Stanford Encyclopedia of Philosophy

Epicurus

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The philosophy of Epicurus (341–270 B.C.E.) was a complete and interdependent system, involving a view of the goal of human life (happiness, resulting from absence of physical pain and mental disturbance), an empiricist theory of knowledge (sensations, together with the perception of pleasure and pain, are infallible criteria), a description of nature based on atomistic materialism, and a naturalistic account of evolution, from the formation of the world to the emergence of human societies. Epicurus believed that, on the basis of a radical materialism which dispensed with transcendent entities such as the Platonic Ideas or Forms, he could disprove the possibility of the soul's survival after death, and hence the prospect of punishment in the afterlife. He regarded the unacknowledged fear of death and punishment as the primary cause of anxiety among human beings, and anxiety in turn as the source of extreme and irrational desires. The elimination of the fears and corresponding desires would leave people free to pursue the pleasures, both physical and mental, to which they are naturally drawn, and to enjoy the peace of mind that is consequent upon their regularly expected and achieved satisfaction. It remained to explain how irrational fears arose in the first place: hence the importance of an account of social evolution. Epicurus was aware that deeply ingrained habits of thought are not easily corrected, and thus he proposed various exercises to assist the novice. His system included advice on the proper attitude toward politics (avoid it where possible) and the gods (do not imagine that they concern themselves about human beings and their behavior), the role of sex (dubious), marriage (also dubious) and friendship (essential), reflections on the nature of various meteorological and planetary phenomena, about which it was best to keep an open mind in the absence of decisive verification, and explanations of such processes as gravity (that is, the tendency of objects to fall to the surface of the earth) and magnetism, which posed considerable challenges to the ingenuity of the earlier atomists. Although the overall structure of Epicureanism was designed to hang together and to serve its principal ethical goals, there was room for a great deal of intriguing philosophical argument concerning every aspect of the system, from the speed of atoms in a void to the origin of optical illusions.

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1. Sources

The major source for Epicurean doctrine is Diogenes Laertius' third-century C.E. *Lives of Eminent Philosophers*, a compilation of information on the lives and doctrines of the philosophers of classical Greece (see "Doxography of Ancient Philosophy"). In the tenth and final book, devoted to Epicureanism, Diogenes preserves three of Epicurus' letters to his disciples, in which he presents his basic views in a concise and handy form. The *Letter to Herodotus* summarizes Epicurus' physical theory, the *Letter to Menoeceus* offers a précis of Epicurean ethics, and the *Letter to Pythocles* treats astronomical and meteorological matters. (There is some doubt about whether the last is by Epicurus himself or a follower, but there seems to be sufficient reason to attribute it to the founder himself.) Diogenes also quotes a collection of brief sayings, called the

"Principal Beliefs" or "Principal Doctrines" (*Kuriai Doxai*), excerpted from the writings of Epicurus or, in some cases, of his close associates; another such collection, partially overlapping with the first, survives in an independent manuscript and is conventionally called the Vatican Sayings. The purpose of both sets, like that of the Letters, was to make the core doctrines easy to remember. Diogenes also fills in topics not covered in the Letters, and provides a list of Epicurus' writings and other biographical information (for the text, see Dorandi 2013; for an English translation, Mensch 2018).

Short citations of Epicurus' works appear in other writers (e.g., Plutarch, Sextus Empiricus, and the Greek commentators on Aristotle), often taken out of context or presented in a polemical and distorted fashion. (The standard edition of Epicurus' works in Greek is Arrighetti 1973; the fullest collection of fragments and testimonies is still Usener 1887, repr. with Italian translation, Ramelli 2002; for translations, see Bibliography: Editions, Translations, Commentaries). In addition, several works of Epicurus, including parts of his major treatise, *On Nature* (*Peri phuseôs*) — a series of lectures running to 37 papyrus rolls — have been recovered in damaged condition from the library of a villa in the town of Herculaneum, which was buried in the eruption of Mt. Vesuvius in 79 C.E. The library almost certainly contained the working collection of Philodemus, an Epicurean philosopher from Syria who studied in Athens and moved to Italy in the first century B.C.E. Many of the rolls consist of Philodemus' own writings, and provide valuable information about later issues in the history of Epicureanism. One must be cautious about ascribing these views to the founder himself, although the school tended to be conservative and later thinkers embellished rather than altered Epicurus' own teachings. New editions and translations are now making these difficult texts available to a wider readership.

More or less contemporary with Philodemus is Lucretius (first century B.C.E.), who composed in Latin *De rerum natura* ("On the Nature of Things"; the title, if it is Lucretius' own, is an adaptation of "On Nature") in six books of hexameter verse, the meter characteristic of epic and didactic poetry. As a dedicated Epicurean, passionate to promulgate the message of the founder, Lucretius reproduced Epicurean doctrine faithfully (Sedley 1998; Clay 1983 allows Lucretius more originality). His poem concentrates principally on the physical and psychological or epistemological aspects of Epicureanism, and to a great extent omits the ethical. From a hostile point of view, Cicero rehearsed and criticized Epicurus' ideas, especially concerning ethics, in several of his philosophical works, including *On Moral Ends* (*De finibus*) and the *Tusculan Disputations*. Still later, in the second century C.E., another Diogenes erected a large inscription, to this day only partially excavated, in the city of Oenoanda (in southwestern Turkey), which contained the basic tenets of Epicureanism (authoritative edition by Smith 1993, but new fragments have been published subsequently; see also Gordon 1996, Hammerstaedt et alii, 2017).

2. Life

"Epicurus, the son of Neocles and Chaerestrata, was an Athenian from the deme of Gargettus and the lineage of the Philaïdes, as Metrodorus says in his *On Noble Families*. Heraclides, among others, in his epitome of Sotion, says that he was raised in Samos, since the Athenians were given parcels of land there, but came to Athens when he was eighteen, when Xenocrates was head of the Academy and Aristotle was still in Chalcis" (where he died in 322). So begins the account by Diogenes Laertius (10.1). The dates for Epicurus' birth and first move to Athens are thus 341 B.C.E. and 323 respectively. Diogenes adds that after the death of Alexander (323), when the Athenians were expelled from Samos, Epicurus left Athens and joined his father in Colophon (in 321), on the coast of what is now Turkey. Here he studied philosophy under the tutelage of Nausiphanes, a Democritean philosopher with skeptical leanings, and author of a work called the *Tripod*, on which Epicurus reportedly drew for his *Canon*, his principal work on epistemology; in ethics, Nausiphanes substituted the term *akataplêxia* ("undauntability") for Democritus' *athambiê*, "fearlessness," as crucial to the good life, which invites comparison with Epicurus' *ataraxia* or "imperturbability," though Epicurus is said to have denied having been influenced by him (On Nausiphanes' role in transmitting elements of Democritean doctrine to Epicurus, see Warren 2002: 160–92.)

Ten years later, Epicurus moved to Mytilene on the island of Lesbos, and soon proceeded to Lampsacus on the nearby mainland; in both cities he taught and gathered followers before returning again to Athens in 307/06, where he remained until his death in 270, at the age of seventy or seventy-one. In Athens, he purchased the property that became known as the "Garden" (later used as a name for his school itself) and began to develop his own school in earnest. Diogenes reports a number of slanderous stories that were

circulated by Epicurus' opponents, despite which he affirms that Epicurus was of an extraordinarily humane disposition; this was the prevailing view, shared even by hostile witnesses to Epicureanism. Diogenes also records Epicurus' will (10.16–21), in which, among other things, he made provisions for the children of his friends and appointed a successor.

