154] Epicurus advocates for training and habituation as a means for "becoming accustomed," for Lucretius *consuetudino,* to simple pleasures in order to keep the experience of pleasure as sensitive and hence acute as possible. Significantly, Epicurus expects such mental training to impact the subject to a degree that the mind is safe even when attention is relaxed in sleep. Apparently the mind is plastic enough that attention when awake will have a formative effect that outlasts its own exertion. Thus after advocating a diet of barley cakes and water in order to keep the appetite keen, sensitive, and appreciative, Epicurus claims, "Therefore, becoming accustomed to simple, not extravagant, ways of life makes one completely healthy, makes man unhesitant in the face of life's necessary duties, puts us in a better condition for the times of extravagance which occasionally come along, and makes us fearless in the face of chance."[155]

Epicurus himself reflects on the necessity of a constant, unceasing activity in contemplation as the state in which self-sufficient tranquility is experienced. For Epicurus again tranquility is an ongoing state of activity. In his initial comments in his *Letter to Herodotus*, in which he provides his correspondent with a concise summary of the main points of his philosophy, Epicurus describes himself as continually engaged in this ongoing activity and declares that such continual activity is necessary for any who desire to attain the state of tranquility: "Since this kind of method is useful to all those who are concerned

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[154] *Hellenistic Philosophy* (1997:31-32). DL (10.135).
[155] *Ibid.* (1997:30-31). DL (10.131).

with the study of nature, I recommend constant activity in the study of nature; and with this sort of activity more than any other I bring calm to my life."[156]

Lucretius picks up this same emphasis on habit and custom in Book 4. For Lucretius, the habit of the mind which will subdue fear and desire and safeguard perceptual accuracy. This is the means by which Lucretius answers Cicero's contention to the Epicureans about the constant availability of mental images to the mind. For Lucretius, the mind is a not a passive recipient of images but an active agent in the process of the reception and ordering of the images. For Lucretius, *attention* is rooted in *memory.* Dreams and unconscious mental states threaten to overturn the mind with wandering images, but mind through memory and attention is able to collect, unify, and direct itself in its relation to images.

Lucretius describes the constant and unceasing generation of images from bodies as the reason for the constant availability of images to the mind, an unceasing generation made conceivable again by, as discussed previously, the extreme fineness and rarity of the images and the extreme speed of their movement. For Lucretius, the mind must virtually "squint," that is, intentionally determine which images it seeks to engage. The thinness of mental images means the mind can only perceive those images it has prepared itself to perceive.[157] The mind makes itself ready to receive the images and then is able through arranging itself in a certain state of anticipation, to perceive properly.[158] Without this kind of anticipation, the mind is unable to see properly: it does not matter if the intended objects is even something very plain and obvious: "And yet even in things you are able to clearly

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[156] *Hellenistic Philosophy* (1997:6). DL (10:38).
[157] *DRN* (4.800).
[158] *DRN* (4.810).

see, if you do not turn your mind, in the same manner it is as if the whole time the object

were separate and removed a long way," *si non advertas animum, proinde esse quasi*

*omnitempore semotum fuerit longeque remotum.*[159] This attention is crucial for questions

both large and small, clear and unclear: in either case, failure to attend will mean that the

mind "adds" to the evidence of the senses and will thus irrationally conclude with logical

fallacies: "Furthermore we draw large deductions from small indications, and ourselves

bring ourselves into deceit and delusion*:" deinde adopinamur de signis maxima parvis / ac*

*nos in fraudem induimus frustraminis ipsi.*[160]

After this warning, Lucretius illustrates his point with several more delusions that

reveal the human susceptibility to suggestion rather than evidence of the senses:

conclusions such as the notion of intelligent design of bodily faculties for specific purposes

and functions.

Lucretius then considers sleep and the dangerous power of dispersion that is

attendant upon it. Sleep brings the very relaxation of memory and attention that renders the

mind vulnerable to delusion and deception. Curiously Lucretius does simultaneously speak

of sleep as bringing on a certain quiet, *quietem,* and release from cares, *atque animi curas e*

*pectore solvat.*[161] This is followed by his injunction to the reader to practice in reading

what Lucretius is teaching, an exercise to implement even as the instruction continues:

"Give me a keen ear and a wise mind, so that you may not reject what I say is possible, and

leave me with a heart that repels true words, although you are yourself to blame and not

able to perceive it," *tu mihi da tenuis aures animumque sagacem, / ne fieri negites quae*

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[159] *DRN* (4.815). Lucretius continues: *cur igitur mirumst, animus si cetera perdit praeterquam quibus est in rebus deditus ipse?*
[160] *DRN* (4.817).
[161] *DRN* (4.907).

*dicam posse, retroque / vera repulsanti discedas pectore dicta, / tutemet in culpa cum sis neque cernere possis.*[162] Sleep comes about according to Lucretius when the spirit, *anima,* has been dispersed throughout the body and has lost its concentration.[163] In its relaxation, sleep is like a small death and brings about something approximating a "collapse, all through the limbs," *conturbantur enim positurae principiorum / corporis atque animi.*[164] Such a state becomes a prime opportunity to demonstrate how the mind has been conditioned, but in a well-trained mind, habit and consuetude remain even when memory and attention have been scattered, as noted earlier for Epicurus. This is for Lucretius the test: in dreams, each person does what he has accustomed himself to do. Lawyers collect laws, generals lead battles, sailors set out upon their boats. Lucretius offers himself as an example of a mind well-trained in its own customary activity: "I myself conduct this task, to always seek out the nature of things and, when found, to put it forth in our own native language," *nos agere hoc autem et naturam quaerere rerum / semper et inventam patriis exponere chartis.*[165] Lucretius has trained himself so assiduously in reflection on the true nature of things that his mind is still occupied with this subject even when it undergoes the dispersion and scattering of *anima* in sleep. Lucretius concludes: "In this way all other pursuits and arts generally appear in sleep to hold the minds of men with their deception," *cetera six studia atque artes plerumque videntur / in somnis animos hominum frustrata tenere.*[166] Men who are absorbed in athletic games are an extreme example of this, as their imagination is abnormally quickened by their constant occupation, and their dreams have a

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[162] *DRN* (4.913-915).
[163] *DRN* (4.916-924).
[164] *DRN* (4.943-944).
[165] *DRN* (4.969-970).
[166] *DRN* (4.972).

certain intense vividity.[167] The activities to which the mind devotes attention themselves

shape and form the mind in a way that retains its form even when the activity itself is no

longer immediately present before the eyes.  For days afterwards, viewers of dance and

music performances see images of dancers and hear strains of music, because their minds

have been so engrossed that they have retained these images.[168] Lucretius explains this in

terms of the "pores" or "passages" which lie in the mind. Patterns of thought in the mind

seem to establish certain mental connections which are either more or less open and

available to certain thoughts: "still passages, remaining, stand open in the mind by which

the images of these things can come in," *relicuas tamen esse vias in mente patentis, / qua*

*possint eadem rerum simulacra venire.*[169]

This reference to *vias,* or passages in the mind, is of particular importance. David

Konstan reflects on sensation, in which the image, sensed at the level of the *anima,* travels

through the "pores" or "passages" from the *tupoi* at the surface level of sensation, down to

the heart, where the mind, *animus,* lives. It is in this dynamic exchange between *anima* and

*animus,* Konstan suggests, that perception occurs. Konstan has pushed the argument a step

further to suggest that the much-debated question of *phantasia* in Epicurean philosophy is

simply the same process in a kind of inverse relationship: through *epibole,* or "projection,"

in Epicurus the mind pushes forth an idea and "throws it out" through these same pores or

passages to the *tupoi,* or impressions at the level of sensation, where it is either validated or

invalidated, keeping intact the communication between *animus* and *anima* as the guarantor

of accuracy. This account answers the question of what *phantasia* may be, but it leaves open

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[167] *DRN* (4.973-975).
[168] *DRN* (4.973-984).
[169] *DRN* (4.977).

the question of how the mind may be best "prepared," as Lucretius puts it, for accuracy in these two inverse relationships.[170]

Diogenes of Oenoanda reflects further on what seems to be the very plastic, very malleable nature of these "pores," or "passages," *via,* from sensation to mind. Diogenes says: "And after the impingements of the first images, our nature is rendered porous in such a manner that, even if the objects which it first saw are no longer present, images similar to the first ones are received by the mind, [creating visions both when we are awake and in sleep]."[171] For Diogenes, it is these "passages" that are responsible for the mind's ability to view images independently of the current presence of the object of perception. Perhaps this corresponds to the state of the Epicurean student whose continual practice of mental attentiveness has materially altered her disposition such that she is safe from delusion even while sleeping.

