

IX

Hellenistic Philosophy: The Epicurean School

1. THE PHILOSOPHERS

Were we not upset by the worries that celestial phenomena and death might matter to us, and also by failure to appreciate the limits of pains and desires, we would have no need for natural philosophy. There is no way to dispel the fear about matters of supreme importance for someone who does not know what the nature of the universe is, but retains some of the fears based on mythology. Hence without natural philosophy there is no way of securing the purity of our pleasures.

Epicurus, *Principal Doctrines* 11–12.

Empty are the words of that philosopher who offers therapy for no human suffering. For just as there is no use in medical expertise if it does not give therapy for bodily diseases, so too there is no use in philosophy if it does not expel the sufferings of the soul.

Epicurus, as quoted in Porphyry,
To Marcella 31.¹

Epicurus (342/1–270 BCE), the founder of the Epicurean school, was born in Samos, of Athenian parents, seven years after the death of Plato.² His father, Neocles, a school master, had settled there in 352 with two thousand other Athenian *cleruchs*, colonists retaining a diminished form of Athenian citizenship. Economic adversity probably made emigration attractive to Neocles, for in leaving Athens he gave up a number of rights, including his vote in the Assembly, and the colonists would not have been popular with the Samians. Moreover, his profession enjoyed little status, and a number of later authors referred to Epicurus contemptuously as the son of a school teacher. It is possible that Epicurus's mother, Chairestrate, was a superstitious woman who performed purifying rites for her neighbors, and if this is so, her son's distaste for superstition may be traceable in part to his observation of her fears and anxieties. In one letter he offers his mother reassurance that her dreams have no meaning. In any case, Epicurus's Plebeian origins made him much inferior, in Cicero's eyes,

¹This and the second quotation translated in Long and Sedley (1987) 155.

²For Epicurus's life, see Diogenes Laertius X 1–16, and the extended discussion in DeWitt (1954). DeWitt (1954) is the most thorough treatment of Epicurus, and still an authority.

to such as Plato, no matter what his doctrines, and Cicero's attitude must have been that of many.

Epicurus had three brothers, but it became clear early on that he was the gifted one, and his entire family devoted themselves to his education and career. He maintained close relations with his family and returned their kindness in later life whenever he was able. He was also, however, well aware of his own brilliance, and given to intellectual pride and rebellion from an early age. After establishing his own school he refused to recognize the influence of any teacher on his thought. The contempt he endured due to his lower class origins invited rebellion, and as an outsider in the upper-class intellectual community he must often have enjoyed deploying damaging insights against his wellborn peers. Epicurus studied four years with Pamphilus, a Platonist, in Samos. Then, in 323–321, he went through the military training required of an Athenian citizen. He served at the same time as Menander, the comic poet, who, whether he was an acquaintance or not, exhibits knowledge of Epicurean views in a number of his plays. This time in Athens was unusually eventful. Aristotle died in 322, and Diogenes the Cynic, at Corinth, in 323. More important, Alexander the Great died in 323, and as Athens attempted to break free of the rule of Macedonia Epicurus would have had the opportunity to observe the whole affair at close range. It ended, inevitably, in ignominy and a renewed Macedonian occupation of the city, and, if Epicurus's own low status had not already set him against it, this might have been the beginning of his rejection of the political life. Certainly the suicide of Demosthenes and execution of other popular leaders after the Macedonian victory would have gone far to convince him that rhetoric was not a particularly useful study, and that good speakers are rarely men of wisdom. An independent democracy was no longer possible, and, clearly, ideal Platonic city-states were only so much hot air.

After his military service, Epicurus's poverty forced him to teach elementary school for a few years at Colophon, where he lived with his parents, who had been expelled from Samos in 322 by the Macedonian regent, Antipater. He then seems to have spent some time in Rhodes studying with the Peripatetic Praxiphanes, who was especially interested in literary criticism and fine writing (as opposed to rhetoric), but the young man was dissatisfied with the orthodoxies of his day, and after giving Aristotelianism a try, probably to satisfy his parents, he returned to his first inclinations, and transferred his studies to the school of Nausiphanes, a Democritean who resided in Teos, near Colophon, teaching rhetoric, mathematics and philosophy. Nausiphanes had conceived an admiration for the character of Pyrrhus, the Skeptic, and seems to have absorbed from him the ideals of imperturbability and withdrawal from public life, ideals he passed on to his student. The influence of Pyrrhus (and perhaps of Buddhist doctrines learned by Pyrrhus in India) may also be present in Epicurus's insistence that we have free will (though he handles the topic clumsily compared to Buddhism) and

that only things useful for a happy life should be investigated and taught by the philosopher. Epicurus was said to have inquired often about Pyrrhus from Nausiphanes. He remained with Nausiphanes for a number of years, and must have been strongly influenced by him, though he attacked him bitterly in later life, and one suspects a falling out as the prideful student formed his own views and began to take issue with his teacher. In particular, Epicurus disagreed with Nausiphanes on the issue of free will and determinism, and the function of philosophy, though Epicurus also condemned homosexuality, which he accuses Nausiphanes of practicing with his students. It seems possible that he followed the ethical views of Pyrrho, at least as he understood them, in preference to the somewhat similar Democritean views of his teacher, and this, too, might have created friction. From the little information we have about Nausiphanes's thought, it seems Epicurus may have developed his theory of knowledge directly from Nausiphanes's reaction to Pyrrho. After the break with Nausiphanes Epicurus spent some time in Colophon, making a living by teaching elementary school. He later espoused a system of education calculated to lead even the youngest students on by the lure of pleasure rather than the threat of punishment. Epicureans always had their own elementary schools run on their own principles, much as Christians did later.

Epicurus first took on advanced students about 311 at Mytilene on the island of Lesbos. There, his public teaching enraged the citizenry, so that he had to move to Lampsacus within a year, where he continued to teach, but with more circumspection and in private. Piecing together the evidence, it seems he was accustomed to proceed to the gymnasium in Mytilene, where the young men exercised, and all manner of teachers could be found seeking students. He debated with the Platonic philosophers there, who apparently were generally recognized as legitimate teachers of the young, arguing for hedonism, and against the teaching of rhetoric and other useless knowledge. He made such a nuisance of himself that the gymnasiarch, the official in charge of regulating activities in the gymnasium to protect the young men from corrupting influences, with the encouragement of the Platonists, brought charges against him. The situation was serious enough so that Epicurus found it necessary to flee the city in winter, when the unpredictable storms of the Mediterranean usually ruled out sailing, and only made it to Lampsacus with some difficulty. After that he avoided public fora, perhaps recognizing that the ethical views he had been espousing should have suggested to him all along he would do best to do so.

Epicurus probably fled to Lampsacus because, unlike Mytilene, it had no philosophers of note in residence. Indeed, the political activities of some Platonists in the past had rendered the Academy unpopular there. Moreover, there seems to have been something of a history of philosophical tolerance (Anaxagoras had

fled there when forced to leave Athens), and Lysimachus governed there, not Antigonus who ruled in Mytilene, whom he was no doubt anxious to get away from. When Epicurus arrived, he apparently found Lysimachus's steward, Mithres, in charge, and successfully pleaded for his protection. (Later, when Mithres fell out of favor, he was befriended in his turn by Epicurus in Athens.) Epicurus seems to have been something of a court philosopher for a while, and in that capacity he came athwart the Cyrenaic hedonist Theodorus, visiting from Egypt, an abrasive man who alienated many of those who knew him. In Lampsacus Epicurus found a number of people ripe for philosophy, and recruited the chief members of his school in Athens, including Metrodorus, Polyaeus the mathematician, Colotes, noted for his satirical attacks on other philosophers, and the rich official Idomeneus, who became his chief financial patron. Most of these people seem to have been members of the school of the Platonic astronomer Eudoxus, who had died in Lampsacus some forty-five years earlier. Eudoxus was reputed to have said it made no difference what people thought of the Greek gods, such as Zeus and Hera, since nothing could be known about them, but the stars must be admitted to be wise gods worthy of reverence,³ and Epicurus apparently attacked this view as, first of all, unduly skeptical, and, in the second place, un-Greek, since it placed the Eastern Astral deities above the gods of Homer. He himself held that the gods were as Homer represented them, and had actually been "seen," though he thought they did not interfere in human affairs, being mere ideals of the intellect, and even if they had enjoyed an existence outside the intellect, he thought, they were supremely blessed and so would have had to be free of all trouble on behalf of others. He certainly opposed the notion that the stars, or any other natural object of our world, were gods. So in Lampsacus Epicurus attempted to ally himself, in his own peculiar way, with orthodoxy, and had much better luck than he had had in Mytilene. Plato deals with Homer somewhat harshly, and Epicurus had learned to take advantage of this, presenting himself as a defender of an ancient Hellenic faith inspired by an Apollonian vision of the perfect and happy gods even as he attacked the religious superstition enshrined in Plato's notions about the afterlife and divine sanctions for human vice and virtue. It seems to have been in Lampsacus that Epicurus developed the literary form of the Epistle, taken over later by the Christians, and his habit of avoiding any reference to contemporaries by name, dealing only with schools, doctrines, and those safely dead. He was not yet perfected in diplomacy, however, and he alienated Timocrates, who felt slighted when his brother Metrodorus was preferred to himself, withdrew and remained an enemy, slandering Epicurus for his "shameful flattery" of Mithres, while Epicurus wrote letters against him to Lysimachus.

³Plato, *Epinomis* 984D, viewed by DeWitt (1954) as the work of Eudoxus.

Epicurus finally settled at Athens in his school, the Garden, located between the city and Piraeus, about 307/6, at the age of 34, until his death. He was financially independent at this point, and the move was for the sake of settling at the center of Greek intellectual life, and to return to the city of which he was a full citizen, not for the sake of making a living. Moreover, the Platonists and Peripatetics had both recently made themselves unpopular in Athens, and he may have felt they were in no position now to do him much harm. His school was his own home, and Epicurus clearly was still resolved not to teach publicly. Zeno the Stoic had arrived in 301, and hostility between Stoicism and Epicurus is often assumed, especially since Cicero pits the two against each other in his dialogues, but the hostility began only with Chrysippus, after Epicurus's death, and it was not Stoicism, but Plato, that Epicurus himself especially intended to refute.⁴ Personally, Epicurus was rather sickly, and knew how to use his ill health to dominate others. He was much attached to friends and study, and he seems to have been as attractive a person to his friends as he could be abrasive and vulgar toward those who questioned his views.⁵

The "school" was not the usual school of advanced studies in Greece, but rather a group of friends following a common ideal of life together in retirement from the rest of society, under the direction of Epicurus. Epicurus aimed to form the character and lives of his students through the association, and was viewed as a kind of religious savior by his followers, who took an oath to follow him as disciples. The organization was hierarchical, with each person assigned his well defined place. There was a pattern for this in the Pythagoreans, of course, but Epicurus's was an Enlightenment religion, which sought, like the Deism of the Encyclopedists in France in the 17th century, to supplant old superstition with practices and beliefs rooted in reason and science. Epicurus himself actively sought to spread his societies all over the Mediterranean world, admitting women and slaves as well as educated men. For the sake of proselytizing, Epicurus wrote brief summaries of his views, textbooks and handbooks for those who had vowed to follow Epicurean precepts, as well as longer and more detailed treatments for scholars. Since his intention was to convert people to reason, even the handbooks are argued and rise from first principles, patterned after the geometrical texts that inspired Aristotle's treatment of science in his *Posterior Analytics*, but such texts still represent a departure from the literary forms of such as Plato, and even of Aristotle, who, despite his theory of science, wrote dialogues and

⁴De Witt (1954) 11.

⁵Long (1986) 14–19 provides an excellent summary of what is known about Epicurus, his writings, and the fortunes of his school.

exploratory works, not outlines of completed sciences. Handbooks and textbooks were new in the world, designed to address the masses, and destined to dominate philosophical literature in the later Roman world. Epicurean handbooks were carried about by adherents like Bibles, to be consulted continuously, and to shape one's approach to the world.⁶

We know of Epicureanism chiefly through a few fragments of Epicurus's own writings, and such brief handbooks and introductions, including one in verse of middle length, Lucretius's poem, *Of the Nature of Things*. The only Epicurean writings that have survived are popular tracts, but Epicurus is reported to have written extensive technical works, including *On Nature* in thirty-seven books, a treatise *On the Criterion*, and a number of books on ethical topics, including *On Lives*, *On the Goal*, and *On Choice and Avoidance*. He also wrote polemical works against other philosophers, in particular, against Theophrastus, the Pre-Socratic thinkers, and the Megarians. Among these works there have survived three letters providing doctrinal summaries, included in Diogenes Laertius's account of his life—*To Herodotus*, providing a summary of atomism, *To Pythocles*, on meteorology and astronomy, and *To Menoeceus*, concerning ethics⁷—as well as a set of forty *Principal Doctrines*, also preserved in Diogenes, and a second set of maxims preserved in a Vatican manuscript, usually called *Vatican Opinions*. Some fragments of *On Nature* are preserved in charred papyri discovered in Herculaneum. In general, Epicureanism had a bad reputation with other philosophical schools in Antiquity, and was especially despised by Christians, and that is one reason so little is preserved of its literature. There is no reason to suppose, however, that the school had a bad reputation among laymen. It enjoyed some following among the Romans, and was made the official philosophy of his court by Antiochus IV (ca. 215–164) of Syria. Of later Epicurean work, we have some of Zeno of Sidon's *On Signs* (ca. 150–170 CE), and the surviving inscriptions of the Epicurean Diogenes at Oenoanda (ca. 200 CE). To go beyond this material we must depend on hostile secondary sources, chiefly Diogenes Laertius, Cicero, Seneca, and Plutarch, but Sextus Empiricus, who found the Epicureans as congenial as any dogmatic school to his own opinions, balances the record somewhat with an interesting discussion of the Epicurean epistemology.

Titus Lucretius Carus was born somewhat after 100 BCE, and lived in the period of Roman civil wars that eventually led to the climactic clash between Caesar and Pompey and led to the Empire. He died in

⁶De Witt (1954) 4–5.