3. Physical Theory

Epicurus held that the elementary constituents of nature are undifferentiated matter, in the form of discrete, solid and indivisible particles ("atoms") below the threshold of perception, plus empty space, that is, the complement of matter or where matter is not (Inwood 1981, Konstan 2014; contra Sedley 1982, who argues that space, for Epicurus, is a continuous matrix extending uniformly throughout the universe, and is either occupied by matter or empty). In its broad outline, Epicurus inherited this scheme from the earlier atomists, above all Democritus. But Democritus' version had been the object of critiques by later thinkers, especially Aristotle, in part for incoherencies in the notion of an infinite void, in part for problems attaching to his idea of minima, or entities of the smallest conceivable size (see especially *Physics* Book 6). First, freestanding entities of minimal size could have no edges, and so no shapes, or rather would be all edge: thus, if two minima touched, they would wholly overlap. (The same argument applies to points in a line, which is why a line contains points but is not composed of them, according to Aristotle.) Further, if atoms really are conceptually indivisible, and not just physically unsplittable, then when two atoms pass by each other it is impossible that they should at any time be only partway past, for this would imply a point partway along the length of the atom, which contradicts the premise that it is a minimum. Although Aristotle does not state the argument precisely in this form, it is apparent that a strict conception of minimal-sized atoms entails that motion too must consist of discontinuous quanta; and if motion, then time. Atoms must, then, Aristotle inferred, move in discrete hops (*kinêmata*), each one occupying a single temporal minimum — and hence, all atoms must move at a uniform speed. An infinite void, with atoms distributed throughout it, led to problems of its own, for it permits no intrinsic spatial orientation and hence no account of why things fall, as they are observed to do.

The problem for Epicurus was to find a way of explaining the natural phenomena of bodily movement while responding to the challenges posed by Aristotle's criticisms of Democritus' theory. Epicurus rose to the challenge, although one cannot be certain that he was responding directly to Aristotle's critique. (It is unclear whether or how much philosophers of Epicurus' generation who were not members of Aristotle's own school had access to Aristotle's treatises.)

First, he distinguished between the atom, which by its nature cannot be broken apart, and the minimum conceivable expanse of matter: atoms have such minima as parts, but are not minima themselves — there can be no free-standing entity one minimum expanse in size. This resolves the problem of atomic edges, and also that of how atoms can come in different shapes and sizes (though never large enough to be seen): to have the hooks and crevices needed to form compounds, they can scarcely be theoretically partless. Second, Epicurus agreed that time too is discontinuous, as is motion: Simplicius (p. 934.23–30 Diels; translation in Konstan 1989) quotes him as affirming that it is untrue to say that an atom is moving over a minimum interval, but only that it has moved (some scholars maintain that this is a later innovation in the school; see especially Verde 2013). What is more, as Aristotle had argued must be the case, atoms all move at the same velocity (the principle of *isotakheia*). This last claim entailed difficulties of its own, such as how atoms ever overtake each other, if they are moving in the same direction. (Lucretius invoked the idea of a random swerve to solve this one; see below.) But it also provided a solution to another problem, that of entropy: for since atoms can never slow down, the universe can never come to a halt (in modern terms, there is no loss of energy). As for gravity, Epicurus may have had a solution to this too, and in a novel form. If an atom just on its own cannot slow down or alter its direction of motion, then an atom that is rising or moving in an oblique direction cannot at some point begin to tilt or fall, unless something blocks its progress and forces it to do so. If, however, after a collision atoms tended to emerge in a statistically favored direction — that is, if the motions of all atoms after collisions did not cancel each other out but on average produced a vector, however small, in a given direction, then that direction would by definition be down. The absence of a global orientation in the universe was thus immaterial. Due to this vector, any given world will, like our own, be similarly oriented in respect to the direction "down." (Given the infinite expanse of the universe on Epicurean theory — see below — we must expect there to be a plurality of worlds, some like ours, some — within limits — different.)

Macroscopic objects, of course, do not move at a uniform and very great speed; the atoms within them do, but their motions are restricted and deflected by neighboring atoms, and so they vibrate. In the case of compound objects that are completely at rest, the resultant of internal atomic motions is zero, relative, at least, to the earth, which may have an average motion of its own. If so, and if for some reason the earth's motion is slower in a downward direction than that of objects on or near its surface — because, say, the earth is disk-shaped, as Epicurus held, and hence sinks more slowly in the surrounding atomic medium, like a falling leaf — then Epicurus could explain as well why things like stones tend to fall to the earth's surface when let go.

Epicurus operated with a highly limited number of elementary principles in nature — he did not know the concept of force, for example, or the associated ideas of attraction and repulsion among atoms, not to mention more arcane properties — and for all his efforts to account for all the physical features of the world on the basis of this theory, paradoxes remained. An excellent one is posed by Sextus Empiricus (*Against the Physicists* = *M* 10.144–48), which at the same time gives an idea of how Epicurean atoms were understood to behave (at least in Sextus' time, late 2nd century C.E.). Sextus imagined two atoms separated by a distance of nine minima, traveling at the same speed (as atoms must) toward each other; after four temporal minima, the atoms would be one spatial minimum apart. Then what? They cannot meet in the middle of the remaining distance, by the very concept of a minimum. Nor can one cross the interval before the other, without violating the rule of equal velocity. But how, then, can they meet at all? We do not know an Epicurean reply to this conundrum. Perhaps atoms are always an even number of minimal spaces apart from one another. Or else, minima are always bundled in such large quantities that it is meaningless to speak of an odd or even number of minima between atoms; the Stoics, at all events, held that whether the number of stars, for example, is odd or even is absolutely or naturally non-evident (*kathapax adela*, Sextus Empiricus *Outline of Pyrrhonism* = *PH* 2.97, *M* 8.147; *physei adela*, *M* 8.317–18). But Epicurus believed that motion at the atomic level obeyed different laws from those that appear to operate at the level of macroscopic objects (that atomic motion is discontinuous is an example). Perhaps, then, motions over small numbers of minima were in some sense indiscernible. Finally, it is possible that he discounted such a puzzle as a purely mathematical paradox, since it is recorded that he had little interest in mathematics as a separate science from physics and believed it to be irrelevant to the proper study of physics.

Fascinating as these questions are in their own right, Epicurus himself does not proceed by creating an abstract model, exploring its internal coherence, and determining its applicability to phenomena, in the ideal manner of modern science. Rather, he begins with the testimony of the senses, which he thinks are always reliable. These provide a basis on which to draw conclusions either with respect to things that still await confirmation or those that are by nature imperceptible (*Letter to Herodotus* = *LH* 38). Thus, in beginning his account of the physical world in this Letter, he argues that things cannot arise out of nothing, since otherwise there would be no need of specific seeds for specific plants and animals, and anything whatsoever could be generated out of just any types of material elements. Since this is not seen to happen, but reproduction in things we can observe with our senses is in fact orderly and determinate, spontaneous generation at any level is ruled out. The logic is what Epicurus calls counterwitnessing: a hypothetical premise (here, that things sometimes arise out of nothing) is eliminated because experience tells against its conclusion (here, that the coming into being of visible objects does not require determinate seeds or materials). More simply, if *A* then *B*; but not *B*, hence not *A*. One might, of course, challenge the implication: something might arise from nothing, even if there are no cases of chickens giving birth to horses. The important point, however, is that Epicurus invokes the data of perception to testify for or against the nature of elementary phenomena; he assumes a certain uniformity of nature at all levels. So too with his next postulate: things are not destroyed into what is not, since in that case everything would cease to exist (and would have ceased to exist before now, given infinite past time — recall that nothing is created out of nothing); but things do exist, hence the premise is false.

