

THE DIDACTIC UNITY AND EMOTIONAL IMPORT OF BOOK 6 OF *DE RERUM NATURA*

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To the memory of Frank R. Rossiter

SCHOLARS HAVE BECOME INCREASINGLY AWARE of the missionary orientation of the Epicurean school.¹ In the case of Lucretius, however, although the intensity of his didactic purpose is recognized in his prologues, "digressions," and conclusions, its consistent influence in the scientific portions of the poem has yet to be appreciated. The story of the plague concluding Book 6 is now widely accepted as a valid expression of Epicureanism, aptly interpreted by Gerhard Müller as a final test for the reader;² but much of the preparation for that test throughout Book 6 has remained unnoticed. Even A. S. Cox,³ who understood that Lucretius' overriding purpose was to combat fear and that the last book does this by revealing the universal operation of natural law, could see only idle scientific curiosity, e.g., in the long discussion of the magnet.

Although the author of *De rerum natura* could not have lacked disinterested scientific curiosity, it would be surprising that he should indulge it particularly in connection with the topics of Book 6, topics which Epicureans considered worth studying only to secure peace of mind by eliminating mythology.⁴ The present paper will show that the contents of Book 6 are not determined by a rambling curiosity, but largely by the design of leading the reader to an attitude of philosophical detachment.

¹Interesting examples are Bernard Frischer, *The Sculpted Word: Epicureanism and Philosophical Recruitment in Ancient Greece* (Berkeley and Los Angeles 1982), who shows how Epicureans used statues of the master conveying his paternal wisdom to attract new members, and Martha Nussbaum, "Therapeutic Arguments," in *The Norms of Nature*, ed. Malcolm Schofield and Gisela Striker (Cambridge 1986) 31-74, whose interpretation of the "medical analogy" for curing unhappiness suggests that something like indoctrination was practised by the Epicurean school.

²G. Müller, "Die Finalia der sechs Bücher des Lukrez," in *Lucretius*, ed. O. Reverdin and B. Grange (Vandoeuvres-Genève 1977, Fondation Hardt) 217-221.

³"Lucretius and his Message: A Study in the Prologues of the *De rerum natura*," *G&R* 18 (1971) 1-16.

⁴This applied in principle to all of natural philosophy, but especially to phenomena such as "meteorological" events which could not be ascribed to a single cause, so that all explanations consistent with sensory evidence were considered acceptable (*Letter to Pythocles* 85-86).

I DESTRUCTION

In the poem, the cycle of birth and death, of coming-to-be and passing away, is the poetic vision in which Lucretius exhibits his message (the *species naturae*).⁵ Book 6 surveys destruction, as the first book surveys generation, and Lucretius emphasizes this feature. Thus, cosmic hyperbole, an important device throughout the poem, serves in this book to stress the destructiveness of the phenomena discussed: the "whole earth" produces the mist feeding a menacing storm-cloud (523; cf. 5.311), and in the stormy autumn, *concutitur caeli domus undique totaque tellus* (358). In 430, Lucretius adds to his account of waterspouts a "nautical exaggeration"⁶ not mentioned in Epicurus' version (*Letter to Pythocles* 104-105) by insisting on their serious dangers.

Not only in the closing description of the plague but throughout the book he gives prominence to the collective danger to mankind and civilization. Thunderbolts can

*ictu discludere turris,
disturbare domos, avellere tigna trabesque,
et monumenta virum commoliri atque ciere,
exanimare homines, pecudes prosternere passim.* 240-243

In earthquakes *multa . . . ceciderunt moenia . . . / . . . et multae per mare pessum / subsedere suis pariter cum civibus urbes* (588-590). The plague itself *exhausit civibus urbem* (1140).

It might seem unlikely that a forceful presentation of destruction should lead the reader to an attitude of detachment. We should rather expect that it would inspire fear, whereas an attempt to eliminate fear through scientific understanding of such processes—which, after all, is the purpose of Book 6—would require a calmer atmosphere, like the assuring instruction offered by Epicurus in his letters. It is easier to accept Epicurus' abstract assertion of the multiplicity of worlds than the poet's invitation to imagine the corollary, viz., the end of our own world in an earthquake.

Fortunately, it is no longer fashionable to dismiss the fearful poetic descriptions as symptoms of the author's personal psychology.⁷ P. H.

⁵This cycle has been analyzed exhaustively by Richard Minadeo, *The Lyre of Science* (Detroit 1969). Minadeo strives to demonstrate a more rigid systematic execution of the theme than we actually find—or should expect—in the poem, but his overall analysis is irrefutable.

⁶W. E. Leonard and S. B. Smith, eds., *T. Lucreti Cari De rerum natura libri sex* (Madison 1942) *ad loc.*

⁷For a partial list of the many authors taking this approach, see Carl Joachim Classen, *Probleme der Lukrezforschung* (Hildesheim 1986) vii. The underlying assumption that Lucretius' descriptions of anxiety can only reflect his personal problems was questioned by T. E. Kinsey, "The Melancholy of Lucretius," *Arion* 3 (1964) 115-130,

Schrijvers has suggested, more constructively, that Lucretius deliberately seeks to rouse the reader's fears in order to create a need for Epicurean solutions;⁸ but after Epicurus' objections to the exploitation of emotions by traditional poetry, this would be very cynical. We should attempt to gain a better understanding of Lucretius' didactic strategy.