⁷These letters will be referred to below under their titles, with references to the relevant sections of Diogenes Laertius, Book X, for instance, "Epicurus, *Letter to Herodotus* 35."

55 BCE, and there are signs in his poem that he had not quite finished the revisions to *On the Nature of Things* when he died. Nonetheless, it is first-rate poetry throughout, as well as a tightly argued piece. Cicero remarked that it contained many marks of philosophic genius, and, despite this, was also written with much art.⁸ Nothing is known of the poet's life, and Jerome's story that he committed suicide after being driven mad by a love potion must be rejected as slander. His espoused purpose in his poem was to provide a beautiful setting for his health-giving doctrine, so that his patron, the Epicurean Gaius Memmius, as well as others, might imbibe the sometimes harsh medicine mixed in a honeyed draft of poetry. The poem survived in two 9th century copies, which were discovered by Poggio Bracciolini in 1417. After its publication, the philosophy within it sprang to life again in the 17th century, when Gassendi and others once more took the atomic hypothesis seriously, and a naturalistic ethics became once more possible.

More than the other schools, the Garden was tied to the doctrines of its founder. There was a kind of sacramental banquet held on the 20th of each month in the honor of Epicurus and Metrodorus, to which friends and family members of the Epicureans were invited. Epicurean Gardens spread all over the Mediterranean, and persisted until the 4th century CE, though they did not survive long after Christians gained control of the government. **Metrodorus of Lampsacus (ca. 330–277 BCE)**, was later considered a co-founder of the school. Epicurus was succeeded by Hermarchus of Mytilene (325–ca. 240), to whom he left his house and garden, and Polystratus followed him. The successor seems to have been chosen always by the previous head of the school. Philonides, a friend of Antiochus Epiphanus, was in the school 175–164, and was known for his mathematical work. Zeno of Sidon is known from a later time, and Philodemus of Gadara from the first half of the first century CE. The last known member of the school was Diogenes of Oenoanda, who engraved Epicurean teachings on a stone wall about 200 CE. The group was strongest in Italy under the Roman Republic.

The Garden lasted as a school of philosophy for only a short time. By the first century BCE it had taken on more the quality of a religious sect. Indeed, the Epicureans were known for their faithfulness to the original teachings of Epicurus, which were treated as revelations like those of the Mysteries. The rejection of popular religion and popular notions concerning the soul guaranteed that the Garden would not establish itself as a place to educate upper class young men, the eclectic, and suitably pious, schools centering on Plato and Aristotle taking over that role.

⁸Letter to his brother, Quintus, in February, 54 BCE .

2. EPISTEMOLOGY

Thus Epicurus, in the *Canon*, says that sensations, anticipations (*prolepseis*) and feelings are the criteria of truth.

Diogenes Laertius X 31.⁹

Epicurus held the aim of philosophy to be the promotion of happiness through speech and thought, and despised every field of knowledge not tending to this end, including grammar and history, mathematics, rhetoric and logic. He thought one should study natural science only to get free of superstitious thoughts of the gods and the fear of death, and, through investigation of the instincts and desires, to learn how to keep within the bounds of nature. He had no expectation of technological outcomes from the study of nature, even in medicine, it seems, and no faith that, aside from a general account, as we shall see, it was possible to settle on the correct explanations for phenomena. He also rejected logic as useless, it being unnecessary to supplement our natural ability to see if an argument is valid or not, but he did present a theory of knowledge, which he called “canonic,” as one of the three parts of philosophy. He saw canonic as necessary, for only through it could we confirm our knowledge of the natural world, and this second part of philosophy, the study of the nature of things, was needed to establish ethics, the study of the good life. He was particularly concerned to establish the possibility of natural knowledge since the atomists following Democritus had, in the course of the 4th century, drifted into skeptical views.¹⁰

Epicurus argued that it was absurd to question the senses after the manner of a skeptic, for several reasons. First, “if you fight against all sensations, you will not have a standard against which to judge even those of them you claim are mistaken.”¹¹ Apparently he thought it unreasonable to reject a given sense perception merely because global considerations suggest that all sense perception whatsoever might be false. Rather, a legitimate reason to believe a particular sense perception to be false must be rooted in information about the world indicating that particular perception to be inaccurate, information that could only come from other sense perceptions one supposes to be true. So, one could only reasonably reject the appearance that the oar was bent

⁹Translation (slightly altered) from Long and Sedley (1987) 87.

¹⁰Metrodorus of Chios and Anaxarchus were skeptics according to Diogenes Laertius, VII 87-8, for whom see the opening of Chapter 10 below.

¹¹*Principal Doctrines* 23; see also Lucretius, IV 469–521.

when half immersed if one had some positive reason to think it was straight—perhaps its appearance when entirely out of the water, or one’s knowledge, rooted in sensory experience, of the way in which water distorts visual images. Metaphysical considerations, suggesting there may not be a world of sensible things at all or some other such absurdity, however they might shape our attitude to life in general, do not provide a reason *within our natural, everyday life* to reject a given perception. We must live within the bounds of nature, and part of staying within natural bounds is to trust one’s natural cognitive faculties, which provide sufficient contact with the world to know what we usually need to know. If we rely on “reason,” that is, some supernatural faculty answering to the skeptic’s supernatural difficulties, something like the recollection of Platonic Forms, we involve ourselves with words and expressions without meaning, for meaning can only be established on our experience of the natural world.

Epicurus backs up his point with a distinction between what is actually presented in a presentation to the senses, the truth of which the presentation guarantees, and what is suggested by the presentation but awaits confirmation.¹² An opinion formed on the basis of a sensory presentation which can only be confirmed by another presentation, for instance, the opinion that the apple one sees will have a certain taste, is not made certain by the presentation, but must await confirmation. That something red is presented, however, does not await confirmation, and can be believed with certainty. A third sort of opinion, that it will be pleasant or good to eat this, waits upon confirmation, but this time not from the senses, but from the feelings that will be aroused when one eats it, and perhaps further feelings occurring even long after one eats it, but still caused by the eating. The opinion that this is an apple is yet another sort, and is not directly verified by or contained in the visual perception, but rather involves the application of a concept¹³ to what is sensed, and is only confirmed, it seems, by a general coherence of all of one’s experience with the hypothesis that the concept fits the object causing the perception.¹⁴ A sense presentation, as long as we limit ourselves to what it actually presents on its own, ignoring other opinions it may suggest requiring various kinds of confirmation, cannot be contradicted by any other cognition.¹⁵ To refer to another sense, or to feelings, or to a concept to be associated

¹²*Principal Doctrines* 24.

¹³Of an “anticipation,” *prolepsis*, discussed below.

¹⁴It might be objected that complete confirmation will never be obtained that this is an apple, or perhaps that it is good to eat, for we never have so much confirmation that further evidence might not change our belief. But later Epicureans, at least, thought that sufficient confirmation could be obtained to make such beliefs certain.

¹⁵Diogenes Laertius X 31–32.

with the presentation, is just to change the subject, for the apple's taste, or the pleasure or displeasure in perceiving it, or the question whether this is indeed an apple or only a wax fruit, has no bearing on the accuracy of the visual presentation of its color. Any sort of experience that can establish truths, and cannot be contradicted by any other sort of experience, must be considered a criterion of truth, and as indubitably establishing its truth. So perceptions, taken in general, must be considered true. Further, there is no mark in individual perceptions distinguishing the true from the false, so we can only accept that all are false, or that none are, and life requires us to accept that all are.¹⁶

The position is clarified in Sextus Empiricus,¹⁷ who cites the Epicureans as saying that a sensory presentation of an object is true as long as it arises from its object and is in accordance with it, and that every sensory presentation meets this criterion.¹⁸ We have seen a similar line of argument in the Sophists. Sextus goes on to discuss the problem that arises when several apparently conflicting perceptions are had of the same object. He argues that the presentations of an object as, say, small, in the distance, and as large, close up, are both true, for each corresponds to an object. The smaller image, he points out, has traveled a considerable distance, and so has become worn, which is why it is smaller (and only an image proportioned to the size of the pupil can enter the eye, so if the object is quite large and we are close up, we will only be able to look at a small portion of it at a time), but the presentation arising from its presence in the eye is still in accordance with its object. This seems to suggest that the presentation due to the image that has come from a distance is true in itself, but perhaps misleading if we deduce from it that we will have a similar perception of the same object viewed close up. But this is not Epicurus's intention at all. The discussion in fact insists that the two presentations are of *different* objects, indeed, it assumes that *every* presentation is of its own unique object and we can't have two different presentations of the same object. Sextus says that Epicurus would have compared the situation to that

¹⁶As to how sense perceptions are formed, visual images are due to fine images thrown off an object due to very fine vibrations. What is thrown off is very fine, and so can pass through transparent things. Moreover, what is thrown off is a continuous stream of such images, traveling very rapidly, and the image built up in the eye is compacted from a number of such arriving images. The shape of the image is apparently the same as the shape of the object that throws it off, but its color, for instance, is an artifact of its effect on the soul, given its fine structure in terms of shape and motion. Only small images can enter the eye, of course, given the size of the pupil, but due to the erosion and decay of the images as they fly there will be those small enough as long as the object is far enough away. The accounts that survive from the Epicureans of the operation of the other senses is much less adequate. How does one know this account of vision is true? In the same way one knows any other physical explanation of the phenomena to be true. It is not a special problem of canonic, but can only be approached after canonic is settled.

¹⁷*Against the Professors* VII 203–216. Compare Plutarch, *Against Colotes* 1109a–e, 1121a–e, which confirms Sextus's account in the course of criticizing the Epicureans.

¹⁸*Against the Professors* VII 203–205.

with a sound. We do not, he points out, say that a perception of a sound made faint by distance is false for that reason, that it is really loud, because it sounds loud close up. Nor do we say that the sound heard is the sound in the gong which is struck, but rather we hear the sound that arrives at our ear, and the faint and the loud sounds, though both produced by the same gong, are different objects of perception.¹⁹ If we carry this over, somewhat counter-intuitively, to what false opinion takes to be the two visual perceptions of the same object, we will have to say that the object of our perceptual presentation in the two cases is not the one tower, seen first in the distance and then close up, but rather the two different visual images of the tower.²⁰ The object of a perceptual presentation is always the image present in one's own sense organs. Presentation can make no mistakes concerning this object, and error only arises when we think falsely that what produces the image which is the object of the presentation is like that image in some regard.²¹

That one sense impression never contradicts another would seem to conflict with Plato's observation in the *Theaetetus*, and Aristotle's in *On the Soul*, that there are common sensibles, such as shape, perceived immediately by several senses. This notion is dealt with in an interesting fragment from an anonymous Epicurean treatise on the senses.²² There it is argued that to perceive shape by sight is to perceive the position and boundary of various colors, and that it is only by analogy that one then concludes that the object has a similar shape, that is, that touch will find it to be of a similar shape.²³ The shape perceived by touch is not the shape perceived by vision, and one provides not the perception of the other, but only its anticipation.²⁴ It seems Epicurus took his position on the privacy, immediate perception of sensory images in full knowledge of Plato's objections to it in the *Theaetetus*.

¹⁹*Against the Professors* VII 208.

²⁰*Against the Professors* VII 209.

²¹See the *Letter to Herodotus* 51–52, where Epicurus calls presentations “clear facts.” For the equation of clear facts with presentations, see Sextus Empiricus, *Against the Professors* VII 203.

²²It is preserved in the Herculaneum Papyri, in a passage translated in Long and Sedley (1987), 80.

²³The argument is rather like that used by Berkeley in his *Essay on Vision* (1709). The dispute over the privacy and infallibility of immediate perception picked up again in the Empiricist tradition, and dominated considerations of perceptual knowledge of the world in the 20th century. It seems to have resolved itself a good deal more in Plato's favor than Epicurus's.

²⁴Since anticipations stand in for concepts in Epicurus's theory, we might say that a concept of a shape, squareness, say, can be developed from visual images that are square, and then, somehow, we can find this concept or anticipation satisfied by tactile sensations. That is, tactile sensations are predicted from visual sensations, and a concept built on one sense can be applied to what we are aware of through another.

The object of the presentation, then, is not whatever it is that produces the image entering the sense organ, but the image itself. This image, however, is not some “intentional” thing, whose existence just is its being perceived, but rather a physical thing which would exist whether perceived or not. As it happens, it has entered the sense organ, and is perceived because of its effects on the sense organ. The mind must respond to the incoming atoms to form images, and this requires an action of attention or focus, which contributes to the formation of the image. The image will persist a little while, but it does not produce images stored in memory or any such thing, though a sufficient number of images under the right conditions will produce an anticipation or concept, and also, for a little while, an afterimage may persist. The presentation or appearance cannot be false, since it must come from an existing object, the image in the organ, and must correspond to it, that is, how the image appears or presents itself to the senses depends on what the image is like. Moreover, the presentation (as opposed on one hand to the image presented, and on the other to any opinions one may form) must exist just as it is presented.²⁵ The presentation is an event, not a second thing that might somehow fail to be like the image presented, and just as what produces pain must be painful in virtue of producing pain, so the image producing a presentation of itself must be just as it presents itself, in virtue of its presenting itself in that way. All we mean when we say something is painful is that it produces pain, and all we mean when we say that some image is green is that it presents itself as green. So it seems to be a necessary truth that presentations, as long as we restrict ourselves to what they actually present, and avoid confusing them with opinions or feelings that arise from them, must be true.

This seems to get at the difficulty one might feel in the claim that the physical image and what it presents itself as must be similar. Our tendency will be to ask what the mechanism is by which the image presents itself as a given sort of thing, and then to attempt to show that the mechanism somehow guarantees the similarity, but, of course, the Epicureans generally have no idea what the mechanism is, except that it involves the transfer of atoms from the thing imaged to the sense organ. They bypass this manner of arguing by suggesting that, just as something painful simply is something that produces pain, so something square, say, just is something that presents itself as square. What it is about the thing that leads it to present itself as square, the mechanism involved, is not relevant (though in *this* case we might be able to say what it is), any more than it is relevant in the case of a painful thing. But it is not clear that this picture of Epicurean views will stand for the sorts of properties that might be assigned to atoms as they are in themselves, for Epicurus, following

²⁵*Against the Professors* VII 203.