As for bodies (note the plural: Epicurus does not typically speak of matter per se) and void as the basic physical principles, the senses, Epicurus affirms, testify to the existence of bodies, and by calculation on the basis of the senses we infer the nature of what is invisible, for example the atoms (*LH* 39). Here the reasoning is based on analogy: what is evident to our senses must be true on the microscopic level as well, at least in some respects. Void must exist, in turn, if bodies are to be able to move, as they are seen to do. Thus motion is the counterwitness to the non-existence of void — an indirect argument is required since one cannot perceive empty space. What is more, since bodies, being "full," offer resistance and void, being empty, offers no resistance, they complement each other and exhaust the possibilities; hence it is impossible to conceive of

anything besides these two principles, apart from things that are accidents of them — accidents that arise from unions of elementary bodies in the void. (Inconceivability is another tool in Epicurus' method of demonstration.) These elementary bodies, then, are the atoms, which are indivisible and inalterable, if things are not to dissolve into nothingness. The *Letter to Herodotus* is an epitome of Epicurean doctrine, and the arguments are crisp and abbreviated, but the reasoning is clear, and is confirmed by the more detailed treatment in Lucretius, which almost certainly follows Epicurus' *On Nature* (see Leone 2012). Epicurus appeals to some elementary intuitions concerning bodies and their movement through space in order to establish the structure of imperceptibly small things; he concludes that these must be inalterable if nature is not to dissolve into nothing (creation back out of nothing having already been eliminated by the argument cited above from regularity in generation); and the basic features of the atomic system are then in place. A similar appeal to the senses establishes the infinity of the universe, since what is finite must have an edge, and an edge is conceived in reference to something beyond it. But the universe — in Greek, the "all" — contains everything, and so there is nothing outside it by which to conceive an edge. Hence, it is infinite. And if the all is infinite, so is the void and the number of atoms as well, for otherwise atoms would be too widely dispersed ever to meet (*LH* 41–42).

Epicurus now has in place the fundamental constituents of his natural world, and he might have stopped here, with atoms and void and the denial, on the grounds of inconceivability, of any other kind of basic physical principle. All secondary properties, such as color and taste, will be explained as epiphenomena of atomic combinations, and perception of things at a distance by the continual emission of infinitesimally thin laminas from objects, which maintain the relevant features of the source (in the case of vision, for example, the laminas will preserve the atomic patterns specific to the color and shape of the object) and directly stimulate the relevant sense organ. This is a tricky thesis, and again posed puzzles: how do the lamina or simulacra, as Lucretius called them, of a mountain enter the eye, for example? In fragments? By somehow shrinking? We do not know the answer to this one, but there are some plausible hypotheses (see Leone 2012; Konstan 2020). A few more concepts fill in the picture of the natural world: thus, Epicurus denies that there can be infinitely many kinds of atoms, for then all shapes (which define the kinds) at any given magnitude would be exhausted and atoms would have to reach visible proportions, which we know that they do not (this argument depends on the idea of minima, discussed further below); instead, the number of kinds (i.e., shapes of various microscopic sizes) is inconceivably large but "not strictly infinite," whereas the number of each kind of atom is simply infinite (*LH* 55–56). This condition is also invoked to explain why there is a limit on possible types of combinations of atoms, and hence on the number of viable species of things in the perceptible world: if there were infinitely many kinds of atoms, Epicurus believed, they could combine to generate absolutely anything — an infinity of different sorts of thing.

But an infinite number of solid and therefore indivisible atoms of finitely many kinds, such as Epicurus' theory provides, are enough to avoid the possibility of the universe crumbling into nothing. Why did Epicurus complicate matters still further with the doctrine that atoms themselves consist of still smaller parts in the form of mathematically minimal expanses, as we saw above that he does? Finite bodies, according to Epicurus, had to be composed of smaller expanses, and if there were no lower limit in size to such expanses, one would have to imagine traversing such a body in an infinite number of moves — but then, however small these infinitesimals might be, the object that contained them, Epicurus reasoned, would have to be infinitely large (*LH* 56–57). What are such minima like? Epicurus asks us to think of the smallest perceptible thing. It differs from larger visible entities in that it has no sub-parts to be traversed with the eye: if you do attempt to visualize such sub-parts, they simply coincide with the original perceptible minimum. Since such minimal visible entities have no parts, they do not touch edge to edge (edges are parts), and yet they measure out the body that contains them, larger bodies having more such minima. By analogy with the visible, then, we conceive of the smallest part of an atom (*LH* 58–59). This conception resembles the way points exist in a line, according to Aristotle, since they too do not touch, nor can they exist independently. But Epicurean minima differ from points in that they are physical expanses and so have extension. This looks like a contradictory state of affairs: can we imagine, for example, an atom consisting of just two minima? Or ten? It would be like counting up the least visible bits of a perceptible object. Geometrical problems arise as well, since it was known that the side and diagonal of a cube, for example, were incommensurable, yet both must, it would appear, be composed of finite and hence commensurable numbers of minima. On the assumption that Epicurus was aware of and cared about such puzzles, it has been suggested that he thought any atom consists of a not strictly infinite, but inconceivably large — and so "not strictly finite" — number of minima (see Konstan 1989a): thus, the minimum may be imagined as the inverse of the number of kinds of atoms

postulated by Epicurus, a quantity that takes on a quasi-technical status as a special order of magnitude. But sufficient evidence for this hypothesis is lacking.

4. Psychology and Ethics

Having established the physical basis of the world, Epicurus proceeds to explain the nature of the soul (this, at least, is the order in which Lucretius sets things out). This too, of course, consists of atoms: first, there is nothing that is not made up of atoms and void (secondary qualities are simply accidents of the arrangement of atoms), and second, an incorporeal entity could neither act on nor be moved by bodies, as the soul is seen to do (e.g., it is conscious of what happens to the body, and it initiates physical movement). Epicurus maintains that soul atoms are particularly fine and are distributed throughout the body (*LH* 64), and it is by means of them that we have sensations (*aisthêseis*) and the experience of pain and pleasure, which Epicurus calls *pathê* (a term used by Aristotle and others to signify emotions instead). Body without soul atoms is unconscious and inert, and when the atoms of the body are disarranged so that it can no longer support conscious life, the soul atoms are scattered and no longer retain the capacity for sensation (*LH* 65). There is also a part of the human soul that is concentrated in the chest, and is the seat of the higher intellectual functions. The distinction is important, because it is in the rational part that error of judgment enters in. Sensation, like pain and pleasure, is incorrigible just because it is a function of the non-rational part, which does not modify a perception — that is, the reception of lamina emitted from macroscopic bodies — by the addition of opinion or belief.

The corporeal nature of the soul has two crucial consequences for Epicureanism. First, it is the basis of Epicurus' demonstration that the soul does not survive the death of the body (other arguments to this effect are presented in Lucretius 3.417–614). The soul's texture is too delicate to exist independently of the body that contains it, and in any case the connection with the body is necessary for sensation to occur. From this it follows that there can be no punishment after death, nor any regrets for the life that has been lost. Second, the soul is responsive to physical impressions, whether those that arrive from without in the form of laminas or simulacra, or those that arise from internal motions of the body. No phenomena are purely mental, in the sense of being disembodied states or objects of pure consciousness conceived as separate from embodiment. The elementary sensations of pleasure and pain, accordingly, rather than abstract moral principles or abstract concepts of goodness or badness, are the fundamental guides to what is good and bad, since all sentient creatures are naturally attracted to the one and repelled by the other. The function of the human mind — that part of the soul that is located in our chest — is not to seek higher things, but to maximize pleasure and minimize pain. That is its entire objective; the risk (a substantial one) is that it may miscalculate, since it is subject to false beliefs and errors in cognitive processes.

Unlike other Hellenistic schools, such as those of Aristotle and the Stoics, the Epicureans were not greatly interested in formal logic, but they certainly needed a theory of the formation of beliefs. As far as the ideational content of thinking — that is, the thought of something — is concerned, Epicurus proposed a radically reductive hypothesis: just as sensations occur as a result of thin films emitted by objects that enter the appropriate sense organ, so too some of these simulacra are fine enough to penetrate directly to the mind (located in the chest), and that is how we imagine such objects (e.g., gods). This process is invoked to explain not only dream images, but many kinds of mental impression, including impressions constituting voluntary thought: the latter occurs when we attend to one or another of the exiguous physical films that are continuously floating through the air. (How we manage to attend voluntarily to whichever of these films we choose is not explained in the surviving sources.) Imagining a thing is thus nothing more than picking out the simulacra that have been emitted by it, and which may endure beyond the life of the thing itself (hence we can imagine the dead). These mental images have no privileged status, such as Plato gave to his noetic Ideas or Forms; they are always true, but in this do not differ from the information provided by the senses. Mistakes occur here too when the wrong beliefs are associated with such impressions, for example, that because we have a mental image of a dead person it follows that he or she still exists in a ghostly form. Epicurean physics proves that this is impossible.