Cosmic perspective

*hisce tibi in rebus latest alteque videndum
et longe cunctas in partis despiciendum.*

647-648

In the cycle of birth and death, the description of the plague is the matching counterpart of the opening invocation of Venus. However, the emotive effect of the poem rests not on either extreme read alone, but on the entire intervening treatment, which develops and sustains a universal perspective through such devices as the cosmic hyperbole mentioned above. In spite of the intensity of some portions, the overall effect is contemplative, like Lucretius' image of the atomic movements (*summa tamen summa videatur stare quiete*, 2.310) or the patchy distant image of frolicking sheep (2.320-322).⁹ This poetic vision owes more to Empedocles than to Epicurus,¹⁰ but if it leads the reader to a mood of philosophical detachment, then it is a kind of poetry to which Epicurus' and Plato's objections should no longer apply.

who observed that often it is motivated by readers' inability to accept the Epicurean position. Even if the poet did suffer from psychological troubles of his own, his discussions of anxiety have profound philosophical import.

⁸P. H. Schrijvers, *Horror ac divina voluptas: Études sur la poétique et la poésie de Lucrèce* (Amsterdam 1970) 251. Although quite different as regards the motive of Lucretius' strategy, this interpretation corresponds with mine in noticing the poetic technique (discussed below, 20-22) of alternately emphasizing and deflating the grandeur of natural destruction.

⁹Cox (above, n. 3, 16) states that "His vision is cosmic and contemplative rather than introspective and ethical"; I believe that it is both. Philip Hardie, *Vergil's Aeneid: Cosmos and Imperium* (Oxford 1986) 157-240, shows how both Lucretius and Vergil used a cosmic outlook for a moral goal—in Lucretius' case, philosophical detachment. The examples from Book 2 led P. DeLacey, "Distant Views: The Imagery of Lucretius 2," *CJ* 60 (1964) 49-55, to a similar conclusion.

¹⁰In the current effort to understand Lucretius in the light of Epicurus, his immense debt to Empedocles has been neglected. F. X. Jobst's excellent work *Über das Verhältnis zwischen Lukretius und Empedokles* (Munich 1907) and W. Kranz, "Lukrez und Empedokles," *Philologus* 96 (1944) 68-107 (reprinted in *Studien zur antiken Literatur und ihrem Fortwirken* [Heidelberg 1967] 352-379) should still be read. The Empedoclean origin of the poetic cycle of generation and destruction was recognized by Alister Cox, "Didactic Poetry," in *Greek and Latin Literature: A Comparative Study*, ed. John Higginbotham (London 1969) 124-161, esp. 137 ff.

The Epicurean approach combined intellectual detachment rooted in a scientific understanding of natural phenomena with a realistic acceptance of man's own mortality. Both are necessary, since when Epicurus "showed the way" to freedom from unnecessary fears and desires (6.27), he also showed *quid . . . mali foret in rebus mortalibus passim / quod fieret naturali . . . vi* (29–32). Therefore if Lucretius' goal is to build a secure peace of mind, he must lead the reader to accept death from the plague with the same equanimity with which he should view the marvels of nature. It is this tension between acceptance and detachment that drives much of the emotional dynamics of the poem and finds its resolution in the overall contemplative mood.

The most complex task of any strictly materialistic philosophy is to explain mental or "spiritual" phenomena. In a logical progression from simple to complex topics, Books 5 and 6 should have preceded Books 3 and 4. Indeed, many of Lucretius' explanations of meteorological phenomena in the first half of Book 6 derive from pre-Socratic sources and do not require atomist assumptions. The arguments are not exclusively Epicurean or even atomist, but merely scientific. They substitute reason for myth, and serve to prepare readers, regardless of their previous level of instruction, for philosophical detachment. However, the emotional strategy of the poem (at least as we have received it) is first to wean readers from their self-centred fear of death, then to fill out the universal perspective on nature which was opened in the first two books. The passionate conclusions of the middle books assume the reader to be personally susceptible to the fear of death or the passion of love. Nature delivers her diatribe in the second person singular, and the poet's plea is for acceptance of inevitable human limits. The last two books more often cultivate a universal and collective perspective, e.g., musing on the "mortality" of all compound bodies from fire and air to the firmament (5.305 ff.). This perspective is critical in Lucretius' survey of evolution and cultural history: while scholars dispute the relative importance of "optimism" and "pessimism" in Lucretius' account, both attitudes are tempered by the poet's awareness of the flux of time (e.g., 5.1276–80, 1430–33, 1454–55). The emphasis has shifted from acceptance to detachment.

By the end of the poem, a harsh reality has been revealed. Cybele and Venus have been demythologized; readers have lost their illusions of immortality and of the special importance of their own world. In the plague, the image of the "threshold of death" used for imaginary fears in Book 2 (67) becomes an imminent reality (6.1157), and the crying of the new-born child (2.580) has become that of adults. But the doctrines of Epicurus have become *solacia vitae* (5.21, 6.4), and the perspective urged upon the reader helps to take a distanced view not only of natural phenomena, but

of man's fears, which are seen impersonally and collectively, in the survey of cultural history in Book 5 as well as in the description of the plague and other natural disasters in Book 6. The reader is invited to view the sea of trouble securely with Lucretius from the shore.

Demythologizing

The reason for studying the natural phenomena treated in Book 6 is that ignorance of their true causes tempts men to superstition. The philosophical basis is described by Epicurus in the *Letter to Herodotus* 79–82 and by Lucretius in 6.50 ff. Natural processes can be ascribed to many causes, but those who do not understand them as natural processes are tempted to ascribe them to the gods, whose power they then fear. Therefore these phenomena should be explained empirically, and not by myth.

Epicurus sought to keep his followers secure from any suspicion of divine intervention even during frightening events (i.e., from the irrational fears described below, 22) by having the atomist basis for a proper understanding of phenomena always at hand; it was to be not only studied, but meditated upon, even memorized.¹¹ Lucretius' repetitions of important formulae may be related to this type of study, but he also seeks to lead the reader to experience the security of philosophical detachment through his poem.