In Lucretius' reflection on the relationship between image, desire, will, and motion in *DRN* 4.877-906, the rarity of the body, that is, its pores or the presence of "void" in it, again has a critical function. Lucretius details a sequence whereby images strike the mind and arouse desire and will (which is represented as a direct response to the image in the mind). Having been stimulated by the image, the mind strikes the spirit, which in turn strikes the body: the spirit pushes a wind, *aer,* through the passages of the limbs, which then animates the limbs and creates motion. This is compared to the action of "wind upon the sails of a ship," as Rouse elaborates.[172] It is the passages in the body which allow for the impact of image upon mind and then upon body in a manner that results in action. Just as it was *void*

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[170] Cf. Konstan (2019).
[171] Rouse (1992:353). (Diogenes of Oenoanda in fr. 9.III.6-IV.2.)
[172] Rouse (1992:346-347).

in *DRN* 2 which initially allowed for movement of atoms, so it is void in the body which allows for the movement of the body. And in human vision likewise it is not just the mind but the motion between *animus* and *anima* which is responsible for accuracy in perception. What is key is how void shapes and directs this motion.

Taking Lucretius and Diogenes both into consideration in light of Konstan's interpretation, it seems that these pores reflect the state or habit of the mind, built up and developed over time by habit and attention. Perceptual error occurs when there is an absence of successful communication between *animus* and *anima:* when the passage of the *tupos* (in Konstan's interpretation) from *animus* to *anima* or from *anima* to *animus* has been somehow impeded. Thus the ethical task for ensuring perceptual accuracy is to make sure that the images held in the mind are still compatible with the ones initially received through sense impression, and to ensure, through reflection and attention*,* that *animus* and *anima* are in an ongoing and dynamic relationship facilitated by open *via*.

Lucretius concludes with a reflection on the very powerful nature of habit and inclination: "Of so great import are devotion and inclination, and what those things are which not men only, but indeed all creatures, are in the habit of practicing."[173] Such is the formative impact of habit that it will create visions of the accustomed activity even in the absence of the activity itself.

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[173] *DRN* (4.1036).

**Chapter 4—The Ethics of Perception Performed: *prolepsis* and *vestigia***

This chapter will consider the role that *DRN* as poem plays in creating the therapeutic conditions of tranquility that are necessary for proper perception. W. H. Shearin (2015) describes Lucretius' poetry as performative language: literature that enacts an effect. In his preface, he compares it to Marcellus Empiricus' "therapeutic speech act," in which a medicinal enchantment is effected through a ritual verbal act: one which can "call out" (*evoco*) and expel disease – and it aims to do it in the very act of being pronounced."[174] For Shearin, "we may usefully speak of Lucretius' work as performative, as not simply interested in describing the natural world but rather as centrally invested in doing things with those descriptions."[175] Shearin looks to Derrida to define "speech acts" as literary as well as spoken, and also as necessarily situated within dynamic, fluctuating linguistic contexts, and concludes that Lucretius' poem is a "speech act" as well as simply a didactic epic, a speech performance which seeks to enact even as it describes."[176] Friedlander (1941) and Holmes (2005) both give us analyses of the ways in which the language of Lucretius conveys to us the reality it describes. But one of the most in-depth consideration of Lucretius' relationship to his reader and the performativity of ethical training through poetry comes from Monica Gale's 2001 book *Lucretius and the Didactic Epic.* Thus this chapter will begin with a detailed synopsis of Gale's arguments for Lucretius' performance of ethical training (although Gale does not use so much the language of performativity).

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[174] Shearin (2015:viii).
[175] *Ibid.* (2015: viii).
[176] *Ibid.* (2015: 17-19).

**4.1 Gale on the Clarity of Poetry and Reader Response**

Monica Gale observes that, while there are the much-cited problems with Epicurean use of poetry as a medium, nevertheless poetry is actually an extraordinarily suitable vehicle for conveying Epicurean doctrine: "The traditional use of metaphor and (especially) simile in Greek and Latin epic lends itself easily enough to the presentation of the kind of analogical reasoning which Epicurus recommends; and Lucretius' vibrant imagination equips him with a potent argumentative weapon, whose use is readily licensed by his mentor's insistence on the importance and reliability of sensory experiences."[177] Gale considers this characteristic of Epicurean philosophy – the reliance on the senses – as intrinsically complemented by poetic imagery. While poetry may not translate abstract ideas most readily, still Epicurus' emphasis on sensory experience " allows Lucretius to … appeal instead to our visual imagination (and indeed to the other four senses too). The *DRN* presents the reader with a rich and varied kaleidoscope of sights, sounds and smells, derived from all walks of Roman life… ."[178]

Gale observes how Lucretius' avoidance of technical language and preference for imagery is often actually in service of clarity. She thinks that Lucretius' lack of a proper term for *atom* is poetic rather than philosophical: it gives Lucretius a certain referential flexibility, a "poetic potential,"[179] in calling both atoms and atomic compounds "seeds" and "bodies." While Lucretius laments the lack of a technical Latin equivalent for Anaxagoras' Greek term *homoeomeria,* he ridicules the Greek philosopher's language for being less clear rather than more: "The implication is that the impressive-sounding world

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[177] Gale (2001:16).
[178] *Ibid.* (2001: 15).
[179] *Ibid.* (2001: 16).

*homoeomeria* is just a means of blinding potential pupils to the triviality of Anaxagoras'

theory, which cannot, in Lucretius' view, account for either performance or change.

Technical language may sometimes serve to obfuscate rather than to clarify."[180]

> The 'clarity' of poetry results from its ability to concretize abstract ideas,
> by the use of imagery, personification, and figurative language in general,
> and thus enable the reader to grasp them with his mind. This is itself
> consistent with Epicurean principles: the primacy of sensory evidence, and
> the method of analogical reasoning from the visible to the invisible.[181]

At the beginning of Book 4, Lucretius acknowledges that poetically he is breaking

new ground, drinking from "virgin streams:" Epicurean philosophy has not hitherto been

set forth in poetry, let alone epic dactylic hexameter. Thus the crown he seeks from the

Muses, superiority of poetic excellence, will be his alone. However, while his poetic

project is formally a new one, Lucretius here claims that it serves and supports Epicurean

tenets, both in content and, in a groundbreaking manner, in its form. Lucretius' content

aims to free individuals from superstition. His achievement will be groundbreaking both

because it has lofty subject matter and because "that matter about which I write is so dark

and the verses are so clear, touching every part with the Muses' grace," *quod obscura de*

*re tam lucida pango / carmina, musaeo contingens cuncta lepore.*[182]

However, in its poetic arrangement and mode of expression, Lucretius' verses

also fulfill the specifically Epicurean epistemological criterion of clarity, for Epicurus,

*enargeia.* Epicurus[183] laid down three principle criteria for truth: sense (and mental)

perceptions, *aesthesis* (together with *phantasia);* preconception or *prolepsis;* and feelings

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[180] *Ibid.* (2001: 17).
[181] Gale (1994) references Shrijvers (1970: 38-47) and Hardie (1986: 219-23).
[182] *DRN* (4.8-9).
[183] *Hellenistic Philosophy* (1997:6). DL (10.37).

or affections, *pathe*.[184] All three, in order to be foundational, must have the quality of self-evident clarity, *enargeia.* Epicurus tells us in the *Letter to Herodotus* that all criteria must "stand in no need of demonstration."[185] Lucretius' verses by virtue of being verses possess the specifically formal quality of "clarity," *lucida.* Lucretius says his subject is a dark one: *quod obscura de re tam*.[186] Presumably this refers to the invisibility of the atoms and void, a palpable problem for a materialist philosopher who forbids us to believe in anything not confirmed by the evidence of the senses. Lucretius believes that his verses, through their poetic form rather than in spite of their form, will carry forward the general Epicurean project of uncovering hidden things and shining light on darkness, as Epicurus himself is repeatedly hailed for his triumphant travels through the flaming walls of the world and his triumph over ignorance and superstition.[187]