A great barrier to correct thinking is language itself, which, because it has a name for death, may suggest that death (being dead) is something a person can experience and hence deserves to be feared. Words must be understood in their basic sense, Epicurus says, as opposed to what he calls "empty sounds" (*LH* 37). The culprit in misunderstanding is always an illegitimate inference from sensation (the latter including thoughts

produced by film-like images). An example is the belief that centaurs exist. Epicurus does not deny that the thought of a centaur corresponds to some real stimulus in the form of simulacra: his theory of knowledge commits him to the view that it must. But the flimsy laminas as they float through the air can become distorted or interfere with one another, and thus the upper part of a human figure may get loosely attached to the lower part of a horse's. We know that this is unreal because such a combination is physically impossible: horses and human beings mature at different rates, for example, and eat different foods (see Lucretius 5.878–91; cf. Palaephatus *On Incredible Tales* 20). Beliefs about whether sensations correspond to an actually existing thing must be tested against knowledge of the world, as informed by Epicurean theory.

The ability to reason or calculate (*logismos*) cannot be a function of images. It is the faculty that lets us infer by analogy from the visible world to the invisible, and also that with which we may recognize that not all pleasures are to be chosen at all times, since some immediate pleasures may lead to long-term pain or harm (*Letter to Menoeceus* = *LM* 129). What is more, one must know something about the nature of pleasure in order to pursue it rationally, and likewise for pain. Epicurus, it appears, uses the terms pleasure and pain (*hêdonê*, *algêdôn*) strictly in reference to physical *pathê* or sensations, that is, those that are experienced via the non-rational soul that is distributed throughout the body. As for the rational part or mind, we have positive and negative experiences through it too. Most prominent among the negative mental states is fear, above all the fear of unreal dangers, such as death. Death, Epicurus insists, is nothing to us, since while we exist, our death is not, and when our death occurs, we do not exist (*LM* 124–25); but if one is frightened by the empty name of death, the fear will persist since we must all eventually die. This fear is one source of perturbation (*tarakhê*), and is a worse curse than physical pain itself; the absence of such fear is ataraxy, lack of perturbation, and ataraxy, together with freedom from physical pain, is one way of specifying the goal of life, for Epicurus.

There are also positive states of mind, which Epicurus identifies by the special term *khara* (joy), as opposed to *hêdonê* (pleasure, i.e., physical pleasure). These states too depend on belief, whether true or false. But Epicurus does not treat *khara* as an end, or part of the end for living: rather, he tends to describe the goal by negation, as freedom from bodily pain and mental disturbance (*LM* 128). However, happiness (*eudaimonia*), according to Epicurus, is not simply a neutral or privative condition but rather a form of pleasure in its own right — what Epicurus called catastematic or (following Cicero's Latin translation) "static" as opposed to "kinetic" pleasure. Although the precise nature of this distinction is debated, kinetic pleasures seem to be of the non-necessary kind (see below), such as those resulting from agreeable odors or sounds, rather than deriving from replenishment, as in the case of hunger or thirst. The philosophical school known as the Cyrenaics advocated increasing desires and seeking ever new ways of gratifying them.

Epicurus objected that such pleasures are necessarily accompanied by distress, for they depend upon a lack that is painful (Plato had demonstrated the problematic nature of this kind of pleasure; see *Gorgias* 496C–497A, *Philebus* 31E–32D, 46A–50C). In addition, augmenting desires tends to intensify rather than reduce the mental agitation (a distressful state of mind) that Epicurean philosophy sought to eliminate. Catastematic pleasure, on the contrary, is (or is taken in) a state rather than a process: it is the pleasure that accompanies well-being as such. The Cyrenaics and others, such as Cicero, maintained, in turn, that this condition is not pleasurable but rather neutral — neither pleasurable nor painful.

For Epicurus, there are some fears that are perfectly legitimate; so too are some desires. Epicurus offers a classification of desires into three types: some are natural, others are empty; and natural desires are of two sorts, those that are necessary and those that are merely natural (see Cooper 1999). Natural and necessary are those that look to happiness, physical well-being, or life itself (*LM* 127). Unnecessary but natural desires are for pleasant things like sweet odors and good-tasting food and drink (and for various pleasurable activities of sorts other than simple smelling, touching and tasting). Empty desires are those that have as their objects things designated by empty sounds, such as immortality, which cannot exist for human beings and do not correspond to any genuine need. The same holds for the desire for great wealth or for marks of fame, such as statues: they cannot provide the security that is the genuine object of the desire. Such desires, accordingly, can never be satisfied, any more than the corresponding fears — e.g., the fear of death — can ever be alleviated, since neither has a genuine referent, i.e., death as something harmful (when it is present, we do not exist) or wealth and power as salves for anxiety. Such empty fears and desires, based on what Epicurus calls *kenodoxia* or empty belief, are themselves the main source of perturbation and pain in civilized life, where more elementary dangers have been brought under control, since they are the reason why people are driven to

strive for limitless wealth and power, subjecting themselves to the very dangers they imagine they are avoiding.

Although human beings, like everything else, are composed of atoms that move according to their fixed laws, our actions are not wholly predetermined — rather than entertain such a paralyzing doctrine, Epicurus says, it would be better to believe in the old myths, for all their perversities (*LM* 134). What enables us to wrest liberty from a mechanistic universe is the existence of a certain randomness in the motion of atoms, that takes the form of a minute swerve in their forward course (evidence for this doctrine derives chiefly from later sources, including Lucretius and Cicero). It is not entirely clear how the swerve operates: it may involve a small angle of deviation from the original path, or else a slight shift sideways, perhaps by a single minimum, with no change in direction. The idea of such a minute veering, said to occur at no determinate time or place, is less strange in the modern age of quantum physics than it was in Epicurus' time, and it gave rise to mocking critiques. More problematic today is how the swerve might explain freedom of will — if indeed Epicurus' idea of the will was like our own. It did, at all events, introduce an indeterminacy into the universe, and if soul atoms, thanks to their fineness, were more susceptible to the effects of such deviations than coarser matter, the swerve could at least represent a breach in any strict predestination of human behavior. And this might have been enough for Epicurus' purposes: he may not have invoked the swerve in order to explain voluntary action (claiming that it is action deriving, immediately or ultimately, from a swerve or some swerves of the soul's atoms). He may have wished merely to establish the possibility of action not deriving from the positions of the soul's constituent atoms at any time plus the effects of collisions among them resulting from their given movements at that time. According to Lucretius (2.225–50), the swerve was also put to use to solve a cosmological problem: if at some (as it were) initial moment all atoms were moving uniformly in a single direction (downward) at the same speed, it is impossible to conceive how the process of atomic collisions could have begun, save by some such device. This seems a curious idea: given that time, like space, was infinite according to Epicurus, he need not have imagined a time prior to collisions. Just possibly the tendency of atoms to emerge from collisions in a preferred direction (by definition "down") might lead over time to local regions of parallel motion, and the swerve could serve to reintroduce contact among them. In any event, Epicurus may have thought of atoms moving in some uniform direction rather than in diverse ones as a default position for physical theory (because of the simplicity of that hypothesis); thus he may have felt the need to explain how the diversity of the atoms' motions could have arisen.

5. Social Theory

Although our main witness for Epicurus' views on the evolution of human society is Lucretius' poem (5.925–1457), there is no doubt that Lucretius was following, in the main, the ideas of the founder himself, as recorded in Epicurus' *On Nature* and other treatises. In the beginning, human beings were solitary; they reproduced haphazardly, could not communicate verbally, had no social institutions, and survived because they were physically hardier than their modern descendants. With time, the race softened, thanks in part to the discovery of fire, in part too to the emergence of the family and the gentler sentiments toward spouses and offspring to which the family gave rise. At this stage, human beings were in a position to unite in order to fend off natural dangers, such as wild beasts, and they developed various kinds of technical skills, such as agriculture and the building of houses, as well as language. Epicurus explains (*LH* 75–76) that names at first arose naturally, in the sense that as human beings experienced different affects (*pathê*) or received various images (*phantasmata*) they emitted air corresponding to these stimuli; since human physical characteristics vary somewhat from place to place, however, the sounds people produced in response to any given stimulus similarly differed, which explains why there are many tongues. Upon this basis, people later, nation by nation, established certain terms by convention for the purpose of improving clarity and brevity in communication. Finally, certain individual experts further augmented the vocabulary by the introduction of new and specialized words, to explain the results of their theoretical investigations. Once language reached a developed state, people began to establish alliances and friendships, which contributed further to collective security.