The necessary procedure is indicated by the preface of Book 6, where Lucretius describes the consequences of "wonder" about unexplained phenomena:

*si tamen interea mirantur qua ratione
quaeque geri possint, praesertim rebus in illis
quae supra caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religiones,
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens.*¹² 59–66

Superstition assumes unlimited possibilities, which occasion fear. The cure is knowledge of the limits imposed by natural law, i.e., by the material character of the phenomena in question.

The idea of "limits" is a familiar theme in the poem; but its emotional effect depends on the perspective in which the limits of an object are seen. If we look from inside to the limits of our own life or world (as especially in Book 3), the limits demand resignation, acceptance. If we were to look at the natural disasters of Book 6 or the historic developments of Book 5 from

¹¹Diskin Clay, *Lucretius and Epicurus* (Ithaca, N.Y. 1983) 176–186.

¹²Cf. *Letter to Herodotus* 81 μὴ ὀρίζοντας τὸ δεινόν . . .

such a personal perspective, they might seem unlimited and overwhelming, like Pascal's universe; but a universal perspective reduces their importance and reveals their relativity, thus promoting an attitude of philosophical detachment.

Meteorology

The treatment of natural marvels employs a uniform strategy (with many variations) throughout the book. We can see this strategy through some examples from the treatment of meteorological phenomena, especially thunder and lightning, in the first half of Book 6.

Lines 121–131 discuss the possibility that thunder may be caused by wind bursting out of a cloud. The first nine lines express the terrible magnitude of the process through cosmic hyperbole (*videntur . . . dissiluisse capaxis moenia mundi*) and vehement language (*perterricrepto sonitu*), but the last two lines compare it with bursting a little bag:

*nec mirum, cum plena animae vesicula parva
saepe ita dat magnum sonitum displosa repente.* 130–131

Of course, Lucretius here is following the Epicurean procedure of explaining the meteorological phenomenon through an analogy with sensory phenomena; but his comparison also belittles the thunder.¹³ Thunder need cause no alarm, because it is only a limited, material process no different from the bursting of a little bag. The connective *nec mirum* moderates the effect of the previous description and puts the thunder in perspective. The result is that readers are reminded of the fear inspired by thunder without such understanding, but simultaneously enabled to detach themselves from it.

Similar reminders of the unterrifying character of the phenomena when understood empirically are achieved also by other devices. In lines 150–155, in a starkly materialist context involving fire, we are reminded that Apollo's laurel burns as fast as any other tree. The laurel is demythologized; its limits are revealed, and it is placed in perspective. Another example of this complementary interaction between the poetic and scientific themes is the personification of the winds in 189–203. The winds trapped inside a mass of clouds *magno indignantur murmure . . . in caveisque ferarum more minantur . . . quaerentesque viam* (197 ff.). This figure is typical of the ubiquitous descriptions of destructive grandeur in this book; however, it occurs within a long paragraph of relatively cool, empirical discussion, and Lucretius has

¹³Cf. *Letter to Pythocles* 87 for the general principle. For this particular comparison, see 100: βροντὰς ἐνδέχεται γίνεσθαι . . . καθάπερ ἐν τοῖς ἡμετέροις ἀγγείοις. Comparison of Lucretius' emphatically diminutive *vesicula parva* with Epicurus' simple ἀγγεῖοις confirms that the "belittling" effect is the poet's craft.

in fact just invited the reader to consider the process empirically (189). In this context, the reader becomes conscious of the personification as such, so that it actually undercuts the fearfulness which it depicts. The ferocious personification provokes a smile, rather than a shudder.

Similarly, the long and characteristically Lucretian¹⁴ description of the strife of the elements in the autumn (357–378) is kept in perspective by emphasizing the obviously inanimate nature of the elements being described. The *discordia* is *rerum*, it is only *aer* that is *furibundus*, the war is waged *hinc flammis, illinc ventis*. The fury is only elemental, and therefore “no wonder” (*nec mirum*, 375).

The essential argument is the same throughout the lengthy discussion of alternative explanations of thunder and lightning: understanding them as material phenomena diminishes them in a universal perspective and eliminates fear. This is expressed succinctly in 379–380 (*hoc est . . . naturam fulminis ipsam / perspicere et qua vi faciat rem quamque videre*), and the famous “antitheological digression” which follows is no digression at all, but a point-by-point rebuttal of the rival explanation, viz., supernaturalism. As Mayotte Bollack¹⁵ has argued, the “digression” uses thunderbolts to represent the entire world view based on supernatural intervention; but this is equally true of Lucretius’ own preceding treatment.¹⁶

Thus, the cosmic view of natural destruction, and its materialist explanation—respectively the *species* and the *ratio* of Book 6—both lead the reader towards an attitude of philosophical detachment.

Irrational fears

While describing the destruction, Lucretius often dwells upon man’s emotional response. The “psychologizing” tendency observed in his description of the plague (see below, note 34)—his tendency to turn from physical dangers to psychological anxieties—is not absent in the rest of Book 6. Lucretius not only highlights the fears inspired by destruction itself, he associates them with a deeper insecurity. Thus, the massing of dark clouds

¹⁴The notion that spring and fall are prone to stormy weather because of the natural conflict of elements during transition is not set forth in the *Letter to Pythocles*, although Bailey suggests that it was common, citing Seneca. However, it fits well with Lucretius’ theme of destruction in Book 6, and accordingly he develops it vividly and at great length.

¹⁵M. Bollack, *La raison de Lucrèce* (Paris 1978) 313.