Gale also notes how light and illumination relate to Lucretius' use of poetry in support of Epicurean *enargeia:* she suggests that in the honey-on-the-cup analogy, the rational, factual content of poetry is made persuasive and hence illuminating by its figurative language: "Poetry … helps to shed light on what is dark because of its tendency towards the concrete and sensual (rather than the abstract and conceptual)."[188] Gale continues:

> At the end of the long proem to Book 1 … Lucretius complains of the difficulty of translating Greek ideas into Latin – or, more precisely, of 'illuminating the dark discoveries of the Greeks in Latin verse" (1.136-7). The image of illumination is picked up again a few lines later (144-5), where the poet speaks of 'shedding bright light before your mind, so that you may be able to see things deeply hidden.' Epicurus' discoveries are 'dark' not only because he wrote in a foreign language (in fact most

[184] Cf. Ieroudiakonou (2011).
[185] *Hellenistic Philosophy* (1997:6). DL (10.38).
[186] *DRN* (4.8-9).
[187] *DRN* (1.73, 75-79).
[188] *Ibid.* (2001: 20).

upper-class Romans of the first century BC would have been able to read Greek quite fluently), but because he expressed himself in abstract, non-visual terms.[189]

Finally Gale also considers how Lucretius compares himself to previous philosophers. His critique of Empedocles and Heraclitus, she observes, resembles that of his critique of Anaxagoras: while Empedocles, as a poet, receives commendation for his clarity, Heraclitus is criticized for his abstruseness: "Lucretius concedes that language (especially the kind of riddling, metaphorical language employed by Heraclitus) *can* obscure rather than illuminate the truth; but poetry can also act, he suggests, as a highly appropriate and very powerful medium for the communication of true philosophy."[190]

David West, in analyzing the same passage, reflects on the relationship between the language of light and the language of calm and turbulence in what he characterizes as Lucretius' "fluidity of imagery."[191] While Heraclitus is described as "'illustrious for his dark speech,' *clarus ob obscuram linguam*:[192] Memmius is told that his task is to listen "clearly" to arguments that are dark and obscure, *clarius audi. Nec me animi fallit quam sint obscura*.[193] West notes that "on this dark theme," Lucretius crafts "luminous poetry," *obscura de re tam lucida pango carmina*,[194] a luminosity which is then associated in a fluctuating image with the calmness brought about by Epicurus' discoveries: "Epicurus is praised for taking life out of great storm waves and great darkness and settling it in such a calm and in such a clear light:" *fluctibus e tantis uitam tantisque tenebris / in tam tranquillo et tam clara luce locauit*.[195]

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[189] *Ibid.* (2001:17).
[190] *Ibid.* (20-21).
[191] West (1994:79-80).
[192] *DRN* (1.639).
[193] *DRN* (1.921-2).
[194] *DRN* (1.933-4).
[195] *DRN*. (5.11-12).

West notes how the poem keeps the images of "waves and darkness, the calm and the light," distinct, but nevertheless "justifies the reader in running two things into one and seeing a dark storm followed by a still and sunlit sea." "Epicurus, finally, according to all the printed editions I have seen apart from Wakefield's, is praised, in the proem to Book 3, 'for first being able to lift up such a clear light from such great darkness…' *e tenebris tantis tam clarum extollere lumen / qui primus potuisti.*[196] Thus West calls our attention to the relationship between the light, which Lucretius' poetry brings on those who are in fear under the darkness of ignorance, and the "calm," which Lucretius' poetry is likewise intended to inculcate in the reader. Vision, enabled by light, is related to calm, an ethical disposition; and both are effected through the performance of the poem. Here again we see Lucretius enacting what he describes.

## 4.2 Gale on Reader Response

While Lucretius leverages the persuasive attraction of poetry to make clear philosophical teachings that are dark, this is not his only method of eliciting response and involvement from his readers. Gale describes Lucretius' didactic role to his readers as a *praeceptor,* a didactic speaker who has a *persona* in the poem and whose express purpose is to convert his reader to Epicureanism. She suggests that the role of Memmius, the friend of Lucretius' to whom the poem is addressed, is to stage the role of the reader in the epic and to draw the reader into the lesson: "Although, as noted, Memmius is addressed by name from time to time throughout the poem, non-specific second-person addresses (to "the reader") are far more common – it has been estimated in fact that

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[196] *DRN* (1.79-80).

Lucretius addresses us, on average, once in every seventeen lines."[197] Thus Memmius'

job is to induct the reader into the poem, to involve her and invite her response: "…

Memmius' main role *within the poem* is, so to speak, to mediate between us and the

*praeceptor,* to give the teacher a pupil with whom we can identify, whose errors we can

be warned to avoid and whose progress we can be invited to emulate."[198]  Comparably

Pausanias in Empedocles' poem receives rebuke and lecturing from Empedocles and

"seems to be a figure with whom the broader audience might – at least some of the time –

identify."[199] Gale suggests that this role for the reader is not static: the reader is expected

to develop and evolve in response to her enlightenment through the course of reading the

poem: "A careful reading shows that the pupil (both Memmius and the reader-in-general,

if we are ready and willing to accept the role in which the poem casts us) does make

gradual progress over the course of the six books, and by the end of the poem should

ideally be ready for further study on his or her own."[200] The reader is persuaded to

engage with the message of the poem through both incitement and warning, what Gale

famously calls the "carrot-and-the-stick" method: "That is, [Lucretius] offers us both

enticements (glimpses of the joys of the Epicurean life) and threats (frightening images of

the horrors of contemporary, non-Epicurean society)."[201]

Gale elaborates on the idea that the reader will somehow "progress" or "evolve"

through reading the poem in her explanation for the personification of Venus in the

poem's opening, a personification which is somewhat puzzling considering the poem's

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[197] Gale (2001:23).
[198] *Ibid.* (2001:23).
[199] *Ibid.* (2001:23).
[200] *Ibid.* (2001:23-24).
[201] *Ibid.* (2001: 25).

simultaneous rejection of *religio,* superstition and unenlightened mythical religion. Gale

suggests that the figure of Venus is a rhetorical "seduction" of the reader, a *voluptas* that

invites her into the poem. However as the poem progresses Venus morphs into the more

accurate description of the forces of nature, away from her personification, and

eventually undermining it altogether – once the reader's mind has been prepared. Gale

calls this a movement "from myth to truth:"

> How can an Epicurean poet use myth? He can use it against itself – by
> employing it as a means of enlivening his poem (honeying the cup), and
> then showing that it is not true. Venus seduces us into the poem (just as
> she seduces the animals who follow her in 14-20), but is soon replaced by
> the forces of nature and pleasure, while we are assured that the gods do
> not really interfere in our world at all … ."[202]

Gale explains how Lucretius defends this strategy "explicitly" in 2.600-60, in

which Lucretius refers to the image of the mother-goddess Cybele but then undermines

his own imagery by reminding us that such is not actually the case: "It is acceptable,

however, for the poet to use such personifications, Lucretius concedes, 'provided that he

refrains from staining his mind with vile superstition' (659-60); i.e., mythical imagery is

acceptable, provided we are quite clear that it cannot be taken as the literal truth."[203] Gale

shows us how this same strategy is reflected in the story of Phaethon, the son of the Sun-

god, which is immediately followed by a rational explanation of the true cause of

conflagrations: not demi-gods but "accidental accumulation of fire-particles from outer

space."[204] Thus myth is one more instance of "honey on the rim."