This early form of social life had various advantages: among others, the relative scarcity of goods prevented excessive competition (sharing was obligatory for survival) and thereby set limits on those unnatural desires that at a later, richer phase of society would lead to wars and other disturbances. It would appear too that, before language had developed fully, words more or less conformed to their original or primitive objects, and were not yet a source of mental confusion. But thanks to a gradual accumulation of wealth, the struggle over

goods came to infect social relations, and there emerged kings or tyrants who ruled over others not by virtue of their physical strength but by dint of gold. These autocrats in turn were overthrown, and after a subsequent period of violent anarchy people finally saw the wisdom of living under the rule of law. This might seem to represent the highest attainment in political organization, but that is not so for the Epicureans. For with law came the generalized fear of punishment that has contaminated the blessings of life (Lucretius 5.1151; cf. [Philodemus] *On Choices and Avoidances* col. XII). Lucretius at this point gives an account of the origin of religious superstition and dread of the gods, and although he does not relate this anxiety directly to the fear of punishment under human law, he does state that thunder and lightning are interpreted as signs that the gods are angry at human sins (5.1218–25). While primitive people in the presocial or early communal stages might have been awed by such manifestations of natural power and ascribed them to the action of the gods, they would not necessarily have explained them as chastisement for human crimes before the concept of punishment became familiar under the regime of law. People at an early time knew that gods exist thanks to the simulacra that they give off, although the precise nature of the gods according to Epicurus remains obscure (for contrasting intepretations, see Konstan 2011 and Sedley 2011); but the gods, for him, do not interest themselves in human affairs, since this would compromise their beatitude (see Obbink 1996: 321–23).

If one does not fear the gods, what motive is there for living justly? Where law obtains, Epicurus indicates, it is preferable not to commit crimes, even secret ones, since there will always be anxiety over the possibility of detection, and this will disrupt the tranquillity or ataraxy that is the chief basis of happiness in life (see *Principal Beliefs* = *KD* 34–35). Justice, for Epicurus, depends on the capacity to make compacts neither to harm others nor be harmed by them, and consists precisely in these compacts; justice is nothing in itself, independent of such arrangements (*KD* 31–33). According to Epicurus (*LM* 132, *KD* 5), someone who is incapable of living prudently, honorably, and justly cannot live pleasurably, and vice versa. Moreover, prudence or wisdom (*phronêsis*) is the chief of the virtues: on it depend all the rest. This again sounds calculating, as though justice were purely a pragmatic and selfish matter of remaining unperturbed. Epicurus does not entertain the thought experiment proposed by Plato in the *Republic* (359C–360D), in which Plato asks whether a person who is absolutely secure from punishment would have reason to be just. Did Epicurus have an answer to such a challenge? He may simply have denied that anyone can be perfectly confident in this way. Perhaps, however, he did have a reply, but it was derived from the domain of psychology rather than of ethics. A person who understands what is desirable and what is to be feared would not be motivated to acquire inordinate wealth or power, but would lead a peaceful life to the extent possible, avoiding politics and the general fray. An Epicurean sage, accordingly, would have no motive to violate the rights of others. Whether the sage would be virtuous is perhaps moot; what Epicurus says is that he would live virtuously, that is prudently, honorably, and justly (the adverbial construction may be significant). He would do so not because of an acquired disposition or *hexis*, as Aristotle had it, but because he knows how to reason correctly about his needs. Hence his desires would be limited to those that are natural (not empty), and so easily satisfied, or at least not a source of disturbance if sometimes unsatisfied.

6. The Epicurean Life

Epicurus placed an extremely high value on friendship (or love: *philia*). A saying with rather a more poetic flair than is Epicurus' custom runs: "Friendship goes dancing round the world, announcing to all of us to wake up to happiness" (*Vatican Saying* = *VS* 52). Epicurus held that a wise man would feel the torture of a friend no less than his own, and would die for a friend rather than betray him, for otherwise his own life would be confounded (*VS* 56–57). These are powerfully altruistic sentiments for a philosopher who posits as the unique goal in life happiness based on freedom from physical pain and mental anxiety. Epicurus could justify such an attitude by the same prudential calculus that he uses to argue in favor of living justly: only by living in such a way that loyalty to friends is perceived to be a consummate value will one be able to feel secure in one's friends, and thus maximize one's felicity. Yet this does not seem quite what Epicurus means when he says that "friendship [or love] had its beginning as a result of utility, but is to be chosen [or is a virtue, if we follow the manuscript reading] for its own sake" (*VS* 23). The question is further complicated by the report in Cicero's *On Moral Ends* (1.66–70) that there was a difference of opinion concerning friendship among later Epicureans. Since human beings were originally asocial and only later learned to form alliances and compacts, it is possible that Epicurus means to say that this capacity for friendship arose out of need, but that once the capacity for such feelings was acquired, feeling them came to be valued in itself. The argument

would be similar to the modern idea that altruism could have developed as a result of natural selection. But the evidence does not permit a firm conclusion on this matter.

When Epicurus spoke of friendship, he may have had at least partly in mind specifically the relationship among his followers, who seem to have thought of themselves as friends. Epicureans were encouraged to form communities and to observe certain rituals, although most of these practices, such as the celebration each month of the day (the 20th) on which Epicurus was born or wearing rings bearing an image of Epicurus, may have originated after the founder's death. The Epicureans paid attention to problems of pedagogy as well, laying out the best way to correct the ideas of people new to the school and its community without cajoling or discouraging them. It must be remembered that Epicurus understood the task of philosophy first and foremost as a form of therapy for life, since philosophy that does not heal the soul is no better than medicine that cannot cure the body (Usener 1887, frag. 221). A life free of mental anxiety and open to the enjoyment of other pleasures was deemed equal to that of the gods. Indeed, it is from the gods themselves, via the simulacra that reach us from their abode, that we derive our image of blessed happiness, and prayer for the Epicureans consisted not in petitioning favors but rather in a receptivity to this vision. (Epicurus encouraged the practice of the conventional cults.) Although they held the gods to be immortal and indestructible (how this might work in a materialist universe remains unclear), human pleasure might nevertheless equal divine, since pleasure, Epicurus maintained (*KD* 19), is not augmented by duration (compare the idea of perfect health, which is not more perfect for lasting longer); the catastematic pleasure experienced by a human being completely free of mental distress and with no bodily pain to disturb him or her is at the absolute top of the scale. Nor is such pleasure difficult to achieve: it is a mark precisely of those desires that are neither natural nor necessary that they are hard to satisfy. Epicurus was famously content with little, since on such a diet a small delicacy is as good as a feast, in addition to which it is easier to achieve self-sufficiency, and "the greatest benefit of self-sufficiency is freedom" (VS 77).

Bibliography

Editions, translations, commentaries

Annas, Julia (ed.), and Raphael Woolf (trans.), 2001. *Cicero: On Moral Ends*, Cambridge: Cambridge University Press.

Arrighetti, Graziano, 1973. *Epicuro Opere*, 2nd edition, Turin: Einaudi. (Best edition available, with Italian translation.)

Arrighetti, Graziano and Marcello Gigante, 1977. "Frammenti del libro undidesimo 'Della natura' di Epicuro (PHerc. 1042)," *Cronache Ercolenesi*, 7: 5–8.

Bailey, Cyril B., 1926. *Epicurus: The Extant Remains*, Oxford: Clarendon Press. (Best edition in English.)

Bollack, Jean (ed.), 1985. *Il pensiero del piacere: Epicuro, testi morali, commentari*, Genoa: La Quercia.