Democritus, distinguishes ‘primary’ and ‘secondary’ qualities. To be green, according to Epicurus, is just to be perceived as green (greenness turns out to be an intentional property, even if the green sense perception is not an intentional object, one might say). To be square, however, surely is *not* just to be perceived as square for squareness belongs to things independently of our sensing them. How can we assert that some physical object is square *in itself*, not just square, unless we mean to identify some characteristic we are acquainted with that is *shared* by that object? Or consider the size of a thing. Epicurus is content to say that the Sun, for instance, is a certain size “in relation to us,” that is, that it appears a certain size to us, for that is the size of its image, but may be a different size, larger, perhaps, “in itself.”²⁶ Epicurus must hold, surely, that a green, square image resembles the object outside the body producing it in its squareness, but not in its greenness. That would mean that the greenness is not a property merely of the image emitted but the green, square thing, but involves as well some response of the soul in our body to properties of that incoming image. But why should we suppose this? Is it that squareness is a common to several sorts of sensory images? But we have seen above that Epicureans, some at least, argued that there can be no common property in images from different senses, and visual squareness is not in fact the same thing as tactile squareness (or perhaps, for a bat, auditory squareness). This portfolio of views does not seem to hold together. Perhaps it was only some later Epicureans, and not Epicurus himself, who would have dropped the primary/secondary quality distinction, giving the account Epicurus gives for secondary qualities for primary as well.

The distinction between the image in the sense organ, the presentation of that image, which necessarily presents it correctly, and opinions and feelings arising from the presentation, allow us to see how the senses sometimes “deceive” us. Illusions and the like are not false presentations, but false judgements about the causes of the images that present themselves to us. So when Orestes saw the Furies he was not deceived about the images presented, but those presentations did produce a false opinion in him that there were solid objects before him, detectable by touch.²⁷

Since it is insisted that acts of perception, emotion, willing and thought are all physical events, Lucretius, no doubt following Epicurus, is satisfied that a presentation occurs entirely in the perceiving organ, and is not an action through which the soul is somehow affected by the organ. The soul, it appears, is composed of particles too fine to be affected by sensible emissions from things. But the Epicureans still assimilated

²⁶Letter to Pythocles 91.

²⁷Sextus Empiricus, *Against the Professors* VIII 63. For the account of sense perception, see Taylor (1980).

understanding to perception, arguing that when we turn our attention to thinking of a lion, we are able to do so because of the continuous bombardment of the mind by images of a lion, sent forth continuously from actual lions. These images are too fine to affect the senses, but the mind, being itself very fine, can be affected by them. A lion is thought of when such images present themselves to the intellect. The intellect is active in this process, inasmuch as it directs its attention to the image of lion,²⁸ and such images, being constantly emitted by lions and traveling great distances without distortion, due to their fine and penetrating nature, and the rapidity of the flight by which they arrive at the mind, are always available for the mind to attend to. (The images seem to be thrown off because of a very fine and rapid internal vibration in things,²⁹ and this vibration would, of course, only throw off the finest atoms.) This does not mean that one can form the concept of a lion, as it were, without first experiencing lions through the senses, for the mind must be prepared by the senses to become capable of attending to the images of lion bombarding it, it must develop within itself an anticipation (*prolepsis*) of a lion.³⁰ Such images also account for dreaming,³¹ and hallucinations such as the apparent perception of monsters and the dead.³²

One can form ‘anticipations’ by a kind of generalization from repeated sensory experiences that lead us to attend only to images of a certain sort, but one can also combine or analyze sensory images, or attend to images that are only like or analogous to what we have perceived. The mind has these powers only because the images of the combinations or parts, or the images analogous to or like the sensory images, are available to the

²⁸It is pointed out that sometimes one can only perceive something through the senses when one makes an effort or knows what to attend to, though it is there all along. With the mind the things perceived are so faint that they are always perceivable only with an effort of attention.

²⁹Annas (1992) 158, esp. note 4. The idea is a difficult one to work out, for the images of large objects must on this account be very large, and various implausible efforts are made to explain how they come to be small enough to enter the eyes or affect the mind. Epicurus says they are full of void, and though they cohere, they sustain a lot of damage of various sorts in passage. Being composed only of very small, presumably high-energy atoms, they are able to pass through one another and coarser objects, roughly in the way that a neutrino might nowadays be supposed to pass through things without any disturbance of their paths. When these images encounter the mind or the sense organ they stamp their image on it.

³⁰*Letter to Herodotus* 46–53. Lucretius, IV 722–782, 794–806. Diogenes of Oeneanda, New Fragment 5.3.3–14. (Long and Sedley, 72-76.) Note that the mind is affected by the sensory part of the body, even if it is not affected by sensible images. I assume the ad hoc nature of all this is clear to the reader. Lucretius is saying what he needs to to support his view, and has no independent evidence at all that any of it is true. It is an Empiricist version of metaphysics, in which he deduces the structure of the physical world from how it *must* be if we are to have an understanding of things such as lions. Perhaps it is no more objectionable than the metaphysical deduction of the theory of Forms, or of the immaterial nature of the soul, in Plato.

³¹Lucretius, IV 976–977.

³²Lucretius, IV 722–731 ff.

mind. So thinking of a centaur is the result of receiving the intelligible emissions of horses and men collide and merge with one another, and this happens outside the body, so that intelligible images of centaurs are continually flying about, as well as intelligible images of every other fanciful combination of beings. The mind gains the power to attend to such images, an anticipation of centaur, from its experience of *both* horses and men.

In fact, the Epicurean view is a materialist's version of Plato, in which the object of thought is continuously available to the mind, and this independently of the senses, but not because it is recollected from previous acquaintance with the forms, rather because of the fine images of themselves that everything is continuously emitting. (Note also that, like Plato, Epicurus takes it that there is an objective truth about what kinds of things there are, and it is covered by the list of our possible anticipations. We do not make up what we come to conceive, we only learn to recognize it when we encounter it.) The information about the world that we pick up through reason and understanding is conveyed physically, and is always available because of the peculiar physical mechanism by which it is conveyed. Volition, too, is a matter of attending in the right way to images, so that when we walk we attend in a certain way to images of walking.³³ Memory, apparently, is a disposition to attend to the images of that which we remember, for instance, of a dead relative, on those occasions when we are reminded of it. (Such images continue to fly around long after their source has been destroyed.) So a physical basis *external to the body*, and *therefore publicly available*, is provided for a direct reference to whatever is thought about, remembered, willed, etc., without the intervention of the senses. It should be noted that these intellectual images remain *images* for the Epicureans. To think about something is to entertain an image of it like the images in the senses.

Some of the images perceivable by intellect are misleading. They may be mere chance combinations of effluences from a number of sources, as the thought of a centaur, and others are chance combinations of individual atoms. Such phenomena as hallucinations are not traced by Epicurus to the activity of memory and imagination, as they are in most every other thinker, but are attributed to actual effluences of atoms, corrupted and modified images, entering from the outside. Now even such misleading presentation and conceptions are true, of course, since they correspond to what actually produced them. One can tell that such perceptions are misleading because they are disorganized, chance perceptions, unconnected to other confirming perceptions, while real sense perceptions, and real intellectual conceptions, cohere together and confirm one another. Like

³³Lucretius, IV 881. This suggests, at least, that there is an intentionality to walking, that one cannot walk unless he conceives himself as walking, and so distinguishes personal action from the things the body does.

Plato in the *Theaetetus*, once Epicurus begins to seek knowledge outside what is immediately perceived, and allows that the immediately perceived may not be an accurate guide to the world outside itself, he turns to coherentism instead of foundationalism in epistemology. Do immediately known first principles, for Epicurus, the data of the senses, having any bearing on our knowledge of the real external world? They do, as they do in Plato, provide us with hypotheses to be tested for explanatory coherence, without which dialectic or attempted scientific explanations could not proceed. But they do not provide us with self-evident first principles.

In addition to sensory presentations and intellectual conceptions, an ‘anticipation’ of sensory images arises from the memory of repeated similar presentations associated with the use of a word. These sensory images will prepare the intellect to receive intelligible images of whatever is meant by the word even when it is not present to the senses. So, when someone uses a word whose meaning we have learned, we anticipate what the word refers to, that is, we attend to images of what it refers to in our minds, which thereby become anticipations of our future sensory experience, that is, that sensory experience which would verify what was said. An anticipation, then, plays the role of a concept (or meaning), but is not an image or direct perceiving of something, but rather a certain disposition to attend to the appropriate images, which are always present to the intellect. Anticipations, it seems, form a basis for self-evident knowledge, and are one of the three criteria of truth (with perception and feelings of pleasure and pain),³⁴ because they ground necessary general truths stating what perceptions would verify or disconfirm a statement. The anticipation of a human being, for instance, will tell us that perceptions of a bipedal animal that speaks and reasons are of a human being, as long as we enjoy the right confirming perceptions when we follow up the initial observation with further tests. Hence, necessarily a human being is a rational animal. So an anticipation not only enables us to put a name to a perception, interpreting it (and going beyond what is clearly known through the perception itself), and to understand the utterance of another by allowing us to anticipate the perceptions that are to be expected if what is said is true, but also specifies how to confirm or disconfirm the proposition we form once we have put a name to it, and permits the formation of self-evident propositions.³⁵ Self-evident propositions, as in Plato and

³⁴Diogenes Laertius X 31.

³⁵The view I have outlined would account for Diogenes Laertius X 33, the chief evidence for anticipations, though Diogenes seems not quite to understand the doctrine he presents there. DeWitt (1954) 142–150, questions the account of this passage, holding that anticipations in Epicurus were innate predispositions, and not learned, since Cicero, who is much more to be trusted than Diogenes Laertius, reports in *Concerning the Nature of the Gods* I 43–9 that the anticipation of the gods is imprinted on the mind by nature herself, so that every race has this anticipation. Cicero says in that passage that an anticipation is “what we may call a delineation

Aristotle, then, turn out to have a strong association with meaning and the understanding of concepts. Once, due to the formation of anticipations, we have meaningful words and can speak and understand, we form opinions spontaneously, by applying words to our experiences. We test opinions formed using anticipations by observation, or, if this is impossible, by checking to see if there is any conflict with observation. This is an essentially Empiricist account of concepts and meaning, and an Empiricist theory of necessary truth as something established on the meanings of the words in the necessary statement, rather than by reference to any objectively necessary state of affairs. The British Empiricism of the 17th and 18th centuries can be traced back to Epicureanism.

Language, Epicurus thought, was not an invention of some individual. Rather it is natural to human beings, for men instinctively make different sounds in response to different situations, just as animals do, and, given their social nature, it was natural that they should use such sounds as labels and signs, perhaps first noting what must be present to the other, then deliberately producing relevant sounds in the absence of any stimulus suited to evoke it to communicate the idea. At first only nouns and verbs were used as labels for things and actions. As it proceeded, though, the language grew as new contrivances were discovered, eventually giving rise to the whole range of grammatical forms. The construction of the language also grew more self-conscious, so that conscious agreements on the uses of words were now made within a community. Variations in languages are due to natural variations in the different tribes that first gave rise to them, and their hitting on different ways to expand and elaborate on the original idea of linguistic communication.³⁶

On this account of language, the root of all linguistic meaning is direct reference to experience. One can name only what one already has an anticipation of.³⁷ Epicurus rejected the notion that any intermediary between what a word names and the word itself is to be introduced to explain how it manages to name what it names. So, denying that words and phrases stood as signs for anything other than the objects of experience,

of a thing, anticipated by the mind, without which understanding, inquiry and discussion are impossible.” This is consistent with my account, and it is not clear if the work of nature here provides us with strictly innate conceptions, or instead works through the experience of the community to establish the conception of the gods in the language of our community, or perhaps, produces the conceptions of the gods through our natural tendency to form idealized conceptions (see the discussion of the gods below). Similar remarks would apply to Epicurus’s use of ‘anticipation’ for the ‘innate’ conception of justice. If an anticipation is innate in the sense that it naturally arises, given the world and human thought processes, then conceptions naturally arising from experience would be innate.

³⁶*Letter to Herodotus* 75–76. Lucretius V 1028–1090. Diogenes Oenoanda X 2.11–5.15, cited in Long and Sedley (1989) 97–98.

³⁷Diogenes Laertius, X 33.

he rejected the existence of the Stoic “sayable” (*lekton*), i.e., what is said or meant, taken as an abstract entity other than the concrete objects referred to. He did make something like a distinction between sense and denotation, his “anticipations” of experiences of what is referred to by a term serving in the place of the term’s sense or meaning. He insisted that all the theoretical work done by the notion of “what is said” can be accomplished without this mythical sayable by considering the way in which one who uses a name anticipates experiences that will confirm the truth of his statement.³⁸ Nor did Epicurus allow that definitions stand as an intermediate between a name and what is named. We are not able to refer to Socrates because we know an essential description of him, and so can indicate what fits the description. Indeed, Epicurus pointed out, definitions can always be traced back to undefined words, which are understood as names of things experienced. It is reference to the realities we experience that enables us to understand definitions when they are posed, not definitions that enable us to refer to the realities.³⁹

3. PHYSICS

[Our aim is] neither to achieve the impossible, even by force, nor to maintain a theory which is in all respects similar either to our discussions on the ways of life or to our clarifications of other questions in physics, such as the thesis that the totality consists of bodies and an intangible nature, and that the elements are atomic—and all such things as are consistent with the phenomena in only one way. This is not the case with meteorological phenomena, but rather these phenomena admit of several different accounts of their existence which are consistent with our sense-perceptions. For we should not do physics by following groundless postulates and stipulations, but in the manner called for by the phenomena.

Epicurus, *Letter to Pythocles* 86.⁴⁰

If he was to defend his atomistic physics, of course, Epicurus could not reject every opinion as meaningless which is not directly confirmed by the senses. Certain axioms, he thought, are known to be true

³⁸Plutarch, *Against Colotes* 1119F.