¹⁶That is why he only summarizes in a few lines several other meteorological items treated in the *Letter to Pythocles*. Also Pierre Boyancé’s suggestion (*Lucrèce et l’Épicurisme* [Paris 1963] 266) that Lucretius selected thunder and lightning for special treatment because for Romans they were the greatest single source of superstition in meteorology is obviously correct, and entirely compatible with my statements here and Bollack’s.

*undique uti tenebras omnis Acherunta reamur
liquisse et magnas caeli complesse cavernas:
usque adeo taetra nimborum nocte coorta
independent atrae formidinis ora superne*

251–254

recalls the underworld mythology and the image of *religio super mortalibus instans*.¹⁷ Such psychologizing is especially noticeable in Lucretius' discussion of earthquakes, e.g., in connection with tottering buildings in 563–567:

*inclinata minent in eandem prodita partem,
protractaeque trabes independent ire paratae.
et metuunt magni naturam credere mundi
exitiale aliquod tempus clademque manere,
cum videant tantam terrarum incumbere molem.*

With the suspense of imminent destruction evoked by the first two lines, readers expect that *metuunt* will mean physical fear. However, Lucretius deliberately surprises them by shifting to religious fear, as if to emphasize that it is more important: mankind is afraid to *believe* that Earth is mortal (sc., because of divine punishment for the impiety—cf. 5.110). Shortly after this point—and once again, in a passage which goes beyond the corresponding portion of Epicurus' *Letter to Pythocles*,¹⁸ and therefore may reflect the poet's own elaboration—Lucretius asserts that underground gales can rock the whole earth (557–576) or rend open a great chasm (577–607). Here, through a human analogy explaining the physical tremor (*frigus uti nostros . . . cum venit in artus*, 594), he shifts adroitly first to the actual fear of destruction (*tecta superne timent*, etc., 597–600), but then to the insecurity associated with ignorance or false beliefs (601–605, quoted below, 24).

These shifts are not haphazard expressions of the author's psychological abnormality. They are skilful and deliberate art, directing the reader's attention to what is really important, viz., the emotional response to natural destruction. Death itself must simply be accepted, but shifting the emphasis from physical fear to the insecurity arising from ignorance of natural causes encourages readers to take a more detached view of mankind's anxiety, because *they* need no longer suffer from this type of fear.

It is important to an understanding of the entire book as well as its concluding passage that man's collective fears are seen here in the same perspective as the anxieties of those whose "mask is torn away" in times of crisis (3.41–58), i.e., as the irrational anxieties of those whose conviction is not underpinned by scientific understanding.

¹⁷The ethical import of the same allusions in Book 4 has been noticed by A. Dalzell, "Lucretius' Exposition of the Doctrine of Images," *Hermathena* 118 (1974) 22–32, at 30: "In setting out his doctrine of perception Lucretius wishes to explain not only how we see tables and chairs but how our minds are misled by false visions . . . of religious myth."

¹⁸Cf. Bailey *ad loc.* and Epicurus' *Letter to Pythocles* 105.

Epicurus mentions briefly that irrational fears can be experienced by such persons even if they do not explicitly subscribe to myth, ἀλόγῳ γέ τινι παραστάσει (*Letter to Herodotus* 81). Lucretius too has such cases in mind:

*nam bene qui didicere deos securum degere aevom,
si tamen interea mirantur qua ratione
quaeque geri possunt, praesertim rebus in illis
quae supra caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religiones.* 58-62

His account of the uncertainty of people subject to irrational anxiety helps to disengage the reader from such fears. During earthquakes,

*proinde licet quamvis caelum terramque reantur
incorrupta fore aeternae mandata saluti;
et tamen interdum praesens vis ipsa pericli
subdit et hunc stimulum quadam de parte timoris,
ne pedibus raptim tellus subtracta feratur,* 601-605

and in the plague

*nec iam religio divom nec numina magni
pendebantur enim: praesens dolor exsuperabat.* 1276-77

Polystratus, another Epicurean whose work on irrational anxiety has survived, also insists that those who lack a scientific understanding of their beliefs are subject to contrary "suspicions" (ὑποψίας),¹⁹ but instead of analyzing their inner experience at such moments, he essentially attacks the inconsistency between their beliefs and their actions.²⁰ Here, Lucretius uses the Epicurean principle that true empirical understanding will be obtained by attending to immediate sense perceptions and feelings (τοῖς πάθεσι προσεκτέον τοῖς παροῦσι καὶ ταῖς αἰσθήσεσι, *Letter to Herodotus* 82) to analyze the subjective experience of the insecure persons themselves; *praesens vis ipsa pericli* (603) represents the παρούσα αἰσθησις, and *praesens dolor* (1277) is the παρὸν πάθος, of persons whose beliefs are being counterevidenced by their own perceptions.²¹ The penetrating disclosure of their pathetic confusion encourages the reader to take a distanced view of their fears.

The famous passage from Book 3 (41-58) shows why this emphasis is suitable for Book 6: such fears are triggered by external crises (*tum demum*

¹⁹Giovanni Indelli, ed., *Polystratus: Sul disprezzo irrazionale delle opinioni popolari* (Naples 1978); see, e.g., IX 25, XXXI 24.

²⁰Similarly Epicurus *On Nature: Book 28*, fr. 13 vii 13-ix 11 suggests that false opinions can be counterevidenced by the disadvantageous results of action based on them; see D. Sedley, "Epicurus: *On Nature. Book 28*," *Cronache ercolanesi* 3 (1973) 5-83, at 5-52.

²¹Polystratus' praise for the consistency of truth is a close parallel, but still does not attempt to describe the subjective experience: πανταχόθεν αὐτῇ[ῇ] συμφωνοῦσα καὶ οὐθαμ[ῇ] ἀντιμαρτ[υ]ροῦσα, ὥσπερ τὸ ψεῦδος, ἀσάλευτον ποιεῖ περὶ ἐκάστου τὴν πίστιν (XII).