De Lacy, Phillip Howard and Estelle Allen De Lacy, 1978. *Philodemus On Methods of Inference*, 2nd edition, Naples: Bibliopolis.

Delattre, Daniel and Jackie Pigeaud (eds.), 2010. *Les epicuriens*, Paris: Gallimard. (Very rich collection of texts in translation.)

Dorandi, Tiziano (ed.), 2013. *Diogenes Laertius, Lives of Eminent Philosophers*, Cambridge: Cambridge University Press.

Hammerstaedt, Jürgen, Pierre-Marie Morel, Refik Güremen (eds.), 2017. *Diogenes of Oinoanda: Epicureanism and Philosophical Debates / Diogène d'Œnoanda: Épicurisme et Controverses*, Leuven: Leuven University Press.

Hessler, Jan Erik, 2014. *Epikur: Brief an Menoikeus*, Basil. (Best commentary on this epistle.)

Indelli, Giovanni and Voula Tsouna-McKirahan (eds.), 1995. [*Philodemus*]: [*On Choices and Avoidances*], Naples: Bibliopolis.

Inwood, Brad and L.P. Gerson, 1997. *Hellenistic Philosophy: Introductory Readings*, 2nd edition, Indianapolis: Hackett. (Translation of principal sources. The Epicurean part is also published separately.)

Konstan, David (trans.), 1989. *Simplicius on Aristotle's Physics 6*, Ithaca, NY and London: Cornell University Press and Duckworth.

Konstan, David, Diskin Clay, Clarence Glad, Johan Thom, and James Ware, 1998. *Philodemus On Frank Criticism: Introduction, Translation and Notes*, Atlanta: Society of Biblical Literature Texts and

Translations (Greco-Roman Religion).
Laursen, Simon, 1995. “The Early Parts of Epicurus, On Nature, 25th Book,” *Cronache Ercolanesi*, 25: 5–109.
——, 1997. “The Later Parts of Epicurus, On Nature, 25th Book,” *Cronache Ercolanesi*, 27: 5–83.
Leone, Giuliana, 1984. “Epicuro, ‘Della natura,’ libro XIV,” *Cronache Ercolanesi*, 14: 17–107.
——, 2012. *Epicuro* Sulla natura *libro II*, Naples: Bibliopolis. (Splendid edition with major introduction on simulacra and related questions.)
Long, A.A. and David Sedley, 1987. *The Hellenistic Philosophers*, 2 volumes, Cambridge: Cambridge University Press. (Excellent collection of sources, with Greek text in volume 2, arranged by topic.)
Mensch, Pamela (trans.), 2018. *Diogenes Laertius: Lives of the Eminent Philosophers*. Oxford: Oxford University Press. (Best and most accessible English version, based on Dorandi’s text.)
Millot, C., 1977. “Epicure ‘De la nature’ livre XV,” *Cronache Ercolanesi*, 7: 9–39.
Obbink, Dirk, 1996. *Philodemus De pietate*, Oxford: Clarendon Press.
Sedley, David, 1973. “Epicurus, ‘On Nature’ Book XXVIII,” *Cronache Ercolanesi*, 3: 5–83.
Smith, Martin Ferguson (ed.), 1993. *Diogenes of Oenoanda: The Epicurean Inscription*, Naples: Bibliopolis.
Stern, Jacob (trans.), 1996. *Palaephatus: On Unbelievable Tales*, Wauconda, IL : Bolchazy-Carducci Publishers.
Taylor, C.C.W. (ed.), 1999. *The Atomists: Leucippus and Democritus: A Text and Translation with a Commentary* (The Phoenix Presocratics 5 = Phoenix Supplementary Volume 36), Toronto: The University of Toronto Press.
Usener, Hermann, 1887. *Epicurea*. Leipzig: Teubner. Italian translation by Ilaria Ramelli, *Epicurea: Testi di Epicuro e testimonianze epicuree nell’edizione di Hermann Usener*, Milan: Bompiani, 2002. (Most complete collection of fragments.)
Verde, Francesco, 2010. *Epicuro Epistola a Erodoto*. Rome: Carocci. (The best edition of this fundamental work.)
Verde, Francesco (ed.), 2022. *Epicuro, Epistola a Pitocle*, in collaboration with M. Tulli, D. De Sanctis, F. G. Masi, Academia Verlag, Baden-Baden.

Critical Studies

General

Algra, Keimpe, Jonathan Barnes, Jaap Mansfeld, and Malcolm Schofield (eds.), 1999. *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press. (Good chapters on Epicurean epistemology, physics, psychology, and ethics.)
Bailey, Cyril B., 1928. *The Greek Atomists and Epicurus*, Oxford: Clarendon Press. (Dated but still useful.)
Clay, Diskin, 1983. *Lucretius and Epicurus*, Ithaca: Cornell University Press.
Gigandet, Alain and Pierre-Marie Morel (eds.), 2007. *Lire Épicure et les épicuriens*, Paris: Presses Universitaires de France.
Giovacchini, J. 2008. *Épicure*, Paris: Les Belles Lettres.
Gordon, Pamela, 1996. *Epicurus in Lycia: The Second-Century World of Diogenes of Oenoanda*, Ann Arbor: University of Michigan Press.
Hossenfelder, Malte, 1991. *Epikur*, Munich: Beck.
Jones, Howard, 1989. *The Epicurean Tradition*, London: Routledge.
Mitsis, Phillip (ed.), 2020. *Oxford Handbook of Epicurus and Epicureanism*. Oxford: Oxford University Press. (Excellent collection on every aspect of Epicureanism.)
Németh, Attila, 2017. *Epicurus on the Self*, London: Routledge,
O’Keefe, Tim, 2010. *Epicureanism*. Durham: Acumen. (Highly readable and philosophically engaging introduction.)
Pesce, Domenico, 1974. *Saggio su Epicuro*, Bari: Laterza.
Rist, John, 1972. *Epicurus: An Introduction*, Cambridge: Cambridge University Press. (A good survey.)
Sedley, David, 1998. *Lucretius and the Transformation of Greek Wisdom*, Cambridge: Cambridge University Press.
Verde, Francesco, 2013. *Epicuro*, Rome: Carocci. (Up to date survey of all aspects of Epicurus’ thought.)
Warren, James (ed.), 2009. *The Cambridge Companion to Epicureanism*, Cambridge: Cambridge University Press.
Wilson, Catherine, 2015. *Epicureanism: A Very Short Introduction*, Oxford: Oxford University Press.

Physics

Cambiano, Giuseppe, 1997. "L'atomismo antico," *Quaderni di Storia*, 23: 5–17.

Furley, David, 1967. *Two Studies in the Greek Atomists*, Princeton: Princeton University Press. (Still fundamental.)

Furley, David, 1996. "The Earth in Epicurean and Contemporary Astronomy," in Gabriele Giannantoni and Marcello Gigante (eds.), *Epicureismo greco e romano: Atti del congresso internazionale Napoli, 19–26 maggio 1993*, Naples: Bibliopolis, 1996, Volume 1, pp. 119–25.

Giannantoni, Gabriele, 1989. "L'infinito nella fisica epicurea," in *L'infinito dei greci e dei romani*, Genoa: Facoltà di Lettere dell' Università di Genova, pp. 9–26.

Inwood, Brad, 1981. "The Origin of Epicurus' Concept of Void," *Classical Philology*, 76: 273–85.

Konstan, David, 1972. "Epicurus on Up and Down (Letter to Herodotus sec. 60)," *Phronesis*, 17: 269–78.

——, 1979. "Problems in Epicurean Physics," *Isis*, 70: 394–418.

——, 2000. "Democritus the Physicist" (Review of Taylor 1999), *Apeiron*, 33: 125–44.

——, 2014. "Epicurus on the Void," in Christoph Helmig, Christoph Horn, and Graziano Ranocchia (eds.), *Space in Hellenistic Philosophy*, Berlin: de Gruyter.

——, 2020. "Epicurean phantasia," in Ermanno Malaspina and Jula Wildberger (eds.), *Axiological Confusion and its Causes*, Πηγη/Fons: Revista de Estudios sobre la Civilización Clásica y su Recepción 5: 1–18.