Gale concludes her reflection on reader response to the didactic epic by offering

an interpretation of the enigmatic conclusion to the poem: the abrupt and painful

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[202] Gale (2001: 37).
[203] *Ibid.* (2001:38).
[204] *Ibid.* (2001:38).

description of the Athenian plague, which has left many commentators in doubt as to whether Lucretius intended such a conclusion or whether it is a reflection of the inconclusive state of the poem. She suggests that it is very intentional and is posed to the reader as a final grand "test" of how well the reader has internalized the lessons of the poem in contemplating pain and death. She notes how Epicurus himself at death demonstrates the virtues of the Epicurean in his own tranquility and equanimity, in DL's account:[205] "The finale, then, may be interpreted as both a final test and final warning for Lucretius' pupil: it serves at once as an example on the literal level of the disasters which nature can inflict on us, and as a metaphor for the psychological suffering we will inevitably undergo if we persist in assuming that such disasters are the work of angry gods."[206]

> if we can accept the fact that such things simply happen –that they are not the work of gods and cannot be averted by so-called piety – then we have fully learned the lesson that Lucretius has been trying to teach us. In this sense, the description of the plague acts as a kind of final exam for the reader: we should by now be able to take it without flinching.[207]

## 4.3 *Vestigia* in Lucretius

Gale has carefully detailed for us how Lucretius involves his reader in his poem, using the "carrot-and-the-stick" method of persuasion and warning, as well as addressing the reader as a disciple learning from a mentor and leaving the reader with a final test – and all within the didactic context of the tradition of dactylic hexameter. Her analysis gives us a way forward to open a question about Lucretius' transmission of Epicurean

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[205] Gale (2001:42). Gale says, "Diogenes Laertes suggests that he met his end with the utmost serenity, claiming that his pleasant memories of conversations with his disciples far outweighed the agonizing pain of his last illness."
[206] *Ibid.* (2001:42).
[207] *Ibid.* (2001:40).

perception theory and its application to the reader. This is the problem of how sense perceptions are organized and interpreted in the mind in Lucretius' perception theory. I will suggest that this question can be addressed by reference to the effect of the poem on the reader, an effect which we might call "proleptic." The mind must *prepare itself* before it can receive images by, as Konstan suggests, "throwing out" the "outlines" to select and define what images it receives. This section will explore this question by considering several occurrences of the word *vestigium* throughout the *DRN*. In considering this, Lucretius' metaphor, *vestigium,* "footprint," "trace," or "outline" will emerge as a nexus of references to appearance and poetry that speaks to the problem of how Lucretius understands the mind's relationship to sense impressions. Eva Thury in her 1987 paper "Lucretius' Poem as a *Simulacrum* of the *Rerum Natura*" suggests, with the support of Cyril Bailey,[208] Richard Minadeo,[209] and Diskin Clay[210] that Lucretius expects his poem to resolve the apparent disjunction between *species*, appearance, and *ratio*, underlying reason, by conveying to the reader through a poetic *simulacrum* the true nature of things. So Thury claims that the poem is a *simulacrum* which has already been interpreted, a *simulacrum* which will result in true perception, which makes evident the hidden truth of nature. In exploring several metaphorical uses of *vestigia,* I want to associate this poetic *simulacrum* with Epicurus' criterion of *prolepsis* and then suggest that the poem does not only proleptically point us to hidden truth but also aims in Book 4 to create the ethical conditions in us necessary to see this truth. Here poetry becomes the proleptic mediator

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[208] Bailey (1947).
[209] Minadeo (1969).
[210] Clay (1969).

for true perception, as well as being, as Gale has shown, the ethical instrument for effecting accurate perception in the reader.

First a preliminary clarification of what this argument is not trying to do: it doesn't mean to imply that *vestigium* is ever a technical term: merely that it is a metaphorical designation with a very suggestive panoply of applications. In this argument I associate the technical Epicurean term *prolepsis* with the multivalences of Lucretius' poetic metaphorical leveraging of *vestigia.* For Lucretius *vestigia* as a metaphor functions poetically and allusively rather than technically. Indeed it is the very flexibility of its poetic reference that makes it powerful. What I suggest is that the "traces," *vestigia,* in the poem – and the poem itself as an artistic "trace" of the broader cosmos – provide the material for mental concepts that enable the reader to proleptically identify the objects of her perception.

### 4.3.1 Thury on Uniting *species* and *ratio*

This thesis has opened several questions around the relationship between the mind of the perceiving subject and the image which it receives in perception. One persistent problem about Lucretius' transmission of Epicurean perceptual theory lies in the apparent absence in Lucretius' schematic of Epicurus' *prolepsis,* a crucial tool for the Greek atomist in explaining the accurate perception and interpretation of images.  Since Lucretius' imagistic theory of perception does not explicitly include Epicurus' theory of "*prolepsis*," the reader must ask: since all "images" or appearances are true, what informs and directs the perception of *simulacra* and allows perception to functionally effect the seeing

subject? Thury[211] argues that the poem itself offers a properly ordered *simulacrum* of the world of nature, thus fulfilling its stated purpose: to unite and integrate the *species*, appearance, of things, with the *ratio*, the underlying reason. Thury says,

> … in its representation of reality, Lucretius' poem functions as a *simulacrum* of the *rerum natura* in the technical sense, that is, … the poem presents word-pictures or images of the real world that enter the mind of the reader and are susceptible to evaluation in the same way as the actual simulacra given off by material objects. … . This examination will serve to illustrate Lucretius' method of using what I call poetic simulacra or properly ordered images to fulfill his promise of presenting a more profound understanding of reality than Ennius and, indeed, than any previous poet (*nullius ante trita solo,* 1.926-27).[212]

Thury says that Lucretius' project of bringing together *species* and *ratio* is an attempt to present "an accurate picture of reality by poetic means."[213] Thury thus describes the *species* as "the vision which corresponds to the workings" or "the ordered account."[214] Of particular interest is Thury's emphasis on the poetic *simulacrum* as a properly ordered image. The Epicurean believes all sensations are true, and he blames faulty judgment for perceptual error or delusion, but as Thury says, "The problems connected with vision and with sensation in general can be overcome by learning to see things in their proper contexts:"[215] perceptual dilemmas such as mirror images, vision confused by bright light, jaundice, objects viewed from a moving ship, etc. are all true sensations which the mind must correctly identify within their separate points of reference.[216] Lucretius' *DRN* 4 catalogue of delusions tells us that, in order to avoid error, the task of the mind is to properly assign sensations to their points of reference, and in

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[211] Thury (1987).
[212] *Ibid.* (1987: 271).
[213] *Ibid.* (1987: 271).
[214] *Ibid.* (1987: 271).
[215] *Ibid.* (1987: 272).
[216] *Ibid.* (1987: 272).

order to do this, it has need of a grand schematic, a context for everything, a "*De rerum natura.*" While Thury emphasizes the continuity of *species* and *ratio,* another consequence of her argument seems to follow: that the poetic *simulacrum*, by explaining the world to the reader through atoms and void, offers a conceptual reference or outline, a *prolepsis,* to the reader of the *nature of things:* an interpretation of images that frames them within the fundamental reality of atoms and void.

Here I will use Thury's suggestion offer a comparative reflection on Lucretius' uses of the word *vestigia* in several key passages of the *DRN* text. *Vestigia,* meaning "traces," "tracks," "footsteps," "outlines," etc. emerges as a key image with a remarkable breadth of allusion on multiple layers. In Lucretius it refers to materialist perception theory, to philosophical inheritance, to the mind of the reader, and thus to *prolepsis* itself. On the most literal level, *vestigia* describes the mechanics of interaction in the materialist account: *traces* or *prints* are left from one body on another: again, *tangere et tangi.* I suggest that this metaphor, as it accumulates all these layers of reference, points us toward Lucretius' conception of the dynamic purpose of his poem.

### 4.3.2 *Vestigia* in *DRN* 1 and 2

The first couple references we get to *vestigia* in the *DRN* in Books 1 and 2 are references to the physical argument of the text: the reality of things is atoms and void. Lucretius' text is not intended to be an exhaustive defense of atoms and void but rather offers a "trace," which points to a conclusion beyond what is specified in the text and which invites the reader to make the discovery for herself. This discovery is possible because of the relationship of perfect correspondence between the "trace" and that which makes the trace, between *species* and *ratio,* between the source domain of the analogy

and the target domain. The first reference comes after Lucretius introduces his initial

argument for atoms and void as the fundamental components of the world. Here we find

*vestigia* in a Homeric epic simile, a hunting trip with hounds, in which *species*,

appearance (here scent), leads hounds to discover the *ratio*, the underlying reason, or

grounds for the scent:

> But for a wise mind, these small tracks [proofs that there is void in things]
> are sufficient, through which you can identify the others for yourself. For
> just as hounds often discover the leafy lairs of mountain-wandering wild
> beasts by their scent, once they have picked up certain traces of its path, so
> you will be able to see for yourself each subsequent thing in such matters,
> and to access all unseen hiding-places, and draw out from them truth.
>
> *verum animo satis haec vestigia parva sagaci / sunt, per quae possis
> cognoscere cetera tute. / namque canes ut montivagae persaepe ferai /
> naribus inveniunt intectas fronde quietes, / cum semel institerunt vestigia
> certa viai, / sic alid ex alio per te tute ipse videre / talibus in rebus poteris
> caecasque latebras / insinuare omnis et verum protrahere inde.*[217]

Here the *species* is inherently related to the *ratio* such that the pursuit of *species*

will naturally unearth *ratio*. Significantly, in this passage, the *vestigia* refer to the general

outlines of the object of knowledge rather than to its particulars. Lucretius claims that he

need not give an exhaustive catalogue of arguments for the existence of void: rather, all he

need to do is provide the *tracks,* which will be sufficient to allow the reader to *recognize*

for themselves the others: *per quae possis cognoscere cetera tute.*[218] This passage again

refers to the importance of immanence for Lucretius: the reader is not commanded to

believe something by an external voice but she is rather connected to the world of objects

of perception in such a way that she can recognize them for herself. Her knowledge is

immanent rather than external: as always, her own pain and pleasure, when properly

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[217] *DRN* (1.398-409).
[218] *DRN* (1.403).

trained, are her ethical and perceptual guidelines. Thus the "tracks" of perception in her

mind (if her mind is properly conditioned) lead her reliably to the object of perception

itself.