... *eripitur persona, manet res*). But insecurity arising from ignorance need not be associated with the fear of imminent destruction. In Book 5, Lucretius argued that religion originates in wonder at the order of planetary motions in a clear sky (5.1210), not in the excitement of thunderstorms. The irrational anxieties activated by natural disasters are the same as those experienced by persons ignorant of causes during moments of reflection on a world which they do not understand. They spring from the same sense of "wonder."

Nil admirari

Lucretius develops this theme throughout the book. Always describing the insecurity as "wonder" (see above, 20), he keeps it in mind by means of the "psychologizing" just described, or by such reminders as his sarcastic introduction of the magnet (*hunc homines lapidem mirantur* 910)²² or the frequent use of the transition *nec mirum* where he offers scientific explanations of destructive phenomena so that his reader will no longer "wonder."

The release from "wonder" is never mentioned in Epicurus' treatment of this subject in the *Letter to Pythocles*,²³ which has instead another recurrent theme: it is a strongly worded polemical attack on those who presume to specify a single cause for meteorological phenomena, when many possible explanations are consistent with sensory data. Epicurus' letter is addressed to Epicureans. He reacts defensively regarding a part of his doctrine which was seen as a weakness by other philosophers (viz., multiple causes). Lucretius does not emphasize this issue. He is writing for the Roman public, and his closing book is an initiation not only to Epicureanism, but to philosophy (a protreptic). He therefore presents the Epicurean doctrine with reference to a proverbial expression for the philosophical detachment sought by all the Hellenistic schools.

The idea of philosophical detachment as freedom from wonder found its classical expression in Horace's *Epistle* 1.6. Horace's epistle is popular and eclectic, as is the sentiment itself, which can be traced back to Pythagoras.²⁴ However, Horace's description shows how Lucretius influenced the content of this cliché.

²² Cf. the spring at Hanno, 850 *hunc homines fontem nimis admirantur*.

²³ *Letter to Herodotus* 79 does contain one reference to wonder: astronomers, says Epicurus, may be even more than usually inclined to superstitious fear because their θαύματα at the celestial patterns which they have observed finds no solution.

²⁴ For a convenient list of references see Ross S. Kilpatrick, *The Poetry of Friendship: Horace, Epistles 1* (Edmonton 1986) 141, n. 68. The special import of this theme in Lucretius and in Horace has been obscured by a tendency simply to note its ubiquity among ancient philosophers. More important are the differences in the precise meaning and (positive or negative) value assigned to "wonder" by different schools, which are elaborated very satisfactorily by Peta G. Fowler, *A Commentary on Part of Book Six of Lucretius DRN* (D.Phil., Oxford University 1981) 133 ff.

The standard Hellenistic conception is evidenced by Cicero, who mentions *nil admirari* as the mark of a philosopher twice in his *Tusculan Disputations* (3.14.30 and 5.28.81). In both cases, Cicero's formula is *nil admirari, cum acciderit*; it is a response to events, a practical orientation. But Horace describes it differently:

*hunc solem et stellas et decedentia certis
tempora momentis sunt qui formidine nulla
imbuti spectent; quid censes munera terrae
quid maris extremos Arabas ditantis et ludos
ludicra, quid plausus et amici dona Quiritis,
quo spectanda modo, quo sensu credis et ore?* Ep. 1.6 3-8

Although the following lines embrace a wider, more eclectic content, the fearless contemplation of the regular celestial patterns is placed first and emphasized as the most dramatic embodiment of philosophical detachment. The reference to Lucretius' description of the origin of religion is unmistakable: compare 5.1183-84 (*caeli rationes ordine certo / et varia annorum cernebant tempora verti*) and 5.1204-05 (*cum suspicimus magni caelestia mundi / templa super stellisque micantibus aethera fixum*). But while other schools, particularly the Stoics, saw superstition in the wonder at exceptional natural marvels, the objection to religious inferences of divine orchestration from the regular patterns of nature was specifically Epicurean.²⁵ By seeing the same irrational awe in both types of situation, Lucretius' protreptic takes on a specifically Epicurean character even when it does not employ atomist arguments.

The markedly visual orientation of Horace's description (*spectent ... spectanda ... species* [11]) also reflects Lucretius' contemplative perspective; philosophical detachment is no longer simply an attitude of indifference to events, but a way in which they are seen (cf. Lucretius' *placata posse omnia mente tueri*, 5.1203).²⁶

Just as Virgil's famous *felix qui rerum potuit cognoscere causas* showed that Lucretius had become a model of scientific learning, Horace's letter, in spite of—or precisely because of—its eclectic and popular orientation (all of the philosophical allusions in the letter were familiar), suggests that

²⁵Kiessling-Heinze cite 5.1183 and 1218, but 1183 and 1204 would be more appropriate, since Horace speaks only of regular patterns, not of thunderbolts. Fowler (above, n. 24, 136) writes: "Fear/amazement as a reaction to the sun, moon, stars, etc. as opposed to storms etc. is found only in writers showing a Democritean or Epicurean influence, e.g., . . . Hor. Ep. 1.6.1 ff." whereas "Cleanthes and the Stoics accepted [such wonder] as one of the causes of true religion (Cic. ND 2.14)" (134).

²⁶As DeLacey (above, n. 9) stresses, the contemplative mode of detachment was characteristic of the poet: "For Lucretius, taking the distant view is in effect pursuing the life of contemplation," whereas for less poetic Epicureans "it was living by rules, not gazing on the distant scene, that gave them detachment and security" (55). In this regard, therefore, Horace's description is particularly colored by Lucretius.