³⁹Cicero, *On Ends* 22, speaks of Epicurus “abolishing definitions.” Other, more obscure, sources are cited in Long and Sedley (1989) 99 for the claim that definitions always end up in terms of the undefined. Epicurus does occasionally offer definitions, but he apparently regards them as accounts of the content implicit in some concept, and does *not* think that the essence defined is somehow signified by the word. “That man” refers, perhaps, to Socrates, but it does not in any way signify “rational mortal animal,” though it no doubt signifies something that is a rational mortal animal.

⁴⁰Translated in Inwood and Gerson (1988) 16.

not through direct perception, but rather through the fact that if one contradicts them one is led to predictions contradicted by direct perception. To develop an argument along these lines there is required a necessary proposition about what will confirm or disconfirm a statement, based on an anticipation. For example, a void must be assumed, and cannot be denied, for we have experience of movement, and if there were no void nothing could move.⁴¹ One has to be careful that the necessary truth on which the argument is based really is an anticipation, and Epicurus asserts that many of the opinions of the multitude about the gods, for instance, that the gods seek to enforce justice, are not anticipations at all, but false assumptions.⁴²

Another frequent pattern of argument from the perceptible to the imperceptible is through “similarity.” According to Philodemus, clear perception provide some positive evidence that the connections it consistently reveals between a sort of thing and its accidents are universally valid, and as long as no other clear perceptions undermine that assumption, one is allowed to follow out the connection in new cases. So, for instance, we can conclude from observations in particular cases that all human beings are mortal. This sort of inference can also be made from the observable to the unobservable, as when we argue from observed cases to the conclusion that all motion, including that of individual atoms, is motion into empty space.⁴³ Indeed, Philodemus remarks that it is inconceivable that something hidden should have nothing in common with what clear perceptions reveal, and his sense seems to be that we could not conceive any such hidden thing, since conception occurs only through perceptions. So it seems we are forced to rely on analogy with observables to construct a picture of the imperceptible reality behind clear perceptions, but more than that is no doubt intended. If the atomic theory is in fact true, then everything that happens in the world should be conceivable, since the atoms making up the mind can be arranged so as to reflect the shapes of any arrangement of atoms, and so can take the impression of any reality whatsoever.

The pattern of argument for the other tenets of Epicurean science and metaphysics is similar.⁴⁴ Nothing

⁴¹Sextus Empiricus, *Against the Professors* 213–214, including the example of the void, for which, see also Lucretius, I 329–336.

⁴²*Letter to Menoecus* 124.

⁴³Philodemus, *On Signs*, 34.29 ff.

⁴⁴The patterns of permissible arguments are divided into four groups. (Sextus Empiricus, *Against the Learned* VII 212–215; Epicurus, *Letter to Herodotus* 38–39, 50–51) (1) Concerning beliefs about what can be evident, although it is not yet so, so that we are waiting for confirmation from the senses, (1a) one can verify such a belief by “witnessing,” and (1b) falsify it by “no witnessing.” (2) Concerning beliefs about what cannot be made evident to the senses at all, (2a) these are falsified by “witnessing,” and (2b) verified by “no counterwitnessing.” A case of (1a): we see a person from a distance, and believe it to be Plato. We will be able to verify this,

comes from nothing, so that matter is not created, for this would mean that anything whatever could happen, and all things could arise from all things. We can observe that this is not so—there are patterns in what occurs, and only some possibilities are realized. Moreover, things do not vanish into nothing, for if they did, over the infinite past time all things whatsoever would have disappeared, and given that nothing comes from nothing, nothing would have arisen to replace them. We can observe that this has not happened. Moreover, among observables, whenever something is destroyed something else arises in its place.⁴⁵ There must be persisting bodies, as the senses testify, and there must be place, in which they are located, and which we call space when something moves through it, or void when nothing is located in it.⁴⁶

There must be void, that is, space occupied by no material objects,⁴⁷ for if there were not, motion, which is observed to occur, would be impossible. Those, like Aristotle, who denied the existence of a void, objected that motion can occur within a plenum through circulation, as when a fish moves through water.

if it is true, by the witness of the senses by approaching more closely to the person. A case of (1b): or we can approach more closely and find that we do not witness through the senses that it is Plato, even though we are now quite close enough to recognize if it is him, and in that case we have falsified the statement through “no witnessing.” (2a) We need to draw from the denial of a non-evident belief some conclusion that is evident, that is, a denial of an observable consequence is concluded from the denial of the theory. If we can verify that the observable consequence is in fact true, then we can conclude that the theory is. So from “there is no void,” it follows there is no motion. We verify that there is motion, and that will establish there is a void. We argue from the necessity of a void to explain motion, and the observation that there is motion, to the existence of a void. (2b) This is equivalent to an argument to the only possible explanation for observed phenomena. Sometimes it is pointed out that there is a range of possible explanations for observed phenomena, but some explanation in the range must hold in each case. So that if the phenomenon is to be explained, *one* of these explanations must be true. Then we conclude that in general, explanations of this sort are true for this sort of phenomenon, and in particular, that a particular phenomenon is explained by one of these explanations. In particular, Epicurus is clear that we don’t need to establish just how the heavens work to benefit from removal of superstitious fears, but only that there must be some natural explanation in terms of atoms and the void. (*Letter to Pythocles* 86-8, 92, 95, 98). So all the explanations are in agreement with the phenomena, not counterwitnessed by the phenomena, and that is enough to establish, it seems, that one of them, something of this sort, is right. (Sextus Empiricus, *Against the Learned* VIII 214) And that is enough to remove superstitious fears. So, again, one might see a corpse from a little distance, and, seeing that he is dead, conclude that one of a certain range of explanations accounts for this (the range not including attacks by ghost or angry gods), and does not need to know which to avoid superstitious fear. (Lucretius VI 703-11) This last form of argument seems to include induction. If we observe that everyone so far has died, we may conclude that everyone dies. Why? Because the general statement, everyone dies, is not counterwitnessed in any of our observations, and the only explanation we have for that is that the general statement is true. So an induction requires many observations in a variety of circumstances, so no explanation other than “everyone dies” is available for the observations we have. For this whole analysis, see Elizabeth Asmis, “Epicurean Epistemology,” Ch. 8, Algra et al. (1999).

⁴⁵*Letter to Herodotus* 38–39; Lucretius, I 159–73, 225-37 (more generally, 146–264).

⁴⁶*Letter to Herodotus* 39–40; Lucretius I 419–44; Sextus Empiricus, *Against the Professors* 10.2. Epicurus observes that space does not interact with anything, and, of course, it cannot be destroyed or created. He refers to it as an intangible substance, in which tangible substances are found, though they have no effect on it. We know about it because it can be empty and so makes motion and a good deal else we observe possible.

⁴⁷Lucretius, I 334–90 for all the arguments presented here on this topic.

Lucretius objects that the water in front of the fish must have somewhere to withdraw to if it is to make way for the fish to advance. At first, it may not seem clear what the difficulty is, for surely the water could withdraw into the place left by the water ahead of it, and so on, until a circle is formed, and the last portion of water in the chain moves into the space left by the fish. But Lucretius thinks that something can move forward into the space left by what is in front of it only *after* that space has been vacated, not *as* it is being vacated, so that a void has to occur momentarily at least to allow the motion. If so, this seems false—in a circulation of the sort imagined all the bodies move simultaneously, not first one and then another, and such a circulation is not self-contradictory.

Epicurus and Lucretius, if they thought it was self-contradictory, must have made some further assumptions. In fact, they did, conceiving matter not as a fluid, but as rigidly solid. With that conception, how would a chain of solid moving chunks come back on itself without leaving spaces between them, remaining always in contact without change shape? It could be done, but the motion would have to be literally circular, and the pieces of matter would have to form, say, a circular torus with the same cross-section everywhere. Surely it is reasonably supposed that the variety of motions we see around us cannot all be reduced to such perfect circulations. Lucretius argues that two solid objects with flat surfaces flush and in contact with one another could not separate without creating a void, for the matter entering into the gap would have to travel infinitely fast to prevent a void from forming at the center of the area of contact.⁴⁸ What if two bodies meet only at a point? Then they could separate without creating a void, but assuming, as the Epicureans thought could be shown, that there is a smallest size of material particular, which cannot be further divided, solid bodies filling space without a gap would have to meet along surfaces, and could not then be separated without creating a void.

This would seem to be a conclusive argument for the existence of a void, but Lucretius notes many other indications of empty spaces within bodies, from water seeping through stone into caves, to the ability of the body to absorb food. In particular, he notes that things that are denser or heavier must have less void in them, assuming, it seems, that solid matter is just one kind of stuff, and all of the same density.

Is there anything other than void and body constituting the world? Lucretius holds that whenever we say anything we either attribute an essential quality to these things, as, for instance, when we assert that water has weight, or we attribute an accident to them, as when we say that some water is flowing, or frozen. In

⁴⁸What he says is that the entire space that opens up cannot be filled at once, for the air rushing in must first occupy the space near the opening of the gap, and occupy the space near the center only later.

particular, time is not a third thing, for time is never found empty, as space sometimes is, so that it exists on its own. In speaking of time we always speak of something moving or remaining at rest, and we measure a time by comparing it to something moving cyclically. As for what has happened in the past, like what is happening now, it is to be viewed as an accident of the place in which it happened, and of the material things which were involved in the event.⁴⁹ A different puzzle concerns qualities such as color and weight. These are not different things existing by themselves. Rather, we speak of them because we can conceive one thing in various ways, depending, for instance, on how we become aware of it through the senses, say through seeing it or hefting it.⁵⁰ Are all accidental qualities observer-dependent? Well, none of the texts seems quite to assert that, and a complete description of reality as it is in itself would mention not only space and matter and their essential qualities, but also the arrangement of matter in space, and the motions of the atoms, and these are accidents which are constantly changing (though it is essential to matter that it have *some* arrangement, and either move in some manner or remain at rest). Of course, those accidents we most commonly refer to are those which are detected by our senses, and many of these, such as color and sound, are singled out by us only because we are quite good at perceiving them. Epicurus treats color and other such qualities as manners of appearance, insisting that they really do belong to things, but only as the way in which they appear to a person, not as something belonging to the object in itself.⁵¹

Now, since all the bodies we can observe are subject to dissolution, there must be something we cannot observe that is not, and so contains no void, and those bodies we observe must be composed of such “atoms” (“indivisibles”)—otherwise all things would long since have been destroyed.⁵² Lucretius insists that a body is divisible, and so destructible, only if it contains void within it which can be penetrated by other bodies, separating the parts of the compound body it has been revealed to be. Why do the Epicureans think that destructible compounds must contain indestructible parts which are not compounds? Leibniz argued that a

⁴⁹Lucretius, I 445–82.

⁵⁰*Letter to Herodotus* 68–73.

⁵¹His concern here is to block the skepticism stemming from the causal theory of perception in Democritus. He does not treat secondary qualities as Democritus does, as somehow unreal and illusory. They exist, but are not substances in themselves, or incorporeals attaching to bodies, but are appearances in the mind. Epicurus, *Letter to Herodotus* 68–72.

⁵²*Letter to Herodotus* 40–1; Lucretius, I 540–64. It is to be noted that if time had a *beginning*, then the gradual disintegration of the atoms could go on indefinitely without ever reducing all things to nothing at all. Again, it is assumed that once they divide, atoms cannot coalesce again, a reasonable assumption if atoms are like rocks, rather than drops of water.

compound must be compounded of *something*, and if it is compounded of other compounds this only means that it is compounded of the *parts* of those compounds, but if this is what is meant by the Epicureans they do not make it clear. They actually seem to envision the compound being broken into smaller and smaller parts, so that, if nothing puts a stop to the process, eventually there will be nothing that has not been destroyed. Perhaps they depend here on an infinite past time, so that no matter how small one wants to make the remaining parts, there will have been ample time for them to be reduced to that size. Thus, over the infinite past time all things would have been destroyed by now.

Lucretius adds another argument. He first of all insists that a body which had no admixture of void could not be broken apart or altered in any way.⁵³ (Body, as we have noted, is conceived here as solid, not as a kind of incompressible liquid, after the fashion of Descartes.) Now matter and empty space cannot possibly be so thoroughly mixed that there are no bodies, however small, with no admixture of the void.⁵⁴ Looking to observation, we see that the indestructible bodies must be many, and interact, or there would be no physical change, and therefore they must be bodies (not forms), which affect one another only by contact, never at a distance.

Epicurus argued that there was a minimal possible size to a particle of matter, and concludes from this, as well, that there must be atoms. This would not necessarily be the case if atoms cannot be split up simply because they contain no voids. There might be atoms of every size, however small, given that the number of atoms is limitless. Epicurus provides arguments derived from Zeno to support his contention, arguing that there is a minimal possible magnitude. (1) There is no way one could traverse the list of parts if a body is divisible in thought into an infinite number of parts. The point is that one would have to be able to traverse the infinite list in thought if one holds that the space is infinitely divisible in thought (as opposed to infinitely divisible in reality, or physically), and one cannot do this. (2) Or assume that the division is already made. If one goes through the parts, say, of a linear magnitude, in sequence, starting at one limit, one thus approaches to the other limit of the magnitude divided, but can never, even in thought, actually reach that limit, though, of

⁵³Lucretius, I 503–35. There is a question how he knows this, of course. One answer would be that if such bodies could be broken up, then by now all things would have been reduced to nothing, taking us back to Epicurus's argument.

⁵⁴Lucretius, I 536–39. At I 565–76 Lucretius argues that we can explain soft things on the assumption that they are made up of hard things, but not hard things on the assumption they are made up of soft things, so it seems the ultimate constituents of things must be hard. He also argues at 592–98 that the atoms must remain the same in structure, or else the composites that they make up would alter their natures as the particles making them up were broken down into smaller and smaller pieces. This seems inconclusive, though, since the process of breakdown may be slow, so that the alteration of things would not have been observed by us.

course, that limit must be there to be reached. This suggests that the magnitude cannot be thought as the sum of those parts, since thought of in that way, we cannot think of it as having a limit—but we can, without any problem, think it as having a limit in the ordinary course of things. (3) An infinite collection of masses of ever smaller size would still amount to an infinite mass. This is not true, of course.⁵⁵ Lucretius adds another argument, namely that magnitudes of different sizes would contain the same number of parts, which seems absurd.⁵⁶ (The Stoics accepted this consequence without any qualms, and, indeed, it seems harmless as long as the parts involved are not of the same finite size.)