In *DRN* 2.112-124, *vestigia* comes again as another reference to knowledge of

*ratio* through *species.* Here Lucretius makes a programmatic statement about the function

of *species* in analogy, asserting that appearance analogically leads to reason. He paints a

picture for us of a ray of sunlight in a dark room, throughout which dust motes are visible

moving about, hitting and moving away from each other. From this, Lucretius tells us

that we may conjecture how the seeds of things move about in the void. "To this extent, a

small thing is able to adduce great things, and to show the **tracks** of knowledge," *dumtaxat*

*rerum magnarum parva potest res / exemplare dare et vestigia notitiai.*[219] Gale asserts that

other similes throughout *DRN* function similarly as "'scientific' analogies:" "linking

different manifestations of the same atomic processes."[220]

### 4.3.3 *Vestigia* as *simulacra: DRN* 4

In book 4, we see *vestigia* referring metaphorically to the *simulacra* themselves in

the strictly technical sense. The first reference comes in one of the introductory accounts of

the *simulacra,* in which the atomic films are compared to the colours cast on other objects

by brightly-coloured flags. The canvas of these flags throws off colour from its surface, so,

concludes Lucretius, it is possible for other objects to throw off films of visibility.

"Therefore there are certain outlines of shapes that fly around everywhere, provided with

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[219] *DRN* (2.112-124).
[220] Gale points to "the extended comparison between the destructive power of a strong wind and of a river in flood (1.271-91); the similar effects in each case can be attributed to an identical cause, the violent impact of the 'unseen particles' of which both water and wind are composed." Gale (1994: 29).

slender texture but which singly and separately are not able to be seen," *sunt igitur iam formarum vestigia certa / quae volgo volitant subtili praedita filo / nec singillatim possunt secreta videri.*[221]

Here we also encounter the assertion that these *simulacra* are not visible singly, one by one, but only as continuous streams of films, which register in the mind as a certain "outline." This outline, the discernible likeness identified by the mind, is the *vestigium*. This for Epicurus would be the *phantasia,* the image identified by the mind from multiple *eidola,* or *simulacra.* Here *vestigia* describe the *simulacra,* which accurately represent the bodies of objects off of which they stream, and as such these colours cast by canvas are an analogy which leads us to understand the atomic nature of vision. The colours are our *species,* and the reality of atoms and void is our *ratio.* The source domain of the analogy leads reliably to the target domain.

However, we next see *vestigia* implicated in discussions of erroneous perception and delusion. In the discussion of the sense of smell and scent, *vestigia* is a scent that has grown cold and is not easy to pick up, which may consequently mislead. This breakdown between *species* and *ratio* means that the perceiving subject is liable to succumb to delusion. When hounds are on the hunt, the scent from the "tracks" may grow cold, thus misleading the hounds and causing confusion. Here we see *vestigia* as a potentially deceptive likeness: "Thus hounds often go astray and search for traces, *errant saepe canes itaque et vestigia quaerunt.*[222]

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[221] *DRN* (4.84-89).
[222] *DRN* (4.701-705).

Of course the scent itself as a *simulacrum* is never false, but the manner in which it is interpreted may be false.

In *DRN* 4.364-365, *vestigia* are more explicitly a delusional perception, as it seems to give rise to the appearance of an object which is not actually there: "Our own shadow also seems to move in the sun, and to follow our tracks and to imitate our gesticulations," *umbra videtur item nobis in sole moveri / et vestigia nostra sequi gestumque imitari.*[223] Here the "trace" is a seeming reality that must be understood in its proper context.

However, the problem of perception is not adequately solved by simply providing a proleptic image of nature to contextualize and organize sense perceptions. There is a subjective element to perception which determines whether or not it will be possible for the subject to benefit from even what Thury calls a "properly ordered image." If the perceiving subject is caught up in either fear or desire, the attachments which impede tranquility, then she will misinterpret the images which enter her sense organs. She must condition herself to achieve tranquility, a state of being without disturbance, in order to see properly. And this is what *DRN* 4 proceeds to explore at length. We next see *vestigium* used to describe the harmful kind of interpretation of *simulacrum* that rises out of excessive desire, a desire that mistakenly invests external objects with the potential for desire-fulfillment. Here Lucretius describes a lover who has succumbed to possessive desire and now imagines that his beloved is flirting with other men, because he sees on her face "the trace" of a smile.[224]

Possessive romantic love is a deadly kind of attachment because it is a desire with no hope of satisfaction. Sexual love of the romantic kind, which is based on a desire for

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[223] *DRN* (4.364-365).
[224] *DRN* (4.1133-1135), (1139-1140).

complete union with its object, is essentially illusory, as Chapter 3 has already established. For Lucretius, the insatiability of sexual desire points to its fundamentally mistaken character: true union is never achieved: one never makes contact with the actual object of desire but only with its insubstantial likeness. So here for the perceiving subject who is compromised by the turbulence and disturbance of desire, the "*species*" is a trace that leads to delusion and harm rather than clarity and health. Here the "*vestigium* of a smile" on the face of the beloved one acquires all kinds of illusory connotations for the jealous lover, who sees what is not truly there as a consequence.

So how can the lover be saved from delusion? Book 4 concludes with a humorous meditation on human flaws which is designed to therapeutically divest the lover of delusional attachments. By contemplating the flaws of the object of desire, the lover learns to be self-contained and to not mistakenly attribute to love and sex a purpose which they can never fulfill. The lover is also called upon to self-reflection and to notice the extent to which one's own desire determines one's vision. Lucretius offers a therapeutic perceptual antidote, as it encourages the reader to realize the dissatisfactions and frustrations of love and to cultivate a perceptual capacity that is impeded by neither fear nor desire.

Thus the task of the poem is to engage the mind therapeutically. The mind must learn how to "prepare itself"[225] to see images. Lucretius tells us in 4.804-817 that the mind can only see those images which it has prepared itself for because it is necessary for it to "strain itself" to see, that is, as we have seen, Epicurus' *epibole*[226] or direct application of the mind to a particular stream of images. For Lucretius, it is necessary to "turn your mind

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[225] *DRN* (4.804).
[226] *Hellenistic Philosophy* (1997:9). DL (10.50).

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to" its object, *advertas animum*.[227] Thus the ethical practice for the perceiving subject is two-fold: the cultivation of freedom from disturbance and this intentional "flexing" or "squinting" of the mind's attention. As we have seen, without this ethical practice, Lucretius tells us the mind will fall prey to delusion: "the mind cannot perceive any [images] sharply except those which it strains itself to see; therefore all the others perish except those for which it has prepared itself.[228]

Thus tranquility is the condition for true perception, but true perception is also the condition for tranquility. Knowing the truth about nature will free us from the "harsh bonds of *religio,*" as in the proem of Book 1, but if we succumb in turn to "anguish and avidity," as Deleuze terms it, we will be unable to properly identify and relate perceptual objects. This seems a hard task. And Lucretius knows this: he admits at the beginning of Book 4 that this doctrine commonly seems harsh to those who have not availed themselves of it. This is why he administers his medicine to us through poetry: why he holds it to our lips in a cup smeared with honey.

So in all these passages we see *vestigia* as an instance of the way in which Lucretius' poetics bring his philosophy to bear upon his readers and in which the *species* of the poem not only proleptically instructs the reader in the *ratio* of nature but also creates in the reader a receptive mind that is capable of the tranquility and the attention necessary to perceive the true *rerum naturam*.