Lucretius' version of the proverbial theme had become a model of philosophical detachment.

Earth

Another conspicuous difference between *De rerum natura* and the *Letter to Pythocles* was observed by Friedrich Klingner:²⁷ where Epicurus dispassionately notes the multiplicity of worlds in the universe, Lucretius dramatically stresses the corollary that our world is "mortal." This thesis plays an important role in his cosmic vision. He dwells upon it at the end of Book 2 and in the middle of Book 6 in connection with earthquakes, as well as in Book 5, where it is actually demonstrated. Klingner seems to ascribe Lucretius' emphasis to his personal preoccupation, but it too is an indication of the popular orientation of his mission; Lucretius views the world's mortality, like that of the soul, as a surprising proposition which the reader may resist. That is why the treatment of earthquakes stands at the centre of Book 6 and includes important additional reflections on the major themes. In Book 6, just as at the end of Book 2, the recognition of the world's mortality marks the application of materialist principles to Nature, and will be followed by the inevitable application of the same principles to man.

II UNITY OF THE REMAINDER OF BOOK 6

The rest of Book 6, where Lucretius turns to terrestrial phenomena, appears particularly to support the impression that he discusses a random selection of natural marvels. There are serious textual problems with transitional lacunae, which could help to explain the apparent lack of unity. However, no suggestion so far has accounted satisfactorily for everything that is included (and omitted).²⁸

Certainly Robin (*ad* 6.703 ff.) was right in asserting that Lucretius' selection of topics in the second half—most of which are not in the *Letter to*

²⁷F. Klingner, "Philosophie und Dichtkunst am Ende des zweiten Buches des Lukrez," *Hermes* 80 (1952) 3–39, reprinted in Classen (above, n. 7) 383 ff.

²⁸Some commentators (see Bailey p. 1646) draw a sharp distinction between phenomena involving terror, which dominate the first half of the book, and those causing only wonder, in the second half. But the theme of wonder is characteristic of the entire book, and much of the second half also has elements of terror. Neither do these commentators explain why Lucretius should arrange his topics in this way. Lines 703–711 discuss the possibility that a phenomenon may have multiple alternative causes (i.e., only one can actually apply) rather than multiple actual causes (applying in different instances), and it has been suggested that these lines mark a transition to a study of phenomena which, because they are unique, can have only a single actual cause. But the only unique phenomenon discussed is the Nile, which directly follows 703–711. The volcano was not unique. Neither was Lake Avernus (738). The formula *fit quoque* in 829 (compare *forasan*, 729) shows that already here we are again concerned with multiple actual causes.

Pythocles—seems to have been drawn from a handbook of natural marvels. Nevertheless, they were not chosen solely for the sake of what to Epicureans would appear as idle intellectual curiosity.

Compositionally, these topics, with the exception of the magnet, fall into two distinct series:

(1) Aetna, Avernus, and the scientific treatment of disease preceding the plague; all of these sections still treat destructive phenomena, and all of them devote considerable space to a systematic, gradual development of principles summarizing essential aspects of atomist theory—particularly the theory of destruction—leading up to the plague. Indeed, this theoretic preparation for the plague is the main unifying theme in the second half of Book 6: Lucretius continues to cultivate detachment and perspective, but at the same time he focuses increasingly on man and human limitations, and renews the call of Book 3 for acceptance. Obviously this development is more important than the topics themselves, and it is on this development that my analysis will focus.

(2) In contrast, topics such as the Nile, the spring at Hanno, and the fountain of Aradus are in no way frightening, nor do they contribute to the continuing exposition of atomist principles of destruction leading up to the plague. Perhaps these marvels were so famous that Lucretius felt obliged to include them, not because of his own interest, but to satisfy the Roman reader, who might object, "Certainly you can explain less extraordinary phenomena, but can you explain these?" As Lucretius observes, they occasioned wonder.

The discussion of the magnet stands out as the only completely dispassionate topic which does make an important contribution to the argument.

Aetna

In Lucretius' treatment of Aetna, only lines 680–702 actually concern the volcano. The greater portion of this section (639–679) is an important development of the *nil admirari* thesis, which already subtly begins to shift attention from the Earth to man.

Lucretius opens with a short, but powerful description of the terror of Aetna, in which he deliberately converts the physical fear of the onlookers into fear based on ignorance:

*fumida cum caeli scintillare omnia templa
cernentes pavida complebant pectora cura,
quid moliretur rerum natura novarum.*

644–646

He urges the reader, however, to place the volcano in a universal perspective (647–648). Remember, he says, that one world (*caelum . . . unum*, 650) is as

small a part of the universe as a man is of the world. If you fully understand this point and bear it clearly in mind, he says, *mirari multa relinquo*.

The analogy between the relative smallness of the world and man leads logically to the statement of atomist principle: since there are many generative seeds of things, the Earth and sky must contain, as well, sufficient destructive particles to cause disease; and likewise the universe must contain sufficient destructive material to make the Earth shake and throw up volcanic fires (663 ff.). However, the progress of this argument is delayed, because Lucretius wishes to exploit this same analogy not only to assert the importance of a universal perspective for philosophical detachment, but also to direct the reader's attention beyond the volcano and back to the smallness and destructibility of our world—and, already at this point, of man:

*numquis enim nostrum miratur, si quis in artus
accipit calido febrim fervore coortam
aut alium quemvis morbi per membra dolorem?* 655-657

This is followed by a description of pathological symptoms as precise and vivid as any in the closing passage on the plague. Indeed, there are direct verbal similarities (cf. 659 *oculos invadit in ipsos*, 1207 *ibat et in partis genitalis corporis ipsas*).