Aristotle had argued that there could not be such minima, since they could not be put together to compose a magnitude.⁵⁷ If two such minima are in contact because they match whole to whole, then they are coextensive, and the same magnitude. This sort of ‘addition’ of magnitudes will not ever result in a magnitude greater than a minimum. But if they touch only inasmuch as a part of one overlaps with a part of the other, then they would have parts! Here we might imagine two volumes touching at a point, with no shared volume. The point where they touch is part of each. But, of course, on Aristotle’s own principles, it is not a part of either, but rather a part of the boundary of each. But it might still be argued that if the minimal part has two parts to its boundary, and, assuming its boundary is within itself, it itself therefore has two parts. Epicurus’s response is to point out that there are minima in the field of vision, for a ball that becomes more and more distant at some point disappears entirely, and just before that point, it still appears as a finite dot. So visual magnitudes must be made up of minima, which, though they do not, perhaps, share any parts, not even parts of their boundaries, are nonetheless next to each other, so that no other magnitude is between them. If it can happen in the visual field, it can happen in real space.⁵⁸

Epicurus did not think that these minima, however, could exist by themselves. They exist only in combination with other minima as part of an atom. The reason is that Aristotle had argued, Epicurus thought

⁵⁵*Letter to Herodotus* 56-9.

⁵⁶Lucretius, I 599-634.

⁵⁷*Physics* VI 1.

⁵⁸*Letter to Herodotus* 56–9. Furley (1967), the first study, deals with this topic. Hume borrows the argument for his *Treatise*. See the analysis in Long and Sedley (1987) 42–3. Quite aside from the question of visual minima, it is mathematically possible for the boundaries of volumes to be outside them if the volumes are defined as open sets, and they can then be adjacent, so that no volume can fit between them, even though no parts of them overlap. But, of course, such an open set necessarily has an infinite number of members, or parts. So this logical possibility does not help Epicurus.

correctly, that a minimum cannot actually be in motion, except insofar as it belongs to a larger whole. The reason for *this* is that something in motion is in a process of passing from one place to another, and therefore is in part in each of the two places. So a car moving from Wisconsin into Minnesota must be partly in each state. If it is wholly in Minnesota it is no longer moving into Minnesota, and if it is wholly in Wisconsin, it has not yet begun to move into Minnesota. Now a minimum has no parts, and so cannot be in both places at once. So minimal parts of things enter into physics only in the analysis of the motions of things composed from them, the atoms, and the limit of an atom is composed of minimal parts, which can be next to the minimal part of other atoms.

Similarly, Epicurus took time to be divided into minimal continuous periods of time, which can figure in a description of the world, and such minimal continuous periods of time, since they must have parts (both because things can happen during a period of time, and changes take place within it, so there is a time before and a time after the change, and because a period of time is in contact with the period before it, and the period after it, and so the part that is in contact with the period after is different from the part in contact with the period before), have minimal parts, which are distinguishable from one another only in thought. No movement can take place during one of these minimal parts of a period of time.⁵⁹ The maximal possible speed of movement for an atom is one minimal part of a spatial interval per minimal part of a period of time, else an atom would move from one place to another without ever occupying the intervening spaces. More interesting yet, this is also the minimal possible speed for an atom, for atoms are always in movement, and so move one spatial unit for every temporal unit, lest there be some period of time, however short, during which they are stationary. Aristotle had observed that quantizing space and time thus would make all movements equally quick, and Lucretius's response to this is to suggest that it is so,⁶⁰ but a compound body can move at a speed lower than the maximum if its atoms are moving in different directions. Indeed, if the atoms circulate or vibrate appropriately, the body can even be stationary.⁶¹ One should bear in mind here that all atoms are falling

⁵⁹Epicurus admits that the indivisible space is the sort of thing that cannot be traversed, apparently since one cannot be first at one end of it, then in the middle, then at the other. Compare Aristotle, *Physics* VI 1, 231b25–232a17. In this chapter Aristotle argues that if a space is indivisible, there are indivisible motions, namely those “across” indivisible spaces, and indivisible motions must be measured by indivisible times (this last at 232a18–22).

⁶⁰Epicurus, *Letter to Herodotus* 61.

⁶¹Epicurus, *Letter to Herodotus* 47 and 62. See Aristotle's treatment of Zeno's paradoxes of motion. Epicurus's reply to Zeno's “Arrow” (Aristotle, *Physics* VI 9, 239b30) seems to be to grant that the arrow is at rest in each indivisible moment of time, but nonetheless moving in any period of time consisting of several moments, and to deny any absurdity in this. His reply to “Moving Rows” (Aristotle, *Physics* VI 9 239b32–240a16) is found nowhere in the material available to us, but presumably he would have

at a constant rate, and so appear stationary to us who are falling at that same rate, so the apparatus introduced here is not for the sake of explaining why things seem to be at rest. Rather, it explains, first, how things composed of atoms can move at less than the speed of the atoms in whatever direction they happen to move.⁶² The second point, as we shall see, is to explain the self-motion of animated things.⁶³ (The view that time and motion consist of indivisible smallest parts is not present in the *Letter to Herodotus*, which seems to have been written shortly after Epicurus's arrival in Athens, but it is attested elsewhere.⁶⁴ It seems to have been developed under the influence of Diodorus Siculus, who took a similar view, arguing, for instance, that it is logically consistent to say "it has moved" while denying that it was ever true that "it is moving," in response to Zeno's "Arrow." (It is like saying "Helen had three husbands," while denying that it was ever true that "Helen has three husbands." To say "it has moved" is to assert that, over a period of time, it has occupied a number of consecutive different places.)⁶⁵ Presumably Epicurus came to think, after examining Diodorus's work, that if there are minimal spatial units, then atoms must move one spatial unit at one swoop, such a swoop being

accepted that although two bodies cannot pass one another without ever being alongside one another, since every body, even the smallest, extends over a number of indivisible units of space, still, two indivisible units of space within two such bodies may pass one another without ever being opposite one another. (See my discussion of Zeno in Chapter 2.)

⁶²Perhaps this would be better explained by looking at the components of an atom's velocity. If it is not moving straight downward, then it must be moving downward more slowly than atoms that are, since all atoms travel at the same speed, and one component of this atom's velocity is sideways. But if the atoms are moving *very* quickly downward, as Epicurus says they are, the loss of velocity downward to provide a component sideways may not be noticeable, as long as the sideways velocity is small enough compared to the downward velocity. Thus a cart can roll across floor, without appearing to lift itself in the air, and at a velocity less than the total velocity of the atom (the only velocity an atom can travel). Indeed, it can have a sideways component of velocity of any size, as long as it remains small in comparison to the downward velocity, and appear to us who are falling with it to move sideways alone at those various velocities.

⁶³A final objection to Epicurus's notion of indivisible units of space and time might be that it would force us to rethink geometry. The side of a square, for instance, is incommensurable with its diagonal, so it can't be that both are composed of some definite number of indivisible units of length. Epicurus perhaps did not have to accept this conclusion, for he could have argued that the indivisibles make up length not in the way that equal divisible units do, but in some other way that allows incommensurable lengths. But apparently he did accept it (cf. Cicero, *Academica* II 106, *On Ends* I 20, which claim that Epicurus asserted all geometry is false), though we do not know if or how he worked out an alternative geometry of finitely divisible space.

⁶⁴In Simplicius, *On Aristotle's Physics* 934, 23–30 (cited in Long and Sedley (1987) 49). The *Letter to Herodotus* 61–2 argues that atoms always travel at an equal velocity in a vacuum but not along the lines I suggest for Epicurus in the text (this line is explicitly argued in Simplicius, *On Aristotle's Physics* 938, 17–22, cited in Long and Sedley (1987) 48). The line I suggest would have appealed to Epicurus, I think, because he could then explain handily why it is that atoms moving in a void do not instantaneously cross it, since they can only travel at the maximal possible speed of one unit of space per unit of time. He insists in the *Letter to Herodotus* 46–47 that atoms must occupy adjacent places consecutively, not simultaneously, in moving through the void, but he assigns as their velocity in a void only "the speed of thought" (*Letter to Herodotus* 61–62).

⁶⁵Long and Sedley (1987) 51.

measurable only by an indivisible unit of time.⁶⁶

Against Aristotle, Epicurus argued that space is infinite in extent, for if it were finite, it would have to be limited by something in space beyond the finite space that was claimed to be limited. Or, as Epicurus put it, if one stood at the edge of the finite universe and threw a javelin, it would go somewhere beyond the edge. There is a limitless supply of atoms, since space is limitless, and so the observed density of atoms locally cannot be explained otherwise,⁶⁷ and there must be an infinite number of worlds,⁶⁸ but not atoms of every possible size, for that contradicts experience, which tells us they are all too small to see.⁶⁹ From this it follows that not every possible shape is present, since only a finite number of shapes can be produced given a finite number of minimal parts in an atom.⁷⁰ Epicurus distinguished primary and secondary qualities, assigning weight, size and shape as primary. The only properties of atoms are weight, size and shape, and the only accidents of atoms are location and movement.⁷¹ Sensory qualities belong to groups of atoms in virtue of the manner in which they affect the senses. It may be that a body could not be what it is without certain secondary qualities, and in this sense such qualities may be said to be constituents of it, but they are not parts of the body, nor independent things which combine to form bodies.⁷²

Atoms have weight, and consequently a natural motion, and all move at the same, very high, velocity in the same direction in a vacuum.⁷³ The point of assigning atoms weight seems not to be to account for their motion, but, assuming that atoms are always moving very rapidly, to account for the appearance of a stationary

⁶⁶This is argued also in Aristotle, *Physics* VI 1.

⁶⁷*Letter to Herodotus* 41–2. Lucretius I 958–97.

⁶⁸*Letter to Herodotus* 45.

⁶⁹*Letter to Herodotus* 55–56.

⁷⁰Lucretius II 478–531.

⁷¹Lucretius II 730–1022 for the non-inherence of secondary qualities in atoms. If any particular color, for instance, belonged to atoms, the same color would have to belong to every atom, and there would be only one color. The idea is that all atoms are made of the same stuff, and every quality of this stuff is essential to it, since it has no internal structure to ground accidental qualities. So sensible, contrary qualities cannot belong to it, and cannot belong to atoms. Sentience is accounted a secondary quality here, one belonging only to compounds, and the usual arguments of the physicalist, identifying mental qualities as bodily, are made. See also the criticism of Heraclitus, Lucretius I 635–704, which clearly presupposes the views here.

⁷²Epicurus, *Letter to Herodotus*, 68–71.

⁷³Epicurus, *Letter to Herodotus*, 61.

world. The bulk of their movement is in the same direction, and so, relative to one another, they appear at rest.⁷⁴

If all the atoms fall through space at the *same* velocity, this raises a problem. Since no body can overtake another, how did collisions first arise? Epicurus solved the problem by supposing that there was always some motion other than the motion downward, and that this sideways and upward motion is always preserved through conservation of momentum or something like it. There may have been a concern that the sideways motion would have no explanation—it is not a natural motion, and it may seem uncomfortable to postulate a causal series of violent motions extending without end into the past. A natural sideways motion won't do, for then all atoms would share in that motion, and no collisions would result from it any more than they result from the falling through the void. Epicurus almost certainly embraced the endless series of violent motions. He would have been unconcerned with explaining how this *sort* of motion could have arisen (it never did arise, but always was), as long as he had an explanation at hand for each *instance* of this sort. Epicurus posited a “swerve” that occurs now and again among the atoms, though with a bad enough conscience to insist it be a swerve of only one minimum unit of space, and this hypothesis, which seems to reflect Epicurus's later thought, would produce sideways and upward motion through collisions. But the swerve itself is inexplicable when it occurs, and so it only makes our problem of explanation worse. But the point of introducing the swerve was not only, it seems, to explain the sideways motion of atoms, but also to explain free will.⁷⁵

Complex bodies were conceived by Epicurus as dynamically stable, with a constant influx and efflux of atoms, and continuous movement of atoms within it, so that the circulation of the atoms seems not only to have been used to explain how compound bodies can move at various speeds, but also, perhaps, to explain how bodies hold together, as a kind of whirlpool does, an idea going back to pre-Socratic thought. In particular, images (*eidola*) are constantly emitted from the surfaces of bodies, and the consequent loss of material is made up for by the influx of atoms from without, which are constantly bombarding an object, and can get sucked into its structure in the way that water may be sucked into and incorporated in a whirlpool.

⁷⁴Democritus, it seems, did not assume a natural motion of any sort for atoms, and perhaps accounted for falling downward as a local phenomenon within our particular whirl of atoms, which are so organized that they press in toward the center for some reason. He notes, perhaps, that atoms fall at different rates. This is true even of the same atom, of course, which accelerates as it falls, and this acceleration, had it been observed by Lucretius, should have suggested that our observable falling is *not* a shared, constant motion. But perhaps he does not take the uniform high velocity of the atoms to be our observable falling, at all, but another thing.

⁷⁵Lucretius II 216–293. The doctrine is not attested in any of Epicurus's writings, but Lucretius is surely not innovating here. Another motivation for introducing the swerve was to avoid the elimination of free will by determinism, a point we shall discuss below.