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[227] *DRN* (4.812).
[228] *DRN* (4.805-817).

**Chapter 5—Conclusion**

This thesis began with a reading of *DRN* 4 that produced the claim that Lucretius' physical and ethical projects in this book are mutually reinforcing: accurate perception requires ethical tranquility, and ethical tranquility requires accurate perception. In Chapter 2, the argument claimed that *DRN* 4.1-961, while expositing the Epicurean *simulacra* theory, points to a certain ethical disposition – the possession of ataraxic *tranquilitas,* a self-related tranquility which is free from the disturbance of fear and desire – as both the precondition which makes this physical theory coherent and the consequence of it. In Chapter 3, the argument claimed that *DRN* 4.962-1287, while outlining the ethical problems of desire and fear, posits these problems as the perceptual barriers that impede accurate mental reception of and relation to the *simulacra.* Chapter 4 explored the relationship of the poem as poem to its ethical-perceptual goal and considered the poem as a "speech act" that "performs as it describes."

While the argument has been laid out, perhaps we can conclude by obeying Lucretius' urge to "follow the tracks" and consider what implications the argument leaves for us to uncover for ourselves. Lucretius' poem has given us the "outline" that Epicurus commands us to memorize and reflect on, thereby allowing us to apply our own intellect to the facts.[229] How can we best be led by the "outline" proleptically supplied by the poem? Surely by returning to the most fundamental aspect of the theory: the atom itself. In these final paragraphs, the argument will conclude by speculating how the atom itself exemplifies two key characteristics of ethical Epicurean perception: ongoing activity and self-reflexivity. Thus not only is the atom the fundamental physical *ratio* of nature, but it

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[229] *Hellenistic Philosophy* (1997:5-6). DL (10.36).

is also in a sense the exemplar of the mental habit which is capable of seeing this *ratio.* Having read the poem, we the readers are hopefully in the process of learning the tranquility necessary to see nature properly. This process occurs most perfectly in contemplation of the atom. In contemplating the atom, the reader joins Lucretius in the philosophical pleasure of the mental contemplation of nature: the *iucunda voluptas* that is attendant upon perceiving self-sufficiency: *mensque fruatur / iucundo sensu cura semota metuque?*[230] The significance of the activity and reflexivity of the atom for the ethics of perception will be considered relative to Lucretius through consideration of Book IV's analysis of the phenomenon of mirror reflection.

**5.1 Atomic Activity as Self-Relation.**

It is easy to think of the atom as emblematic of stasis, since, as an eternal and indivisible entity, it does illustrate the kind of katastemic pleasure that the Epicurean disciple seeks to inculcate in herself. However, we remember that one of the primary characteristics of the atom is that it is always in motion, whether or not it has become part of a larger compound. Epicurus tells us, "And the atoms move continuously for all time, some recoiling far apart from one another [upon collision], and others, by contrast, maintaining a [constant] vibration when they are locked into a compound or enclosed by the surrounding [atoms of a compound]."[231] Motion is intimately related to void; as we know, the only explanation for motion according to Lucretius is the presence of void: "This is the result of the nature of the void which separates each of them and is not able to provide any resistance; and their actual solidity causes the rebound vibration to extend,

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[230] *DRN* (2.18-19).
[231] *Hellenistic Philosophy* (1997:7-8). DL (10.43).

during the collision, as far as the disturbance which the entanglement [of the compound] permits after the collision."[232] In *Letter to Herodotus,* Epicurus tells us that it is the vibrating motion of atoms within compounds that is responsible for the generation of *simulacra* from compounds: "… then, for this reason, they give the presentation of a single, continuous thing, and preserve the harmonious set [of qualities] generated by the external object, as a result of the coordinate impact from that object [on us], which [in turn] originates in the vibration of the atoms deep inside the solid object."[233] This is less explicitly reiterated in *DRN* 4.535-541, when Lucretius observes that the generation of atomic films that account for hearing result in a depletion of atoms in the original compound. And again in *DRN* 4.858-876 Lucretius describes nourishment as necessary in organic compounds to replenish those atoms lost through generating likenesses. Food is necessary because it replenishes the store of atoms lost and fills in the empty spaces.[234] Lucretius considers that the phenomenon of a hoarse voice and weariness after lengthy speaking makes this obvious, "because by much speech a man loses part of his body."[235] Thus the likenesses that result in the phenomena of visibility, audibility, and general perceptibility all proceed from atomic motion.

However the motion of the atom in the void is less significant than what we might call an internal activity that comprises the atom itself. While Epicurus and Lucretius tell us almost nothing about the qualities of the atom other than its three allowed characteristics, they do reference the "minima," the intrinsic, imperceptible "parts" of the atom which themselves have no parts and no independent existence and which constitute

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[232] *Hellenistic Philosophy* (1997:7-8). DL (10.44).
[233] *Ibid.* (1997:9). DL (10.50).
[234] *DRN* (4.860-865).
[235] *DRN* (4.535-541).

what Konstan calls the "deep structure" of the atom, a kind of "inner life." While we can

say virtually nothing about these minima, what we do know is, that at least on one level

they are always ultimately identified by themselves (that is, the atom they comprise)

rather than by a compound. The minima define the individuality and identity of the atom.

Epicurus refers to the minima in his effort to explain the problem of contact between

atoms. If two atoms stand adjoined in a compound, and there is no void between them,

what differentiates them from each other? The only possible answer is: two different

atoms in contact are differentiated by the fact they do not share minima. Konstan

explores this at length, concluding that the only way to understand the differentiation is to

attribute a certain activity to minima in atomic differentiation.[236] Konstan argues that

these minima do *not* behave as atoms do, moving together into compounds, but instead

are defined by a kind of continuity since they are not to be understood apart from each

other. Eliya Cohen offers a slightly different suggestion,[237] veering away from Konstan's

consideration of infinite *continuity* as a solution for understanding the identity of the

atom in its minima. Instead *all* coherence is to be understood in terms of harmony of

motion. Cohen suggests that we understand atomic individuation as a consequence of the

motion of the minima, an individuation that has a parallel relationship to the motion of

atoms in compounds. Cohen proposes that the motion of both minima and atoms is more

or less either harmonious or disharmonious. Atoms possess identity because their minima

*cling together,* as Lucretius says: they "harmonize their motions," *consociare motus.*[238]

Both atomic identity and the identity of a compound proceed from the relative "alliance "

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[236] Konstan (1982).
[237] In a current project in progress but reflected in a paper given May 14, 2019: "Point of contact: adjacency and individuation in Epicurean atomism."
[238] *DRN* (2.109-111).

of their constitutive parts. The harmonious motion that belongs to the atom is the *exemplar* of such harmony, since the atom's identity is immutable and eternal. So likewise, but in a lesser degree, Cohen suggests, compounds and contiguous compounds (such as my body sitting on a chair) are not identified but are adjunct because their internal motions are harmonious enough to allow for their juxtaposition. Cohen suggests that, while for Fowler the "entering into alliance" of atoms is the precondition for their harmonious motion, perhaps instead it is the harmonizing motion of the atoms' internal activity that enacts itself the atomic alliance. Thus all motion and consequently contact is explained by the extent to which atoms either succeed or fail in harmonizing their motions.

If this is true, then how do we characterize this "continuous activity"? The minima as integral inseparable parts of the atom define the atom through their activity. We might then describe this activity as a kind of self-relation. This is how Marx considers the Epicurean atom as opposed to the Democritean atom in his 1841 PhD dissertation. For Marx, the swerve of the atom points to a characteristic of self-determination which he considers tantamount to an "abstract self-consciousness." For Marx, the atom's self-related independence reflects the self-related independence of the Epicurean gods, who live remote from human turmoil and disturbance. He connects this separation with the exercise of will and ataraxy: the gods are "abstractions" who, like atoms, "swerve away from the world" and so have calm. Marx sees a direct correlation between the atom, which is outside space and time – *nec regione loci certa, nec tempore certo*[239]– and which hence in Marx's view is a pure abstraction, and the gods in their

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[239] *DRN* (2.294).

ataraxic removal from human affairs. "The purpose of action is to be found therefore in abstracting, swerving away from pain and confusion, in ataraxy. Hence the good is the flight from evil, pleasure is the swerving away from suffering."[240] Humans emulate the divine swerve and removal by themselves avoiding entanglement and turbulence.