Laks, André, 1991. "Épicure et la doctrine aristotélicienne du continu," in F. de Gandt and P. Souffrin (eds.), *La Physique d'Aristote et les conditions d'une science de la nature: Actes du colloque organisé par le Séminaire d'Épistémologie et d'Histoire des Sciences de Nice*, Paris: J. Vrin, pp. 181–194.

Laursen, Simon, 1992. "The Summary of Epicurus 'On Nature' Book 25," in Mario Capasso (ed.), *Papiri letterari greci e latini*, Galatina: Congedo, pp. 141–154.

Masi, Francesca Guadalupe and Stefano Maso (eds.), 2015. *Epicurus on Eidola. Peri Phuseos Book II: Update, Proposals and Discussions*, Amsterdam: Adolf M. Hakkert.

Morel, Pierre-Marie, 2000. *Atome et nécessité: Démocrite, Épicure, Lucrèce*, Paris: Pr. Universitaires de France.

Sedley, David, 1982. "Two Conceptions of Vacuum," *Phronesis*, 27: 175–93.

Verde, Francesco, 2013. Elachista: *La dottrina dei minimi nell'epicureismo*, Leuven: Leuven University Press.

Psychology

Armstrong, David, 2003. "Philodemus, the Herculaneum Papyri, and the Therapy of Fear," in Dane R. Gordon and David B. Suits (eds.), *Epicurus: His Continuing Influence and Contemporary Relevance*, Rochester, NY: RIT Cary Graphic Arts Press, pp. 17–43.

Armstrong, David, 2008. "'Be Angry and Sin Not': Philodemus versus the Stoics on Natural Bites and Natural Emotions," in John T. Fitzgerald (ed.), *Passions and Moral Progress in Greco-Roman Thought*, London: Routledge, pp. 79–121.

Diano, Carlo, 1974 [1939–42]. *Scritti Epicurei*, Florence: Leo S. Olschki.

Konstan, David, 2008. *"A Life Worthy of the Gods": The Materialist Pyschology of Epicurus*, Las Vegas: Parmenides Publishing. (This is an updated version of D. Konstan, *Some Aspects of Epicurean Psychology*, Leiden: E.J. Brill, 1973.)

Ethics

Annas, Julia, 1993. *The Morality of Happiness*, Oxford: Oxford University Press. (Excellent overview.)

Alberti, Antonina, 1994. "Ragione e virtù nell'etica epicurea," in A. Alberti, *Realtà e ragione: studi di filosofia antica*, Florence: Accademia Toscana di Scienze e Lettere La Colombaria [Studi 140], pp. 185–216.

Barigazzi, A., 1983. "Sul concetto epicureo della sicurezza esterna," in *SUZHTHSIS: Studi sull'epicureismo greco e romano offerti a Marcello Gigante*, Naples: Biblioteca della Parola del Passato, pp. 73–92.

Cooper, J.M., 2012. *Pursuits of Wisdom*, Princeton: Princeton University Press, Chapter 5 (Sections 5.1–5.6), pp. 226–290.

Müller, Reimar, 1991. *Die epikureische Ethik*, Berlin: Akademie-Verlag.

Purinton, Jeffrey S., 1993. "Epicurus on the Telos," *Phronesis*, 38: 281–320.

Pleasure

Annas, Julia, 1987. "Epicurus on Pleasure and Happiness," *Philosophical Topics*, 15: 5–21.
Cooper, John M., 1999. "Pleasure and Desire in Epicurus," in J. Cooper, *Reason and Emotion*, Princeton: Princeton University Press, pp. 485–514.
Gosling, J.C.B. and C.C.W. Taylor, 1982. *The Greeks on Pleasure*, Oxford: Oxford University Press.
Nikolsky, Boris, 2001. "Epicurus on Pleasure," *Phronesis*, 46: 440–465.
Wolfsdorf, David, 2013. *Pleasure in Ancient Greek Philosophy*, Cambridge: Cambridge University Press.

Death

Alberti, Antonina, 1990. "Paura della morte e identità personale nell'epicureismo," in Antonina Alberti (ed.), *Logica, mente e persona: studi sulla filosofia antica*, Florence: Olschki, pp. 151–206.
Lesses, Glenn, 2002. "Happiness, Completeness, and Indifference to Death in Epicurean Ethical Theory," *Apeiron*, 35: 57–68.
Mitsis, Phillip, 2002. "Happiness and Death in Epicurean Ethics," *Apeiron*, 35: 41–55.
Rosenbaum, S., 1986. "How to be Dead and not Care: A Defense of Epicurus," *American Philosophical Quarterly*, 23: 217–25.
Warren, James, 2000. "Epicurean Immortality," *Oxford Studies in Ancient Philosophy*, 18: 231–261.
——, 2004. *Facing Death: Epicurus and his Critics*, Oxford: Clarendon Press.

Epistemology

Asmis, Elizabeth, 1984. *Epicurus' Scientific Method*, Ithaca NY: Cornell University Press.
Everson, Stephen, 1990. "Epicurus on the Truth of the Senses," in Stephen Everson (ed.), *Epistemology*, Cambridge: Cambridge University Press, pp. 161–183.
Jürss, Fritz, 1991. *Die epikureische Erkenntnistheorie*, Berlin: Akademie-Verlag.
Konstan, David, 1989a. "Περίληψις in Epicurean Epistemology," *Ancient Philosophy*, 13: 125–37.
Konstan, David, 2007. "Response to Morel 2007," *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 23: 49–54.
Lee, Edward N., 1978. "The Sense of an Object: Epicurus on Seeing and Hearing," in P.K. Machamer and R.G. Turnbull (eds.), *Studies in Perception: Interrelations in the History of Philosophy and Science*, Columbus OH: Ohio State University Press, pp. 27–59.
Long, A.A., 1971. "Aesthesis, Prolepsis and Linguistic Theory in Epicurus," *Bulletin of the Institute of Classical Studies*, 18: 114–33.
Manuwald, A., 1972. *Die Prolepsislehre Epikurs*, Bonn: Habelt.
Morel, Pierre-Marie, 2002. "Les ambiguïtés de la conception épicurienne du temps," *Revue de Philosophie*, 192: 195–211.
Morel, Pierre-Marie, 2007. "Method and Evidence (enargeia): Epicurean prolêpsis," *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 23: 25–48.
Sedley, David, 1976. "Epicurus and the Mathematicians of Cyzicus," *Cronache Ercolanesi*, 6: 23–54.
——, 1989. "Epicurus on the Common Sensibles," in Pamela Huby and Gordon Neal (eds.), *The Criterion of Truth: Essays Written in Honour of George Kerferd, together with a Text and Translation (with Annotations) of Ptolemy's On the Kriterion and Hegemonikon*, Liverpool: Liverpool University Press, pp. 123–136.
Taylor, C.C.W., 1980. "'All Perceptions are True'," in M. Schofield, J. Barnes and M. Burnyeat (eds.), *Doubt and Dogmatism*, Oxford: Oxford University Press, pp. 105–24.
Tsouna, Voula, 2016. "Epicurean Preconceptions," *Phronesis*, 61: 160–221.
vander Waerdt, Paul, 1989. "Colotes and the Epicurean Refutation of Skepticism," *Greek, Roman and Byzantine Studies*, 30: 225–267.

Language

Atherton, Catherine, 2005. "Lucretius on what Language is Not," in Dorothea Frede and Brad Inwood (eds.), *Language and Learning: Philosophy of Language in the Hellenistic Age*, Cambridge: Cambridge University Press, pp. 101–38.

Brunschwig, Jacques, 1977. “Epicure et le problème du ‘langage privé’,” *Revue des Sciences Humaines*, 163: 157–77.
Everson, Stephen, 1994. “Epicurus on Mind and Language,” in Stephen Everson (ed.), *Language* (Series: Companions to Ancient Thought, Volume 3), Cambridge: Cambridge University Press, pp. 74–108.
Giannantoni, Gabriele, 1994. “Epicurei e stoici sul linguaggio,” in *Storia poesia e pensiero nel mondo antico: Studi in onore di Marcello Gigante*, Naples: Bibliopolis.
Verlinsky, Alexander, 2005. “Epicurus and his Predecessors on the Origin of Language,” in Dorothea Frede and Brad Inwood (eds.), *Language and Learning: Philosophy of Language in the Hellenistic Age*, Cambridge: Cambridge University Press, pp. 56–100.