In the natural sciences Epicurus frequently offered alternative explanations, suggesting that we can't tell which is true, and that it didn't matter which was, the point being that possible natural explanations were available to debar superstition. This, of course, is consistent with his method of arguing for scientific theory, for if several different views are each suggested by different analogies with the observable, and are all consistent with observation, he would have no way to tell which is true. So the stars may rotate because they are driven by wind, or by their own power, or for some other reason.⁷⁶ Epicurus rejected final causes in fundamental natural explanations, and so rejected the basics of Aristotle's and Plato's views of the world. Nature has no aim or intention, and certainly is uninterested in human well being.⁷⁷ Moreover, no gods made the world, as is evident from its imperfection for the end of benefitting us.⁷⁸ Animals and plants that appear deliberately adapted to their environment are simply those that survived because they were adapted, every possible construction for a living things having arisen at some time naturally.⁷⁹

Epicurean cosmology is rather vague, given its refusal to choose between alternative possible explanations, but a few things are fairly definite in it. One is that our cosmos is very old, and near its death, as is evidenced by the reduced ability of the earth to give birth to animals and plants. For one thing, the Earth must have produced the originals of every species, and no longer produces any but small and simple animals, so its powers must have diminished from the beginning of this cosmos. But even within historical memory one can perceive the decline, for we know the soil was far more productive in the time of our fathers.⁸⁰

Another is that the world was not produced by gods.⁸¹ One argument that influenced later Christian speculation was that there could be no reason why this world, clearly aging and finite, should have been created at the time it was, rather than earlier. Christians, of course, would argue, along Neoplatonic lines, that the time came to be with the world, asserting the uniqueness of the cosmos against the unlimited number of worlds arising and disintegrating within the void posited by the Epicureans. Otherwise, the arguments rehearsed the

⁷⁶Epicurus, *Letter to Pythocles* 85–88. Lucretius VI 703–711, V 509–533.

⁷⁷Lucretius IV 823–857.

⁷⁸Cicero, *On the Nature of the Gods* I 18–23, 52–53.

⁷⁹Lucretius V 837–877.

⁸⁰Lucretius II 1105–1174.

⁸¹The arguments here are laid out in Cicero, *On the Nature of the Gods*, rehearsed by Velleius the Epicurean, I 18–23, 52–53, and in Lucretius V 156–234. IV 823–57 argues the more general point that the world did not arise to accomplish some end.

problem of evil, suggesting that there was no evidence of particularly good design to the world for the benefit of men, or for the accomplishment of moral aims. As for the gods that the Epicureans granted did exist in the vast reaches of the void outside the formed world, they argued that these gods would scarcely have the ability, or any reason, to create a world of the sort we live in.

This means, in particular, that living things have arisen without any final causes involved. They arose by accidental confluences of atoms, and survived because, as it happened, they were well adapted to the world they arose within.⁸² The ability to reproduce and take in nutrition would be part of this adaptation, of course. Lucretius imagines the earth itself producing the whole variety of creatures, rather than a gradual alteration of species into other species over time, and so asserts that at one time the earth must have produced large and complex animals in the same way as it is now capable of producing insects and the like. In essence, Epicurus follows in the tradition of Empedocles and Anaximander. To the objection that the accidental confluences of atoms that would give rise to worlds with living things in them like ours would be absurdly improbable, the Epicureans responded that space and time and the collection of atoms are all infinite, and so the most improbable of confluences will occur some time or other.

4. PSYCHOLOGY

Moreover, one must also think of this, that we apply the term ‘incorporeal,’ in the most common meaning of the term, to what could be conceived as independently existing. But the incorporeal cannot be thought of as independently existing, except for the void. And the void can neither act nor be acted upon, but merely provides motion through itself for bodies. Consequently, those who say that the soul is incorporeal are speaking to no point. For if it were of that character, it could neither act nor be acted upon at all. But in fact both these characters are clearly distinguished as belonging to the soul.

Epicurus, *Letter to Herodotus* 67.⁸³

According to Epicurus, the soul must be a body, for it acts and is acted upon, and so is not the void,

⁸²Lucretius V 837–77.

⁸³Translated Inwood and Gerson (1988) 11.

and body is the only other thing there is.⁸⁴ Interaction requires contact, and only bodies can come into contact with one another, so immaterial things, if there were such, could not interact.⁸⁵ Interaction requires things to change in their relations to one another so that influence of one on the other, which was not possible before, becomes possible now. Local motion is involved in interaction, then, but is not in itself enough, for Lucretius does not think there can be any interaction between things separated by void. Full contact is needed. A mind, then, to become aware of or attend to something, must make contact with it in a way it did not before, possibly through an intermediary image.

Soul is made up of four kinds of atoms: (1) air, which accounts for tranquillity of character, and in part for the way in which a living thing forms a unity, its different parts communicating with one another, (2) heat, which is responsible for the warmth of the body and aggressiveness, (3) wind (*pneuma*, a word which might be translated in another context as ‘spirit’), which moves the limbs and causes fear and flight, and (4) a fourth kind without a name, composed of the smallest sort of atom, perfectly spherical and so more easily moved than any other kind of atom, which is responsible for sensation and intellect. These four sorts of atoms are all so thoroughly intermixed as to form their own kind of stuff.⁸⁶ The fourth sort, making up the rational part of the soul, is to the soul as the soul is to the body, for just as the soul makes the body a unity by causing it respond to things as a unity, and so “hold together” much in the way the *tonos* of the Stoics holds the body together and makes it a unity, so the finest part of the soul “holds it together” as a unity capable of doing the things that define soul, namely sensing, thinking and willing, and no doubt self-awareness as well. But soul does not hold the body together *physically*, or does the finest part of the soul hold the soul together in this way. Soul is spread throughout and contained by the body, and without the body soul would dissipate like any gas. Moreover, soul’s abilities, even those peculiar to soul such as its ability to sense, will, or reason, are abilities it only possesses within the structure of the body. But it is also the case that the soul enables the body to function and maintain itself. Each needs the other to survive.

We think and feel with the ruling, rational part of the soul, the mind, located in the heart, to which sensation is transmitted from the coarser irrational soul, the spirit, in the rest of the body. (Epicurus’s views

⁸⁴Letter to Herodotus 67.

⁸⁵Lucretius III 161–76.

⁸⁶For the nature of the soul, Letter to Herodotus 63–7, and Lucretius, III 136–176, 238–240, 262–322, IV 877–91. For Epicurean psychology see in particular Annas (1991) and (1992), and Long and Sedley.

are Aristotle's, once one sets aside his materialism.) Sensing takes place in the relevant sense organs, and need not be reported to the central part of the soul in the chest (accounting for reflex action), which suggests that the soul consists of two quasi-independent systems. Lucretius states that if the ruling part of the soul is destroyed, the rest of the soul goes with it, no doubt because its unification of the soul cannot be done without. The Epicureans are rather more comfortable with a soul consisting of independent parts, and exercising some of its functions independently of the body, than any of their contemporaries. Epicurus's account of the soul's physical composition is rooted in the traditional breath-soul providing warmth to the body, and as usual, Epicureans follow folk beliefs as far as they can, ignoring the new findings of the physicians in Alexandria placing the mind in the brain. Also as usual, when it comes to detailed explanations they confess it is hard to know which possibility to settle on, but the main point is the soul's corporeality, and the consequence that upon death it dissipates.

For Epicurus there is no world soul, but animals have souls, and therefore awareness, and even choose their own actions freely. Polystratus argues⁸⁷ that animals do not understand certain things, at least in the way that we do, including prudential, ethical and religious considerations, which perhaps require a concept of the self, and that they do not reason from one belief to another. Hence they do not foresee difficulties, learn from experience, or assess themselves or their interests. We do not owe duties to animals, since they are incapable of entering into contracts. But he clearly implies that in other ways, including subjective awareness, memory, and choice between options presented, as it were, directly by the senses, animals are like human beings. Like Hume, he seems to see the differences between animals and human beings as a matter of degree, and a lack in animals of certain more highly developed capacities of which they nonetheless have in a more rudimentary form.⁸⁸

The complete dissolution of the soul at death is an important point to Epicurus, for he thinks the fear of punishment after death a great evil. Perhaps as important, Epicurean hedonistic calculation would be rendered utterly uncertain if there are rewards and punishments after death, at least as long as the exact nature of those sanctions, and how they are earned, was unknown. Although Socrates had spoken of such sanctions within a hedonistic system to convince people to be just, Epicurus has another strategy for this (as indeed, did Plato), and he sees the possibility of such sanctions as an interference rather than a help in ethics.

⁸⁷Polystratus, *On Irrational Contempt for Popular Opinions* 1–8.

⁸⁸So Lucretius, V 1056–1090 on language, IV 986–1010 on dreams.

The arguments in Lucretius for the soul's dissolution at death are many, but they boil down to a few straightforward observations. Various physical events, blows to the head and the like, can affect the soul, so it must be bodily;⁸⁹ the condition of the soul depends on the condition of the body, and people become senile with old age, are affected by drugs and so on, so the soul must be bodily;⁹⁰ the operation of the senses depends clearly on bodily organs, and if they are modified, the senses are distorted or cease to work.⁹¹ Such arguments express well the reasons why we think that mental events are in the end bodily, and they have an intuitive force, but taken more formally, they assume that bodies can only act on bodies to produce modifications of bodies.

One might think that Epicurus thought of the soul as above all sensitive to its environment, and driven, as it were, by external stimuli. Functions such as volition, imagination and thought, which most philosophers imagine to be less autonomous and very different from perception, with its dependence on stimulus from without, are conceived by Epicurus as very like perception. The images and conceptions that form the private stock of the mind in most thinkers are present in the world at large according to Epicurus, so that we respond to images of walking impinging on the mind from without when we choose to walk,⁹² and are able to conceive lions when we wish to only because images of lions are available to the intellect from without. The world functions as the memory of the soul in Epicureanism, and the resulting picture of the soul's operations smacks somewhat of Neoplatonic notions that would trace the recollection of concepts ultimately to the unity of the soul with the World Soul that embraces all things. The soul is above all responsive, and it is this that accounts for its ability to think about it and deal with the world, as well as the reliability of its intellectual and perceptual processes. But all this said, Epicurus in fact did *not* think of the soul as driven by external stimuli. What is external to the soul in these accounts explains, not why a particular thought or volition occurs at a particular time, but rather why it is possible to have a particular thought or volition. In fact, images of every possible

⁸⁹Lucretius III 170–176.

⁹⁰Lucretius III 445–456.

⁹¹Lucretius III 624–33.

⁹²Lucretius IV 877–906. We respond to “images of walking” by forming a second image of our own, of ourselves walking, and this is the impulse by which the higher, rational soul moves appropriately, and transfers its motion to the body via the irrational soul which pervades the body and strikes it within until it moves. One might wonder how the image can cause us to walk, and one must assume that the image does so because it occurs within a certain context or organ, as it were, within the soul. Epicurus, *On Nature* 28, Frag. 13, says that a person who walks has a practical belief, presumably a belief that it he ought to walk, which perhaps help make the image effective.

action are present to the soul, and concepts of every possible being. It is not explained how the soul selects one image or concept from this confused mass to perform a particular action or think a particular thought. So there will be found in us ‘seeds’ directing us toward various actions and thoughts, and it is up to us which of these seeds is, in the end, made actual.⁹³

Epicurus was in fact, then, quite concerned to defend the doctrine of free will, for he took it that the ethical import of his thought would be robbed of its efficacy if we could not, of our own efforts, pursue the advice it embodied. Moreover, to his mind, the possession of free will meant that a person’s thoughts and actions were *not* determined from without, given the nature of the soul and the particular accidents of the soul in question, by external stimuli to which the soul responds. Democritus, and Epicurus’s Democritean teacher, Nausiphanes, held to such deterministic views, but Epicurus found it impossible to affirm free will given such an assumption. For a Platonist, free will resided in the intellectual functioning of the soul, in its attempt to live up to an ideal conception how one ought to live, an ideal conception independent of the stream of sensory experience immediately affecting the soul, and, indeed, independent of natural causation. Epicurus seems to be governed by similar considerations in his arguments. So, in some surviving fragments from Book 25 of his *On Nature*, Epicurus suggests that anyone who argues that he does not have free will contradicts himself in a way. It is not that he formally says something from which a contradiction can be logically derived, but rather, if he intends to *argue* the point, he cannot view what he is doing as determined by outside causes, apparently because it is shaped by internally shaped standards of argument which he is trying to live up to.⁹⁴

For Epicurus the essential feature establishing freedom in the soul is its ability to resist its natural responses to the external stimuli. Thus, he thinks our free will to be the power of self-direction, so that what we do is caused by ourselves, not by the natural motions of the atoms that make us up. This happens, he says, when “a development occurs which takes on some distinctness from the atoms in a differential way—not in the way which is like viewing from a different distance,” and thus one “acquires responsibility which proceeds from himself.”⁹⁵ A “development” is a matter of one’s shaping oneself, so that, in the first instance, a soul comes to be, and later, a soul comes to be of a certain sort, with certain dispositions. They are a matter, it seems, of

⁹³Epicurus, *On Nature* 25.26. (Long and Sedley give this as Book 34, but Lauersen has established that it is in fact Book 25.)

⁹⁴Epicurus, *On Nature* 25.28.

⁹⁵Epicurus, *On Nature* 25.21–2, as translated in Long and Sedley (1987) 102. See also Lucretius, II 251–293, especially for free will as a power of resistance to external stimuli.

our self-consciously choosing what we are to be from a menu of possibilities provided from without.⁹⁶ The choice depends on beliefs, it seems, which one also chooses, no doubt with rational standards in view, so that rationality lies at the root of free will in Epicurus, just as it does in Platonism. These “developments” would seem to be a new kind of quality belonging to the mass of atoms that makes up the soul, not simply a property of the whole group of atoms, perhaps of a statistical character, but a property which actually involves new, mental, causal connections other than those physical connections arising from the collisions and rebounds of the atoms. Epicurus rejected the Democritean account of secondary qualities, holding that secondary qualities are real enough, and attributable to collections of atoms, though not as they are in themselves, but only *as they appear*. In the same way but at a higher level, Epicurus held that the self, which freely decides its actions independently of external causes, is real, but is not a collection of atoms, and so not governed by the natural laws governing atoms. To use the modern term, it is ‘emergent’ from the physical. The self is presumably that to which the secondary qualities appear, and no doubt one of its emergent properties was awareness, and another, self-awareness.⁹⁷

One might question the possibility of such an emergent quality of the physical soul. If every motion of the body is determined physically by the natural motions of the atoms considered as such, then there would seem to be no room for causation to occur at the psychological level. Reference to such causation would have to be a mere description of the behavior of the atoms as it appears when they are viewed from *en masse* or a distance. But Epicurus introduced, as we have seen, the notion of the swerve, which is not predictable from a consideration of the properties of the atoms involved in it, and such an unpredictable swerve in the atoms making up the soul opens up the possibility of interactive dualism, for such swerves, physically uncaused as they are, might be explained in terms of volition.⁹⁸ One need not envision a voluntary action as a simultaneous, organized swerve of all the atoms making up one’s arm. Rather, modeling it on the same lines as Epicurus’s

⁹⁶Epicurus, *On Nature* 25.24 (not in Long and Sedley, translated in Annas (1991)).