The primacy of activity which Marx points to has led recent commentator Thomas Nail to issue a startling challenge in his commentary on *DRN* 1: can Lucretius even be said to properly be an atomist? Lucretius certainly never avails himself of a technical term designating a discrete, indivisible body. Instead he refers to *primordia, semina, corpora,* all terms, which, significantly, can refer either to the *atomos* itself or to a variety of atomic compounds. Nail notes Lucretius' use instead of the term *nexus,* or "fold," to describe "stochastic flows" of matter. Matter is fundamentally flux, and these stochastic flows fold themselves into ever-changing shapes, which then unfold and form new shapes.[241] Thus for Lucretius to say that "all comes from atoms and void, and all returns to atoms and void," is to claim that all identity comes from and returns to the flows of matter. Like Marx, Nail reminds us that it is a continuous motion that accounts for all phenomena.

**5.2 Lucretius on Mirror Reflection and Reflexivity.**

The atomic characteristic of *self-relation* unites every aspect of the issue considered so far: the nature of image, the nature of the Epicurean goal of freedom from disturbance, the nature of the act of perception. This brings us to conclude with an

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[240] Marx continues: "Finally, where abstract individuality appears in its highest freedom and independence, in its totality, there is follows that the being which is swerved away from, is *all being; for this reason, the gods swerve away from the world,* do not bother with it and live outside of it" Marx (1975: 23).
[241] Nail (2018). Nail's other recent work *The Theory of the Image* (2019) goes on to expressly relate this notion of matter as flux to image and perception.

affirmation of the central function of the activity of self-relation for Lucretius' ethics of perception. If the atom exists in its own identity and independence in virtue of its harmonious motion in an activity of self-relation, then so likewise the individual analogously attains ataraxic tranquility in the self-sufficient identity and independence of an activity of self-relation. This activity is an ongoing act of reflection that identifies the natural limits of both the subject herself and the objects she sees. Only thus can she identify herself and refrain from possessive attachment to external objects. Such reflection comprises the ethical self-relation of the human whereby she approximates the self-determination of the atom. We can consider this in Lucretius' own text in *DRN* 4's consideration of the phenomenon of mirror reflection.

As already referenced in the exegetical consideration of *DRN* 4's physics, the reflexivity of the phenomenon of mirror reflection figures at several points in Lucretius' discussion of the *simulacra.* Lucretius refers to mirror reflection in his initial assertion that bodies cast off likenesses in a continual unceasing stream: "There are therefore thin shapes and close resemblances of objects, which individually no one is able to discern, yet, when they are thrown back by constant and repeated repulsion, give back an appearance from mirror surfaces," *sunt igitur tenues formae rerum similesque / effigiae, singillatim quas cernere nemo / cum possit, tamen adsiduo crebroque repulsu / reiectae reddunt speculorum ex aequore visum.*[242]

The reflexivity of the mirror in this passage is a means of corroborating the claim that likenesses are physically and materially related to the compounds which they are said to

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[242] *DRN* (4.98-109).

"represent." Only a material relationship between image and that which the image depicts, says Lucretius, can explain the image's accuracy. Lucretius' description of the material process of reflection emphasizes its dynamic process: the image is thrown, *missis*,[243] flung, *reiectae,*[244] repulsed, *repulsu.*[245] Mirror reflection is a uniquely helpful example for Lucretius because it *almost* makes visible or at least discernible the invisible but dynamic process by which a compound throws off a *simulacrum.* The mirror image "shows" us how reflection works.

The next reference to mirror reflection comes in *DRN* 4.155, where Lucretius argues that the reliability of mirror reflection supports the argument that there is a constant flow of *simulacra* off objects. Regardless of how quickly any given object is set in front of a mirror, its reflection will appear immediately.[246] Here for Lucretius the phenomenon of mirror reflection demonstrates the extreme rapidity of movement of the *simulacra,* specifically of their generation: a key point to prove their function since they themselves are not visible. It also proves their constant succession, one after the other, in a "flow," *perpetuo fluere.*[247] This constant flow is what allows, in Epicurus' more technical language, for the individual *eidolon* to be registered as an independent *phantasia* in the mind. Finally, in 4.209, Lucretius again uses mirror reflection to argue for the velocity of the motion of the likenesses.[248]

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[243] *DRN* (4.101).
[244] *DRN* (4.107).
[245] *DRN* (4.106).
[246] *DRN* (4.155-160). *et quamvis subito quovis in tempore quamque / rem contra speculum ponas, apparet imago; / perpetuo fluere ut noscas e corpore summon / texturas rerum tenuis tenuisque figuras. / ergo multa brevi spatio simulacra genuntur, / ut merito celer his rebus dicatur origo.*
[247] *DRN* (4.157).
[248] *DRN* (4.209-216). *Hoc etiam in primis specimen verum esse videtur / quam celeri motu rerum simulacra ferantur, / quod simul ac primum sub diu splendor aquai / ponitur, extemplo caelo stellante serena / sidera respondent in aqua radiantia mundi. / iamne vides igitur quam puncto tempore imago / aetheris ex oris in terrarum accidat oras?*

The final reference comes in 4.269, the first example of what ends up being a catalogue of delusions which Lucretius attempts to explain in order to justify Epicurean confidence in the senses and to dismantle Skeptic attacks. This is a lengthy passage in which Lucretius details several different delusions which mirror reflection presents, each of which must be systematically explained in order to safeguard the trust in the senses which is required of the Epicurean. The first delusion is that of depth in the mirror reflection, that is, the fact that the eye essentially experiences reflection in the same way that it normally experiences depth. Lucretius is addressing the issue of why an image seen in a mirror appears to be "within it;" that is, it seems to be slightly removed from the perceiver so that the perceiver sees her face "within" the mirror. This is because of what Lucretius calls "two stretches of air." This refers us back to *DRN*'s original account for depth perception,[249] explained by the air which an image carries before it (as it moves through the air) and which the eye experiences before it actually encounters the image itself. The amount of air determines the sense of depth and distance. A mirror reflection carries "two airs," that is, the "first" air, pushed in front of the *simulacrum* as it initially approaches the mirror, is added to the "second" air, which the image carries before it when it rebounds off the hard surface of the glass.

> So when the image of the mirror has first projected itself, as it progresses to our eyes, it shoves and drives all the air between itself and our eyes, and causes us to be able to feel all this before the mirror; but when we have also seen the mirror itself, the image which is born from us there [to the mirror] immediately arrives, and after being flung back, revisits our eyes, and, propelling, it rolls before itself another air, and causes that we see this before we see itself; and for this reason it seems so far off distant from the mirror.[250]

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[249] See footnote 57: *DRN* (4.289-291).
[250] *DRN* (4.292).

Lucretius tells us not to "wonder" at this, since the same process that explains ordinary depth perception accounts for the apparent depth perception of mirror reflection.

Lucretius then considers the "reversal" of a reflected image: right is left, and left is right. This argument is of a particularly bizarre and creative character. Lucretius explains mirror reversal by claiming that an image is "not unaltered" when it hits a hard surface and rebounds; instead the image itself "is thrust straight out backwards." The impact essentially pushes the image inside out, and it is the reversed image which returns from the mirror surface, having rebounded, to hit again the eye of the perceiver. Lucretius asks us to imagine a plaster mask smashed on a pillar while it is still wet. The front is pushed out the back and "moulds a copy of itself dashed backwards."[251] The mask now bears the impressed form of its front on its back and thus shows its original form in reverse. Therefore  what was the right before is now in the image the left eye, and the left eye in turn becomes the right eye.[252] Lucretius also considers the multiple reflections of a series of mirrors, which still preserve the image regardless[253] and then a concave mirror which "reflects the image twice (and therefore reverses it twice) and so restoring it like the original."[254]

Mirror reflection shows the perceiving subject herself and lets her reflect on her process of reflection. The dynamic exchange of the impression between *animus* and *anima* Konstan details for us is essentially a process of reflection, in which the likeness is weighed, assessed, and finally judged against its own original, all by a perceiver who at the same time reflects on herself interiorly in her own dynamic interaction between soul

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[251] *DRN* (4.323).
[252] *DRN* (4.309-310).
[253] *DRN* (4.302-310).
[254] Rouse (1992:300).

and mind. Finally the perceiving subject must reflect on the shared nature which she

possesses with her objects of perception: it is the shared reality of atoms and void, shared

by both perceived and perceived object, that grounds the physicalist account of motion

and contact that explains perception for the Epicurean. The perceiver will only perceive

accurately if she understands that both she herself and the object which she perceives are

atomic compounds. Here perception is understood as a fundamentally self-relating

activity: both a relation of image to that which it images, of perceiving subject to herself,

and finally of perceiving subject to perceived object. Perception understood as self-

relation in this sense takes us back to Nail's interpretation, in which all matter is flux,

constantly folding into new forms out of shared "flows," rather than separate discrete

quantities.