Free Will and the Atomic Swerve

Asmis, Elizabeth, 1990. “Free Action and the Swerve” (Review of Walter G. Englert, Epicurus on the swerve and voluntary action), *Oxford Studies in Ancient Philosophy*, 8: 275–291.
Bignone, Ettore, 1940. “La dottrina epicurea del clinamen,” *Atene e Roma*, 42: 159–68.
Bobzien, Susanne, 2000. “Did Epicurus Discover the Free-Will Problem?” *Oxford Studies in Ancient Philosophy*, 19: 287–337.
Englert, Walter G., 1987. *Epicurus on the Swerve and Voluntary Action*, Atlanta: Scholars Press.
Furley, David, 1967. *Two Studies in the Greek Atomists*, Princeton: Princeton University Press.
Greenblatt, Stephen, 2011. *The Swerve: How the World Became Modern*, New York: W. W. Norton. (This is more a book about the reception of Lucretius than about Epicurean physics as such.)
O’Keefe, Tim, 1996. “Does Epicurus Need the Swerve as an Archê of Collisions?” *Phronesis*, 41: 305–317.
Purinton, Jeffrey S., 1999. “Epicurus on ‘Free Volition’ and the Atomic Swerve,” *Phronesis*, 44: 253–299.
Russell, Daniel Charles, 2000. “Epicurus and Lucretius on Saving Agency,” *Phoenix*, 54: 226–243.
Sedley, David, 1983. “Epicurus’ Refutation of Determinism,” in *SUZHTHSIS: Studi sull’epicureismo greco e romano offerti a Marcello Gigante*, Naples: Biblioteca della Parola del Passato, pp. 11–51.

Justice

Armstrong, John M., 1997. “Epicurean Justice,” *Phronesis*, 42: 324–334.
Denyer, Nick, 1983. “The Origins of Justice,” in *SUZHTHSIS: Studi sull’epicureismo greco e romano offerti a Marcello Gigante*, Naples: Biblioteca della Parola del Passato, pp. 133–52.
Goldschmidt, Victor, 1977. *La doctrine d’Epicure et le droit*, Paris: J. Vrin; reprinted 2002.
Minutoli, Giuseppe, 1997. “Il problema del diritto in Epicuro,” *Rivista di Filosofia del Diritto*, 74: 436–460.
Mitsis, Phillip, 1988. *Epicurus’ Ethical Theory: The Pleasures of Invulnerability*, Ithaca NY: Cornell University Press.
Morel, Pierre-Marie, 2000. “Épicure, l’histoire et le droit,” *Revue des Études Anciennes*, 102: 393–411.
vander Waerdt, Paul, 1987. “The Justice of the Epicurean Wise Man,” *Classical Quarterly*, n.s. 37: 402–22.

Theology and the Gods

Erler, Michael, 2001, “Epicurus as deus mortalis: homoiosis theôi and Epicurean Self-Cultivation,” in Dorothea Frede and André Laks (eds.), *Traditions of Theology: Studies in Hellenistic Theology; Its Background and Aftermath*, Leiden: E.J. Brill, pp. 159–81.
Festugière, A.-J., 1985 [1946]. *Epicure et ses dieux*, Paris: Presses Universitaires de France.
Freymuth, G., 1953. *Zur Lehre von den Götterbildern in der epikureischen Philosophie*, Berlin: Deutsche Akademie der Wissenschaften.
Kleve, Knut, 1963. *Gnosis Theon: Die Lehre von de natürlichen Götteserkenntnis in der epikureischen Theologie*, Oslo: Symbolae Osloenses, Supplement Volume 19.
Konstan, David, 2011. “Epicurus on the Gods,” in Jeffrey Fish and Kirk Sanders (eds.), *Epicurus and the Epicurean Tradition*, Cambridge: Cambridge University Press, pp. 53–71.
Lemke, D., 1973. *Die Theologie Epikurs: Versuch einer Rekonstruktion*, Munich: Zetemata 57.
Obbink, Dirk, 1989. “The Atheism of Epicurus,” *Greek, Roman and Byzantine Studies*, 30: 187–223.
Purinton, Jeffrey S., 2001. “Epicurus on the Nature of the Gods,” *Oxford Studies in Ancient Philosophy*, 21: 181–231.
Sedley, David, 2011. “Epicurus’ Theological Innatism,” in Jeffrey Fish and Kirk Sanders (eds.), *Epicurus and the Epicurean Tradition*, Cambridge: Cambridge University Press, pp. 29–52.

Evolution of Society.

Cole, Thomas, 1967. *Democritus and the Sources of Greek Anthropology*, Cleveland: American Philological Association.
Grilli, Alberto, 1995. "Lucrezio ed Epicuro: la storia dell'uomo," *Parola del Pasato*, 50: 16–45.

Politics

Ruijgh, Cornelis J., 2000. "À propos de lathe biosas: la valeur de l'impératif aoriste," *Hyperboreus*, 6: 325–348.
Silvestre, Maria Luisa, 1995. "Epicuro e la politica," in Salvatore Cerasuolo (ed.), *Mathesis e philia: studi in onore di Marcello Gigante*, Naples: Universita degli Studi di Napoli Federico II, pp. 131–142.

Sex and Marriage

Brennan, Tad, 1996. "Epicurus on Sex, Marriage and Children," *Classical Philology*, 91: 346–352.
Chilton, C.W., 1960. "Did Epicurus Approve of Marriage? A Study of Diogenes Laertius X 119," *Phronesis*, 5: 71–74.
Morana, Cyril, 1996. "L'atomisme antique face a l'amour," *Revue philosophique de la France et de l'Étranger*, 186: 119–132.

Friendship

Arrighetti, Graziano, 1978. "Philia e physiologia: I fondamenti dell'amicizia epicurea," *Materiali e Discussioni per l'Analisi dei Testi Classici*, 1: 49–63.
Brescia, C., 1955. "La philia in Epicuro," *Giornale Italiano di Filologia*, 8: 314–32.
Brown, E., 2002. "Epicurus on the Value of Friendship (Sententia Vaticana XXIII)," *Classical Philology*, 97: 68–80.
Gemelli, B., 1978. "L'amicizia in Epicuro," *Sandalion*, 1: 59–72.
Giesz, Ludwig, 1990. "Epikur: das Glück der Freundschaft," in *Philosophische Spaziergänge: zwölf vorsichtige Antworten auf die Frage, wei man sich im Leben denn einzurichten hätte*, Stuttgart: Metzler, pp. 3–19.
Konstan, David, 1994. "Friendship From Epicurus to Philodemus," in M. Giannantoni and M. Gigante (eds.), *L'Epicureismo greco e romano*, Naples: Bibliopolis, pp. 387–96.
Mitsis, Phillip, 1988. *Epicurus' Ethical Theory: The Pleasures of Invulnerability*, Ithaca, NY: Cornell University Press.
O'Connor, D.K., 1989. "The Invulnerable Pleasures of Epicurean Friendship," *Greek, Roman and Byzantine Studies*, 30: 165–86.
O'Keefe, Tim, 2001. "Is Epicurean Friendship Altruistic?" *Apeiron*, 34: 269–305.

The Epicurean Community

Clay, Diskin, 1983. "Individual and Community in the First Generation of the Epicurean School," in *SUZHTHSIS: Studi sull' epicureismo greco e romano offerti a Marcello Gigante*, Naples: Biblioteca della Parola del Passato, pp. 255–79.
Frischer, Bernard, 1982. *The Sculpted Word: Epicureanism and Philosophical Recruitment in Ancient Greece*, Berkeley: University of California Press.
Warren, James, 2001. "Epicurus' Dying Wishes," *Proceedings of the Cambridge Philological Society*, 47: 23–46.

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