Bailey's comment on this text is worth quoting (p. 1651):

... because in the man the sensations of disease etc. are brought about by similar physical atomic causes to those which produce the upheavals in the world ... Here, then, the idea is put in its widest form: the same physical causes of disruption produce disease in a man and the upheavals in the world.

Ostensibly the explicandum of the analogy is the upheavals of the world. Its application to man, which will be developed in the rest of the book, is taken for granted without undue emphasis. Yet, Lucretius has taken the opportunity not only to initiate the thought of man's destruction in a relatively dispassionate way, but to inject a grim hint of the plague, and even, for attentive readers, already to suggest the solution to that final disaster (*numquis enim nostrum miratur*). Before he finally explains the volcano, Lucretius underlines the importance of this section by reiterating the relativity of all things in a universal perspective (673-679).

Incidentally, in the brief explanation of the volcano itself, we see yet another poetic device for deflating its terror and wonder. After ascribing the eruption to subterranean wind, Lucretius describes vividly its ferocity, then draws a surprising conclusion:

*crassa volvit caligine fumum,
extruditque simul mirando pondere saxa;
ne dubites quin haec animai turbida sit vis.* 691-693

His "intention to demythologize, to remove superstition, is apparent: hot air replaces the giant in torment" (Hardie, above, note 9, 181).

Avernus

As we advance from Aetna through the Avernian sites to the magnet, the poetic depiction, or *species*, of destruction becomes less insistent and dramatic, while the atomist principles, or *ratio*, of destruction are progressively expounded. The "Avernian" sites deadly to birds pose no imminent threat to the reader, but neither is this topic devoid of fearful connotations. Such sites were thought to be entrances to the Underworld, and some had oracles of the dead (see Bailey *ad loc.*). Lucretius therefore first gives full expression, not to their terror, but to their mysteriousness—then deflates it with appropriate sarcasm, and proceeds to discuss the phenomenon empirically (*de re ipsa dicere*, 768).²⁹

Again a lengthy exposition of general principles precedes the explanation of the marvel. Lucretius reiterates that there are destructive, as well as generative, principles in the Earth, and stresses the relativity of their effects; different animals are susceptible to different effluents (769–780). This enables him again to shift the application of this general argument from birds to man: *deinde videre licet quam multae sint homini res / acriter infesto sensu* (781–782). This is followed by a series of examples of effluents noxious to man, again with a detailed description of the symptoms. Here too, the reference to man is, formally, an analogy to explain the avian phenomenon (818–819), but it is not needed to advance the argument. As commentators have observed, the statement of general principles in 769–780 prepares for the rest of the book, including the phenomenon of disease. But its explicit application to man at this point only underlines the fact that Lucretius is not interested in the avian phenomenon as a scientific curiosity, but as a stepping-stone towards philosophical detachment. His appeal to the reader to recognize the powerful effects of effluents in one example after another illustrating human susceptibility exhibits a sense of urgency, and a crescendo of intensity (e.g., the repetition of *quam facile* in 801 and 803, and of *nonne vides* in 806 and 813) which obviously are not for the sake of the birds, but rather are reminiscent of Book 3; Lucretius is pleading with the reader to accept the principles behind human destruction.

The shift from animals to man is actually characteristic of Lucretius. Many of the famous examples of Lucretius' sensitivity to animals and his keen observation of their behavior serve to illustrate or pave the way for

²⁹The *res ipsa* can not simply refer to the Avernian site, because the next fifty lines concern the relevant atomist principles with special reference not to birds, but to man. Comparison with line 379 (above, 22) and Epicurus' references to knowledge of the φύσεις of phenomena in *Letter to Herodotus* 78 and 79 suggests that for Lucretius to speak *de re ipsa* is to give a materialistic analysis of phenomena.

matters of human import. The cow searching for her sacrificed calf in Book 2 illustrates directly the uniqueness of individuals, but is obviously intended too as a censure of sacrifice. The dreaming dogs in Book 4 preoccupied with their daytime obsessions lead to the attack on romantic love. The observations of animal communication in 5.1063 ff. relate to the origin of human language.

When Lucretius finally does provide a fairly simple explanation of the death of the birds, he expresses pointedly its inevitability as well as its pathos:

*cum iam cecidere veneni
in fontis ipsos, ibi sit quoque vita vomenda
propterea quod magna mali fit copia circum.* 827-829

*claudicat extemplo pinnarum nisus inanis
et conamen utrimque alarum proditur omne.
hic ubi nixari nequeunt insistereque alis,
scilicet in terram delabi pondere cogit
natura, et vacuum prope iam per inane iacentes
dispergunt animas per caulas corporis omnis.* 834-839

After the long description of human debilities used to illustrate the relativity of noxious effluents, the reader should be at least partly conscious of the human implications of this rather moving poetic description.

The magnet

It should not occasion surprise that Lucretius chose a topic entirely devoid of terror to complete his development of the atomist principles which explain the plague. The animated description and rejection of the superstitious cult of Magna Mater follow a sober scientific exposition of the generative principles contained in the Earth. The scientific point of departure for the passionate attack on romantic love in Book 4 is the mechanics of nocturnal emission. The satiric rebuttal of the Jupiter myth earlier in Book 6 was preceded by a dispassionate materialist explanation of thunderbolts. Now Lucretius explains the destructive principles in the Earth and in the universe in connection with the magnet before applying them to man. Always the reader is first quietly compelled by reason, then challenged emotively to accept the consequences.