While Nail's interpretation may diverge from accepted language concerning

Lucretius and his project, it reminds us of the insistence of both Epicurus and Lucretius

that continuous, ongoing activity in the sense of habit and practice are what constitute

identity in an ethical sense. Ethical identity is activity, a dynamic process that must be

unceasingly maintained over time. We have several such injunctions from Epicurus, such

as: "Do and practice what I constantly told you to do, believing these to be the elements

of living well."[255] "Practice these and the related precepts day and night, by yourself and

with a like-minded friend, and you will never be disturbed either when awake or in sleep,

and you will live as a god among men."[256] Epicurus gives his disciples his maxims, the

*kyriai doxai,* to commit religiously to memory, and Lucretius inscribes his poem in

dactylic hexameter, the traditional didactic meter which was so conducive to

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[255] *Hellenistic Philosophy* (1997:28-29). DL (10.123).
[256] *Ibid.* (1997:31-32). (10.135).

memorization, even in extraordinary amounts.[257] While Epicurus' prescriptive epistolary

prose (or perhaps more importantly his maxims given for memory) and Lucretius'

luxuriously sublime poetics seem opposed in form, they both achieve the same end: they

both facilitate a continuous independent state of mental contemplation by being

conducive to memorization.

### 5.3 Boundaries, Limits, and Self-Relation.

This concluding chapter began by returning to the nature of the atom and

considering it as an emblem of the activity and self-relatedness that characterize what we

have called the ethics of perception. Konstan has suggested that we understand the atomic

*minima* as in some sense responsible for the individual identity of individual atoms, thus

indicating that atomic identity is an activity of self-relation. Asmis[258] contributes to the

question of identity by making the question of "boundaries" the point of unification

between Lucretius' ethics and physics.[259] Asmis details to us Lucretius' use of language

of compacts and treatises, *foedus,* and the attached Roman connotation of a "fixed

boundary stone." Nature observes certain boundaries of identity, which arise intrinsically

from nature rather than being imposed externally.[260] These boundaries are observed by

identifying the limitations which mark identity. These limitations are bounded by

mortality; nothing lasts forever.[261] Fear and desire arise from a failure to observe proper

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[257] Cf. Volk (2002).
[258] Asmis (2008).
[259] "We may distinguish, then, between two kinds of structure: a surface structure, which follows roughly the order of Epicurus' physics and proposes two ethical goals; and a deeper structure, which combines physics and ethics into a comprehensive ethical system. This union of physics and ethics, I suggest, is underpinned by a conceptual mapping of the physical universe into domains of power demarcated by nature's treaties." Asmis (2008:151).
[260] Asmis says, "I agree with Tony Long that Lucretius offers a counterpart to the Stoic conception of law." Asmis (2008:156).
[261] Cf. Segal (1990:115-70).

boundaries of identity, to desire or fear what does not belong to our nature, as Deleuze

told us. Thus to observe the limits of identity is to be self-related and to not trespass on

the fixed boundary stones of what belongs to our own natures. The human is a finite part

of nature, and her ethical task is to recognize this, as well as the shared finitude of other

natural objects. Accurate perception requires that the human individual engage in the

activity of self-relation. Asmis details how the observance of boundaries not only limits

but it also frees and empowers.

> Humans are liberated, in the first place, by the expulsion of the gods
> beyond the boundaries of created things and, second, by the limits placed
> on their lifetime. Along with setting these limits, the treaties of nature
> enable a flourishing of powers within a lifetime. The distinguishing power
> of the human is reason, together with the power to achieve happiness
> through reason. The full exercise of these powers demands not only a
> recognition of the limits of divine power and one's lifetime; it also
> requires a recognition of a limit to pleasure. … Although Lucretius does
> not use the term 'treaty' specifically with respect to the boundary of
> pleasure, his general doctrine on the limit of powers implies that this, too,
> is a boundary determined by nature's treaties.[262]

While we have been seeking to understand Lucretius' articulation of the

connection between ethical disposition and the physics of perception, perhaps it is his

mentor and teacher who best articulates the mutually reinforcing nature of freedom from

disturbance and accurate perception. Epicurus tells Pythocles that when he *commits to*

*memory* the precepts of his teacher*,* that is, truly internalizes them, his vision will then be

empowered. He will no longer need the mediation of imagery and likenesses once the

precepts have become part of him. He will then grow out of his need for imagistic

mythology: "Commit all this to memory, Pythocles, for you will leave myth behind you

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[262] Asmis (2008:151). Asmis tells us there are three primary boundaries which free and empower us: "To achieve happiness, therefore, a human being must recognize three main kinds of boundaries as demarcated by nature's treaties: a boundary to the power of the gods, a boundary to one's lifetime, and a boundary to pleasure."

and will be able to see [the causes of phenomena] similar to these." Importantly it is the atoms and the void itself on which Pythocles must meditate, not just the abstract extrapolations which the Epicureans draw from these. "Most important, devote yourself to the contemplation of the basic principles [i.e., atoms] and the unlimited [i.e., void] and things related to them, and again [the contemplation] of the criteria and the [goal] for the sake of which we reason these things out." Atoms exist in an activity of self-relation, and it is the activity of contemplating nature which cultivates a self-related self-sufficiency in humans as well. Epicurus considers mental contemplation of physical reality as the means to ethical contentment, which itself in turn is the condition for the perception of scientific fact. "For if these things above all are contemplated together, they will make it easy for you to see the explanations of the detailed phenomena." Without tranquility, it is not possible to successfully see the physical realities, which in turn when contemplated, give rise to tranquility: "For those who have not accepted these [ideas] with complete contentment could not do a good job of contemplating these things themselves, nor could they acquire the [goal] for the sake of which these things should be contemplated."[263]

### 5.4 Summary

This chapter has considered the atom as an epitome of the kind of ongoing activity of self-relation that characterizes both the process of perception and the ethical condition for that process. This thesis has attempted to show in Lucretius' scientific account of perception the vulnerability to delusion which is attendant upon images. This vulnerability, it has been suggested, results from the inherent *accuracy* of the images, together with their unceasing availability. The very "truth of the senses," as Vogt calls it,

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[263] *Hellenistic Philosophy* (1997:28). DL (10.116).

may ironically mislead the mind. Thus the senses cannot be doubted: rather they must be rigorously interrogated by a mind which has been conditioned out of the fear and desire which blur the distinctive "boundary stones" that demark the natural limits of mortality and identity. These natural limits must be discerned by the mind, which then must recognize not only in itself but in the world as a whole the same limits. The mind must learn to view itself as a part of the "whole" of the nature of the world: a composition of atoms and void which will inevitably dissipate and which thus cannot be an ultimate source of either terror or gratification. Failure to learn the true nature of things makes the mind susceptible to imbue both itself and objects in nature with a potential for desire and desire-fulfillment which exceed their proper limits: a potential which is strengthened by the dangers of the *simulacra.* The lover experiences a particularly powerful kind of perceptual slavery to images: not only does the object of desire appear more attractive than she is in reality, but also she becomes the object of a desire for union that is fundamentally delusional since it can never be satisfied. The only way to be free of such delusion is to flee desire that brings possession.

These dangers are countered by Lucretius as a student of Epicurus and mentor of the reader. The poem offers the reader a simultaneous "carrot and stick" to attract her to true philosophy and to test her internalization of Epicurean precepts. Not only does it invite her to adopt Epicurean doctrine, but the experience of reading itself trains the reader in the tranquility necessary to see nature properly by offering the atom as an object for mental contemplation. The atom exemplifies the self-sufficient activity of reflexivity, an activity which is free of dependence on external contingencies. After contemplating the atom as paradigmatic of *ataraxia* and internalizing it as a proleptic concept by which

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to organize and understand the cosmos, the reader, free of the blindness of desire, can

survey the world of Nature.

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