⁹⁷Thus far, the theory is very like the view of John Searle on these matters.

⁹⁸They are not, it appears, necessarily uncaused psychologically, according to Epicurus. Cicero, *On Fate* 21–25, asserts that the swerve must be admitted to be without a cause, *even if Epicurus does not say it is in so many words*. So it would seem to be left open for a swerve to be caused, sometimes, psychologically, though sometimes it may not be caused at all. The theory is rather like that of Eddington in his *The Nature of the Physical World*, which in 1928 seized on the new notions of quantum mechanical indeterminacy, though Eddington did not suggest that volition caused events at the quantum mechanical level, but only that the indeterminacy allowed us to free volition from physical determination. (It should be observed that quantum indeterminacy is not in fact a viable explanation of the indeterminacy alleged to accompany free actions, if such actions are caused by neurons. Neurons are much too large to experience quantum effects.)

discussion of the intellect and thinking, the soul's dispositions would presumably be structured in such a way that when a suitable swerve does occur it can result in action if the soul is such as to amplify it, attending to it and responding to it as a unity and thus producing a voluntary action through the physical apparatus of nerves and muscles. Or perhaps Epicurus thought the soul could actually produce the necessary swerve to resist the effects of external causation. But even if he did not, if we assume that swerves happen often enough, so that there is always a possibility of the soul's turning to a swerve in its decision making at a critical moment, human actions become unpredictable by ordinary physical means, and dependent on the nature of the self.

But what is the motivation for holding that we have free will in the first place? Here Epicurus argues, first, that we have an apparent awareness of our free choosing, and some reason would have to be proposed to reject that apparent experience before we can reject it as misleading, and kick out the conception of freedom that arises from it. (This, no doubt, is the same awareness Plato relies on when he holds that the source of our motion is our soul, not the body.) In the second place, if we choose to affirm determinism against free will, we become involved in a kind of self-refutation, for the very attempt to convince an Epicurean of this position implies that one thinks the fellow has a choice what to believe, is to be blamed for believing a falsehood, and can be reformed, and so implies that one thinks he has free choice. It is precisely the experience of blame and praise, with its consequent assignment of (causal) responsibility for our beliefs and actions, that leads to the formation of the conception of freedom, or self-determination. In the third place, determinism, since it entails a rejection of such practices as reproof and attempts at self-improvement, is pragmatically impossible.⁹⁹

5. ETHICS

We also regard self-sufficiency as a great good, not with the aim of always living off little, but to enable us to live off little if we do not have much, in the genuine conviction that they derive the greatest pleasure from luxury who need it least, and that everything natural is easy to procure, but what is empty is hard to procure... Therefore the habit of simple and inexpensive diet maximizes health and makes a man energetic in facing the necessary business of daily life; it also strengthens our character when we encounter luxuries from time to time, and enboldens us in the face of fortune. So when we say that pleasure is the end, we do not mean the pleasures of the dissipated and those that consist in having a good time, as some out of ignorance and disagreement or refusal to understand suppose we do, but freedom from pain in the body and from disturbance in the soul. For what

⁹⁹Epicurus, *On Nature* 25.26–30.

produces the pleasant life is not continuous drinking or parties or pederasty or womanizing or the enjoyment of fish and other dishes of an expensive table, but sober reasoning which tracks down the causes of every choice and avoidance, and which banishes the opinions that beset souls with the greatest confusion. Of all this the beginning and the greatest good is prudence. Therefore prudence is even more precious than philosophy and is the natural source of all the remaining virtues.

Epicurus, *Letter to Menoeceus*, 130–132.¹⁰⁰

The third criterion of truth in Epicurus is provided by the feelings of pleasure and pain. Feelings determine the truth or falsehood of statements concerning value, and are, like perceptions, impossible to challenge in their own realm. Only feelings can refute what feelings tell us about what is good or bad, and if a feeling of pleasure, say, tells someone that something is good, no other feeling can challenge the truth of what it says about what is immediately experienced. It may be that someone else has a different feeling, but that will be due to another object, the one they experience, not the one I do. Or it may be that I will later experience feelings of pain and come to regret having enjoyed the wine, but the enjoyment of the wine at the moment of imbibing it is a different thing from the hangover the next morning.¹⁰¹ Pursuing the parallel with the senses, we can introduce anticipations in the area of the good, and, of course, most of what we have to say about the good involves questions about persisting objects and the long range effects of our actions. So too much wine may be bad because of the hangover. If this is so, it is because we read “bad” in reference to, not the immediate effects of the wine, but the anticipated effects of the hangover. Or, again, it may be that unjust actions are bad, again, not due to their immediate effects, but to their anticipated effects. So our conception of the bad, the just, and the like, are generally anticipations, testable only by future experience of pains and pleasures. This means that there are not only observable truths about what is good and bad, but also conceptual or analytic truths about various notions of value, regulating how we verify and falsify such notions in experience.

People should seek pleasure, the only thing good in itself, the only thing all creatures seek. Pleasure comes in two kinds. Kinetic pleasure is due to some motion, such as the pleasure connected with sex or food and drink, which is a motion toward a state of rest. Static pleasure is the state of rest, a simple absence of pain

¹⁰⁰Translation from Long and Sedley (1987) 114. For Epicurean ethics, I rely especially on Long and Sedley (1987), and Annas (1993) Chapter 7.

¹⁰¹Cicero, *On Ends* I 29–32, 37–39. Epicurus, *Letter to Menoeceus* 127–132, esp. for *ataraxia* and freedom from pain. Lucretius II 1–61, VI 1–28. For static and kinetic pleasure, Cicero, *On Ends* II 9–10.

or tranquillity (*ataraxia*), a state of normal functioning with no trouble or pain interfering with it. Perhaps a second sort of kinetic pleasure can occur while in the state of rest, as the quality of one's experience changes over time due to some activity, such as listening to music. If so, this second sort of kinetic pleasure does not increase one's pleasure, for once one is at rest and no longer in any need, pleasure can no longer be increased, even if it changes in its quality depending on one's activities.¹⁰² In effect, Epicurus defines pleasure simply as the absence of pain. This, of course, replies to the Platonic argument that pleasure is an illusory good, since it is at most a motion towards a good—true enough, if we mean kinetic pleasure, but not if we mean *ataraxia*. Again in response to Plato, Epicurus holds that *ataraxia* is present only when pain is *entirely* absent—it cannot be mixed with pains, even if kinetic pleasure commonly is.¹⁰³ *Ataraxia* is the natural end of a person, and is complete and self-sufficient. One only enjoys *ataraxia* when one no longer stands in need. None of this, of course, is true of kinetic pleasures. As the final end of human life, *ataraxia* is familiar to us, that is, we find it a natural and comfortable state to be in, and it is obvious that it is choice worthy. Newborn children and animals seek pleasure without having to learn to do so.

One should also seek things other than pleasure, however, and some for their own sake, even if the ultimate justification for this is rooted in a consideration of pleasure. For instance, one should seek stability, with alliances and friendship for common benefit. Moreover, pleasure which leads to yet greater pain is not to be chosen, not because it is bad in itself, but because it leads to something bad, and sometimes pains, though they are bad, are to be chosen, if they can be expected to lead to greater pleasures in the end. In general, it is kinetic pleasures that lead to more pain than they are worth, and pains that are worthy of choice generally are so because they contribute to *ataraxia*. Some desires are not for what is necessary, that is, necessary for life or the satisfaction of some need, but are rather for something to supplement and vary a state of *ataraxia*, for instance, a desire for music or fine food, and as long as the satisfaction of such desires does not lead to suffering, they should be satisfied if possible. Such desires may not be natural, that is, universal and independent of one's

¹⁰²Cicero, *On Ends* II 9–10. Some scholars claim that Cicero is confused here, and deny that Epicurus thought there was this second kind of kinetic pleasure. Cicero clearly feels some difficulty over the question why this sort of kinetic pleasure is good if it does not increase the pleasure of *ataraxia*. Perhaps it prevents pains from arising, due to thoughts about unpleasant things, or distracts one from pains that might otherwise intrude on *ataraxia*. Certainly “staying active” seems to be a good way of distracting one from minor pains that might, if one is not active, spoil one's pleasure.

¹⁰³*Key Doctrines* 3, 18. Diogenes Laertius X 136–137 notes that Epicurus differs from the Cyrenaics here, who insisted that pleasure is always a movement. Epicurus distinguishes pleasure from joy and delight, which are movements, but, of course, necessarily short-lived. Epicurus's preference for *ataraxia*, peace and freedom from pain, may connect to Pyrrho's thought through Nausiphanes.

culture and experience, so that a desire for lobster is not natural, and only occurs among those familiar with the beast, but it may be reasonable to seek their satisfaction nonetheless.

Even more important, men's empty opinions lead them to seek the good in wealth, fame and power, or place undue value on luxuries, successful retaliation against enemies,¹⁰⁴ and the like, none of which are naturally desired by us, and such desires lead to more suffering and pain than they are worth. Indeed, any *intense* desire, one creating suffering if it remains unfulfilled, for something the absence of which does not lead to pain is based on a false and empty opinion. The suffering that comes from lack of fulfillment here is avoidable if one but realizes it is due to empty opinion.¹⁰⁵ It is the opinion that we have been harmed or are deprived that causes the most suffering in men.

Mental pleasures are worth more than bodily pleasures, for the mind contemplates not only the present, as does the body, but also the past and future, and so a wise man can draw on a much more ready supply of mental pleasures in times of difficulty.¹⁰⁶ A simple life, not one full of elaborate aesthetic pleasures, or the pleasure of domination over others, or any other thing difficult to obtain, is to be chosen, for it is freedom from bodily pain and the presence of mental tranquillity that is to be sought if one desires as good a life as one can get. Such a life can be had without great effort and without taking risks, so the only rational thing to do is to aim first of all at self-sufficiency by planning carefully and moderating one's desires. Epicurus values "delight" and "joy" as well as pleasure, and these states are to be obtained through the occasional indulgence in luxury and other positive experiences, but one must be careful not to form the empty opinion that such goods are necessary for a good life, and so a certain mild asceticism to avoid addiction to such experiences is recommended. Moreover, these goods are best enjoyed by those whose desires are very moderate so that they do not over-indulge themselves or become jaded.

¹⁰⁴Philodemus, in *On Anger*, claims that there is a natural anger, a natural desire that a wrong-doer be punished (a Christian's righteous anger, perhaps), but also an unnatural anger rooted in the false and empty view that the punishing is something in itself valuable and enjoyable. The natural anger is dispassionate, amounting to a conviction that one had better assert oneself here to obtain peace, or good behavior from the other person. Indeed, it supposedly involves some play-acting, as it would have to, since the other is most likely to moderate his behavior in response to the appearance of irrationality, so that he conceives the angry person would be willing to suffer a great deal of trouble and damage, if necessary to carry off a successful retaliation, should he misbehave again. Philodemus treats gratitude very much the same way. It would be an empty opinion to think that it was somehow intrinsically *important* to repay a benefit, but it is, of course, prudent to do so, and even to fake more feeling than one has.

¹⁰⁵*Key Doctrines* 30. The opinion is "empty" inasmuch as it contributes nothing to life and so is useless.

¹⁰⁶Cicero, *Tusculan Disputations* V 95, *On Ends* I 55. Writing from his deathbed, Epicurus told his friends that the memory of discussions with them was a great joy that balanced the pain of his final disease, Diogenes Laertius X 22.

It is somewhat misleading, then, to classify Epicureanism as a form of hedonism. *Ataraxia*, the final end, is not what we usually conceive as pleasure, that is, what Epicurus calls kinetic pleasure, or delight and joy. *Ataraxia* is rather the sense of well-being that comes when one experiences no needs or lacks, and, in the enjoyment of health and full competence, engages in those efforts and activities that seem worthwhile with maximal effectiveness. This is why Epicurean “pleasure” can be made to include both virtue and the altruistic stance of friendship. The end reflects the Greek conviction that true virtue makes one capable, and virtue, including self-restraint and effort, as well as alliances with others, are needed if one is to be capable and effective in one’s endeavors.

It is of some importance to the Epicurean to believe that great pains do not occur frequently, and do not last long when they do. Epicurus argues that the most acute diseases, for instance, are of short duration, and that chronic diseases admit an excess of pleasure over pain. One of the chief benefits of friendship and society is the well-founded belief that they can secure us against the worst things that can happen, for help will be there when it is needed.¹⁰⁷ So a good life is possible, if one chooses wisely.

6. POLITICS AND FRIENDSHIP

Nature’s justice is a guarantee of utility with a view to not harming one another and not being harmed. Nothing is just or unjust in relation to those creatures which were unable to make contracts over not harming one another and not being harmed; so too with all peoples which were unable or unwilling to make contracts over not harming and not being harmed. Justice was never anything *per se*, but a contract, regularly arising at some place or other in people’s dealings with one another, over not harming or being harmed. Injustice is something bad not *per se* but in the fear that arises from the suspicion that one will not escape the notice of those who have the authority to punish such things. No one who secretly infringes any of the terms of a mutual contract made with a view to not harming and not being harmed can be confident that he will escape detection even if he does so countless times. For right up to his death it is unclear whether he will actually escape.

Epicurus, *Key Doctrines* 31–35.¹⁰⁸

¹⁰⁷Epicurus, *Key Doctrines* 4 and 28.

¹⁰⁸Translation from Long and Sedley (1987) 125.