Since the consequences soon to be encountered are perhaps the grimmest in the poem, Lucretius contrives to present his argument in a completely dispassionate atmosphere. He introduces the exposition of general principles as if it were directed only towards explaining the magnet, and demands the reader's careful attention because, he says, the explanation will be complicated (917-920, 997-1001). However, Lucretius here is not so much indulging his own scientific bent as taking advantage of the reader's

curiosity about this famous marvel so that (to use his own analogy) the draught of his instruction will be swallowed. The lengthy general exposition which follows is quite unnecessary for the magnet. Lucretius himself is impatient to conclude the topic (1081–83), and he registers his usual contempt for its popular fascination (910; cf. above, note 22).

Lucretius takes up again the ubiquity of effluents beneficial to some species and noxious to others, always stressing this element of relativity, which links the doctrine of inherent limits with the cosmic perspective. He reminds us that only atoms and void exist; the void in compound bodies is their “pores,” and it is through matching pores that effluents can penetrate a compound body. These points are made in a very lengthy exposition, replete with verbal echoings of passages especially from Books 1 and 4, as well as statements echoed later in the treatment of disease and the description of the plague. The correspondences have been observed, and it is understood that Lucretius is reviewing fundamental principles (atoms and void), and adapting them to the context of the magnet and disease (e.g., through the emphasis on pores).³⁰ However, the full importance of this section in the structure of the poem has not been recognized. In Book 1, after the invocation of Venus, the same principles were presented specifically in their generative aspect; now, before the plague, they are presented with the emphasis on their destructive aspect. Just as complementary atoms combine to form stable compounds and life, complementary void (pores) exposes compound bodies to corresponding effluents which dissolve them in death. The attraction of the magnet for Lucretius himself is that it employs the mechanism of receiving effluents through complementary pores for a uniquely non-destructive function. It therefore offers an occasion for presenting the *ratio* of destruction in a context which is as extraordinarily dispassionate as the *species* of destruction in the plague is moving.

Meanwhile, the emphasis on relativity, with the long list of examples both here and previously in the Avernian section, serves to maintain the universal perspective and to place man within it.

The plague

The section on disease leading up to the plague need only spring the trap which has already been set. In 1106 ff., the relativity of destructive effluents is applied to man by the citation of different diseases in the four corners of the world (Britain, Egypt, etc.). The reference to the far-flung

³⁰Leonard and Smith compare “many of the lines” of 921–935 with 4.217–229. Compare too 936–958 with 1.329–369, and 990–997 with 2.386–397. Book 6.954–958 foreshadow 1096–1100. Bollack (above, n. 15, 404 f.) lists corresponding passages in detail. Bollack (358) calls the review a climax of *DRN*, and Bailey notes adaptations, not only here, but previously; for example, in 790, the fact that beneficial and noxious effluents are emitted from the Earth *separately* is new.

quarters of the world, a common device in Roman poetry, helps to sustain a cosmic perspective, and momentarily withholds the shock by keeping the threat in remote places. The trap shuts in 1133 ff. when Lucretius points out that, of course, it makes no difference whether we move to another place or the noxious effluents come to us. This realization, combined with the description of the startling movement of the noxious atmosphere of plague from remote Egypt to the centre of the Hellenic world, conveys the ineluctable character of the destruction.

The plague itself has been well researched. A number of authors have observed how Lucretius' Epicurean biases and "psychologizing" transform Thucydides' report into a moral as well as a medical crisis, and how the scene of death closes a ring structure with the scene of generation opening Book 1.³¹ Indeed, one purpose of the present study has been to redress the balance by revealing the development of these same features through the body of Book 6. I shall therefore not discuss the plague itself; however, the interpretation which I have proposed clarifies the appropriateness of Lucretius' choice and treatment of his source. One aspect of the detached perspective cultivated in the last two books of the poem is that man's fears are viewed collectively and impersonally, with the moral distance of one who comprehends their unreason. Instead of the intimate details of the personal fears of an individual expecting death or possessed of romantic love, we survey the behavior of society in cultural evolution and the reaction of entire cities to natural disasters, observing especially man's irrational fears and desires. Thucydides, who also sought a universal perspective (*κτῆμα ἐς ἀεί*), described the collective disaster of the plague in a general and impersonal way, but also with moral distance, observing that demoralization and anomy were the worst aspects of the plague (Thuc. 2.53). Of course, the moral values presupposed by his description were not identical with those of Epicureans; but Lucretius' Epicurean "twists," interpreted by some scholars as mistranslations, enabled him to exploit creatively this classical model of intellectual detachment in the face of collective disaster and demoralization.

SUMMARY

Throughout Book 6, the imagery of destruction completes the natural cycle. In the first half, the terror of nature is powerfully depicted, but at the same time eased by being demythologized and reduced to limited, empirical phenomena which can be understood with some detachment from

³¹Discussion of the plague was initiated by H. S. Commager, Jr., "Lucretius' Interpretation of the Plague," *HSCP* 62 (1957) 105-118. For a good example of current opinion, see David J. Furley, "Lucretius," in *Ancient Writers: Greece and Rome*, ed. T. J. Luce (New York 1982) 617.

a universal perspective. After more explicit instruction regarding this way to detachment in the section on Aetna, Lucretius develops the theoretical (destructive) counterpart of the principles of generation presented in Book 1, in a relatively dispassionate context, but with increasingly rigorous inevitability. At the same time he gradually focuses the theme of destruction on man, who is incorporated in the universal perspective in the discourse on relativity. The transition from nature to human destruction starts in the middle of the book with the recollection of the mortality of our world. The choice of the remaining topics is determined largely by this program. The magnet, in particular, provides a fully dispassionate occasion to present the universal principles of destruction (with the critical role of pores). Finally the reader is challenged by the grim conclusion to look at concrete human suffering—both its inevitable physical component and its unnecessary anxieties—with the same detachment.³²

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