A basic move in Epicurean ethics is to divorce the good life from politics. Epicurus does not believe that a good person can only be formed within a good state, though he does recognize the usefulness here of a small community of like-minded friends. His anti-Platonic line fit the new political environment of the Hellenistic kingdom, and the Epicurean life can be lived under any polity.

Living things in their various kinds arise by natural selection. Human beings must originally have lived by their strength, but gradually discovered the civilized arts, the discovery often being due to exceptionally intelligent individuals whose ideas are picked up by others. Government arises through a kind of social contract for the sake of the common good.¹⁰⁹ Certain natural patterns of behavior are useful within the community. People recognize this fact, and so they begin to institutionalize those behaviors, setting up sanctions, teaching them to children, and the like, and so justice arises. There is no universal, unchanging standard of justice, though justice is not determined purely by agreement either, for the just is what is socially useful. So the agreement, for instance, not to harm one another is a natural and universal part of justice. Much, however, does depend on the specific circumstances and the nature of the existing contract, and so a certain degree of relativism is admitted. One does well to avoid political ambition, which is motivated chiefly by the mistaken idea that one can best gain protection from others by acquiring power, rather than through obscurity and retirement. The state would disappear if all men were wise, but nonetheless, it is best for people if they obey the laws and avoid making trouble. Epicurus thinks justice is neither, like the Platonic health of the soul, of value for its own sake, nor objectively required by some obligation written into the nature of things or the Forms imitated by the world. Its obligations are established through a contract, but he insists that breaking the contract is never a prudent thing to do because wrongdoers can never be sure they will not be brought before the bar, and so suffer continual mental distress even when they are not actually punished. It makes far more sense, if one seeks security as one ought, to stick by the contract.¹¹⁰

Friendship was of special importance in Epicurus's notion of the good life, though his account of it seemed double-minded to many of the Ancients. As one would expect, he recommends it for the sake of pleasure and security, especially on account of the latter, asserting that it is not our friend's help so much as

¹⁰⁹On the development of human society, see Lucretius V 925 ff., on politics and justice, 1105–1157. Lucretius, because of the times he lived in, seems to have been more opposed to involvement in political life than was Epicurus himself.

¹¹⁰*Key Doctrines* 31–37, 17.

confidence in his help that we need.¹¹¹ But, on the other hand, he also takes altruistic motivation as a part of friendship, claiming, for instance, that it is more pleasurable to confer a benefit than to receive one.¹¹² Perhaps the solution to the paradox lies in his remark that friendship is an intrinsic virtue, unlike the other virtues, which are virtues because they are useful, even though it originates in mutual benefit.¹¹³ The notion seems to be that one begins by forming a contract of mutual aid and benefit, but people naturally find the company of others, especially in a common endeavor such as philosophical investigation, pleasurable, and so one becomes affectionate towards one's friend, and takes pleasure in the friend's pleasure as well as the friend's company. On this account pleasure remains at the root of the value in friendship, but the friend could even be said, as Aristotle puts it, to be valued for her own sake if one takes pleasure in the friend's welfare and is grieved at her pain.¹¹⁴ Hedonism, even coupled with egoism, that is, the view that only *my* pleasure is a good for me, would not rule out this sort of thing. It is also suggested that friendship arises when two wise people enter into a compact to regard one another's welfare as the same as their own. (Note that this covers all three of Aristotle's motives for friendship, pleasure, utility, and a sharing of the virtuous life in which one views the friend as another self.) This presumably is something that occurs when affection has already arisen and the two friends become aware of it, and resolve to allow it to develop, and to foster it, each recognizing and welcoming the other's resolve.¹¹⁵ Justice arises in a community in somewhat the same way, and is for the sake of utility, each

¹¹¹On friendship, *Vatican Sayings* 23, 28, 39, 52, 66, 78. Annas (1993) 236–244.

¹¹²Plutarch, *Against Epicurean Happiness* 1097A, *Against Colotes* 1111B.

¹¹³*Vatican Sayings* 23.

¹¹⁴Perhaps friendship is an intrinsic virtue, since, unlike other virtues, friendship gains us pleasures which are not separable from it, which cannot occur at all unless there is friendship. So it does not gain us pleasures which might conceivably be gained without the virtue in question, as courage or self-restraint do.

¹¹⁵Cicero, *On Ends* I 66–70, explores this line of thought. Annas (1993) 241 ff. and other scholars have found difficulties with this view of friendship, holding, if I understand her, that one cannot at one and the same time have an eye to one's own pleasure and a truly altruistic regard for the other. I think perhaps she is right that one cannot have a truly altruistic regard for the sake of one's pleasure, but one might permit oneself to develop such a regard, assuming that one has a natural inclination to do so, only because one realizes that it tends to complete one's pleasure (*ataraxia*). Epicurus does not seem to think that only pleasure is desired for its own sake, and perhaps he does not even think it is the only thing that should be, he only thinks that to decide what should be desired for its own sake one must consider the effects the desire has on one's *ataraxia*. So one may not permit oneself the development of a taste for luxuries, which also naturally occurs if one is not careful, because one recognizes that the belief that luxuries are necessary for the completion of *ataraxia* is a false and empty one. Annas suggests that even on some such more friendly reading the more intense forms of love and friendship, those involving extensive sacrifice, cannot be brought into the fold, but what counts as sacrifice for most (sacrifice of career prospects to raise a child, maybe) may not be great sacrifice for an Epicurean with properly moderate desires, and perhaps it would make sense to commit to such sacrifice as long as one got a similar commitment in return, given the uncertainty of the world. In any case, the most intense forms of love, and friendship with those who lack wisdom and cannot be made wise, should

offering not to harm the others if he is not harmed in return.¹¹⁶ It should also be noted, though, that friendship is regarded by Ancient authors as involving the duty to provide aid when it is needed, so this agreement between wise men may be at least in part a matter of setting up a mutual aid society with a trustworthy individual, and may not imply great affection.

Indeed, Epicurean friendship remains guarded. The kind of love that comes to value the particular person above all, and to imagine that life would be intolerable without that person, is not approved. This would be a prime example of an unnatural desire rooted in an empty belief. Epicurean friendship is always somewhat diffuse. One has many friends, and does not mourn over the death of any one of them, but rather takes pleasure in the memory of the time spent with him or her. (In judging this, one must be fair—the perfect Epicurean will take the same attitude to herself that she takes to her friends, neither will she mourn for her own approaching death.) There is altruism and faithfulness here, but not passion, and a certain distance is always maintained. Here, more than anywhere else, perhaps, it becomes apparent that Epicurus’s notion of the best life may be a controversial one. Some would surely argue that he avoids risk too much, and that his notion of the good life is missing important things that can only be had by taking risks and embracing pain and trouble.¹¹⁷

7. DEATH IS NOTHING TO US

Feelings also serve as a criterion of truth in the issue whether death is an evil, but there is an initial problem here, since no feelings of pain or pleasure are consequent on death, and death itself is also unaccompanied by feelings. So Epicurus rules that death is nothing to us, neither good nor evil, but indifferent. It is unwise to court death unnecessarily, for a further time of pleasure is better than indifference, but since the fear of death robs us of all security and produces a great deal of suffering, for “we all live in an unwalled city when it comes to death,” it is also unwise to fear it. Even if we believe we are immortal, we suffer great insecurity, because we don’t have any assurance about what awaits us after death. In one place, Epicurus suggests that life is not improved by lengthening it, once we have attained to philosophical understanding and

be avoided by an Epicurean.

¹¹⁶Epicurus, *Principal Doctrine* 31 and 37. Long and Sedley (1987) vol. 1, 125. This is clearly a form of contract theory, holding that to be just is to enter into and support a contract not to harm one another, and that laws are just if they contribute to the purpose of this contract.

¹¹⁷In particular, Romantic love is not much approved by the Epicureans. See Lucretius IV 1058–1191 for the disturbance of reason produced by sexual desire, for instance.

abandoned irrational fears and worries. A wise person lives in the moment.

Epicurean views here have often sparked disagreement, and even a refusal to believe that the Epicureans really believed what they professed. Perhaps the evil of death, if Epicurus is wrong, resides in the fact that it cuts off our projects and plans, to which we must, perhaps, have some commitment to lead a good life. We are harmed by death because it harms us to prevent us from completing our projects, including fulfilling duties we have undertaken to others. Epicurus would doubtless reply that we had misconceived the nature of the good life. The good involved in pursuit of a project can only be measured by the pleasure it produces, and that means that we should not become excessively attached to projects difficult of completion. It is possible to be involved in a project, and yet undisturbed if it is left unfinished, and that would be the right attitude. For Epicurus, as a hedonist, it is always the quality of the moment that makes for a good life, and although we must take into account future and past moments, especially to judge a life as a whole, in the end no commitment to the future or reaction to the past can be justified if it damages the present without any reasonable expectation of greater rewards in future present moments.

Trying another tack, it might be objected that Epicurus is making a false assumption about rationality, to the effect that it is only rational to be concerned for one's *own* present or future pleasure or distress, and given that our apparently reasonable goals in fact extend beyond that range to the welfare of others, this assumption might be challenged. Indeed, Epicurus himself, given his high valuation of friendship, which surely involves us in such goals, provides us with support for such a challenge. The most likely reply to this would point out the rational limitations of one's concern for one's friends, according to Epicurus. The function of friendship, he thinks, is to increase our security and provide certain pleasures, and so any attachment to a friend that has the opposite effect is to be regarded as irrational. It seems, then, that any attachment to our friends that would make us disturbed by the prospect of their suffering after our deaths is irrational. That is not to say that it is irrational to make provision now to help our friends after our death, through a properly executed will, for instance. It is the disturbance, not the action, that is irrational. Moreover, Epicurus is at pains to argue that the good life is possible to the wise, so, given that our friends are wise, as they must be if they are chosen wisely, we need not be concerned that they will be unable to lead a good life after our death.

Making one more try, perhaps it can be objected that Epicurus supposes memory of past pleasures and anticipation of future pleasures comfort us when we are in pain, and perhaps such memory and anticipation may even help us when our state of *ataraxia* is disturbed by an anticipation of some pain. Doesn't that imply that it is rational to make something of future pleasures and pains? The prospect of a near death would prevent

the anticipation of future pleasures, of course, and might not that be reasonably regarded as an evil? But it should be noted that this consideration of past and future pleasures is a technique for creating pleasure at present, by drawing our attention away from present pain. The technique does not presuppose that it is rational to be concerned about future pleasures and pains, for it is proposed that we ignore the pains entirely, and if there are no future pleasures, then it is proposed that we attend to past pleasures alone, perhaps even noting that the future is for the most part nothing to us if death is near. The technique is recommended because it is effective in producing pleasure and directing our attention away from pain, not because it is somehow rational to be concerned about the future and the past. Indeed, the technique seems to presuppose that it is rational only to be concerned about the present, and to contemplate past and future only to the extent that it aids us in the present.

On balance, then, it seems that Epicurus's view of death is defensible within the framework of his own views, and the usual objections smuggle in assumptions about what it is rational to be concerned about that Epicurus would reject.

8. THE GODS

. . . what cause spread the authority of the gods through the wide world, filled the cities with altars, and led to the institution of holy rituals. . . The reason is that already in those days the races of mortal men used to see with waking mind, and even more in their dreams, figures of gods, of marvelous appearance and prodigious size. . . They endowed them with everlasting life, because their appearance was in perpetual supply and the form remained unchanged, and more generally because they supposed that beings with such strength could not easily be overcome by any force. And hence they supposed them to be supremely blessed . . .

Lucretius, *The Nature of Things* V 1161 ff.¹¹⁸

Epicurus was strongly opposed to superstition, for it made people afraid, especially afraid of death, since they supposed something happened to them after death. But he attempted a philosophical defense, and rational reconstruction, of traditional Greek polytheism. He wished to retain the admiration for the Gods as participants in the ideal, happy life, but also to deny the gods any power in the affairs of this world. He

¹¹⁸Translated Long and Sedley (1987) 139.

assumed, then, that the Gods lived in the open spaces between the worlds, where they were invulnerable to harm because they never encountered atoms outside themselves.

The common beliefs of every race, he argued, establish the existence of the gods, for that on which all agree must be right.¹¹⁹ The gods are always conceived as human in shape, immortal, and perfectly happy. These must be due to common experience of the gods, gained from the effluences from them which enter the mind and give rise to conceptions. We might object that there are other and better explanations available for the consensus of all on this matter, or that there is in fact no such consensus once we look outside the Mediterranean basin, but Epicurus has a strategy in mind to neutralize common beliefs. He does not want to oppose them too directly, and so finds reasons to agree with them as far as he may without producing problems. In his analysis, it is not belief in the gods that causes trouble for human beings, but fear of them and the conviction that they interfere in human affairs. Epicurus held that the gods should be worshiped because of their perfection, not because of fear, that is, because of the practical import of their activities on us. The stories of the Gods in Homer, and ordinary worship, are all wrong, for the Gods do not have any concern for us. (This, of course, opposes the Stoic doctrine of providence.) Epicureans were willing to go along with religious customs, but did not treat Homer and the like as sources of wisdom to be allegorized into philosophy. The argument from evil shows that there is no divine providence. Everything is explained and determined mechanically.

One might wonder if this is religion at all. The point of religious belief seems to be to reassure us that we have some standing in the world, and that the evils found in the world have some justification, so that the world is ruled by good powers that aim, if not at our welfare in particular, at least at the welfare of natural beings in general. Religion addresses, not the fear of particular evils that might be countered by suitable precautions and technology, but the general problem why there should be evil, and provides a world view that reconciles us to evil in the world. If that is right, does Epicurean religion do this? Perhaps it does, at least inasmuch as it provides us with an image of the ideal life, the untroubled life of *ataraxia*, and suggests that such a life is possible for some beings at least. Of course, Epicurus argued that such a life is possible for us too, as we have seen, given the way we and the world are constructed, at least as long as one is wise. We are assured of the existence of the ideal, then, which we can at least use as a guide, and can admire and enjoy.

¹¹⁹Cicero, *On the Nature of the Gods* I 105; I 43–49. See, for the Gods, Epicurus, *Letter to Menoeceus* 123–4, Lucretius, *The Nature of Things* VI 68–79,