Introduction

One of the most startling and distinctive aspects of Epicurean philosophy is the atomic motion known as the ‘swerve.’ The Epicureans are materialists, holding that the only things that exist per se are bodies and ‘void,’ which is just empty space. Bodies are simply conglomerations of atoms, which are uncuttable, extended bits of ‘full’ space flying through the void as a result of their weight, past motions, and collisions with other atoms. But the Epicurean poet Lucretius writes that if all atomic motion were the deterministic result of past motions and weight, we would not have the ‘free volition’ (libera voluntas) which allows each of us to move ourselves as we wish. Since we evidently do have the power to move ourselves as we wish, there must be a third, indeterministic cause of atomic motion, in addition to weight and past motions – a ‘swerving’ of the atoms to the side at uncertain times and places, which saves us from fate.

In part, this book is an attempt to discern the role the swerve plays in preserving human freedom. However, the swerve cannot be studied in isolation; it must be understood in the context of Epicurus’ ethics, philosophy of mind, and metaphysics in general. So the subject of this book is Epicurus’ overall theory of human freedom. I will argue that the swerve plays only a peripheral role in Epicurus’ overall theory, and that an overemphasis on the role of the swerve has significantly distorted our understanding of Epicurus’ ethics, philosophy of mind, action-theory, and metaphysics, as scholars read swerves into parts of Epicurus’ philosophy where they are not mentioned at all.

Epicurus’ theory of freedom deserves attention not only because of its place within Hellenistic philosophy, but because of the way it has shaped how we conceive of the issue of free will today. Epicurus plays a key role in the birth of the traditional ‘problem of free will and determinism’

---

1 See Sedley (1988b) for an extended discussion of the notion of void in atomism. He argues that there is an important shift from the early atomists, who regard void as a negative substance that occupies space (and could move around), to the Epicureans, who regard it as simply empty space.
– that is, the seeming incompatibility of causal determinism and the sort
of ‘ability to do otherwise’ that is necessary for moral responsibility. Because Epicurus believes that freedom and determinism are incompat-
ible, and because he denies that determinism is true in order to preserve our freedom, Epicurus has been hailed as the first person to discover the free will problem, and the first to offer a libertarian solution to it. 2 But I think that this is mistaken. There is a great variety of ‘freedom and determinism’ problems, and Epicurus is responding to concerns quite distinct from the ones that motivate the traditional problem of free will and determinism. Epicurus is pivotal in the story of how our problem of free will and determinism arose, but not because he himself formulated this problem. Instead, his own position was appropriated and significantly reshaped in debates by subsequent philosophers, and through a process that owes a great deal to historical quirk and happenstance, Epicurus helped to form a libertarian conception of the freedom of the will that he himself would have repudiated.

Because of textual difficulties, understanding Epicurus’ position on freedom and the role the swerve plays in it is not easy. Almost all of Epicurus’ own writings are lost, and none of those that we do have mention the swerve. Because of this, in order to reconstruct Epicurus’ position we must rely on reports by later sources, some of them hostile or undiscerning. We also need to try to see how Epicurus might be responding to problems he saw in the positions of earlier philosophers. Because of these obstacles, a multiplicity of competing and incompatible explana-
tions of how the swerve is supposed to save us from fate have been proposed. Before turning to the main argument of the book, in the remainder of this introductory section I provide a little background for those unfamiliar with the texts and issues. First I present key figures and texts that will play a part in the subsequent story, then I lay out the main thread of the book’s argument, chapter by chapter.

0.1 Figures and Texts

Sources on Epicurus. Our picture of Epicurus’ thought is gleaned from the works of many figures, but three will be particularly important to my discussion.

2 For example, see Huby (1967); Long and Sedley (1987) vol. 1 p. 107; Asmis (1990) 275.
3 For more information on the sources on Epicurus and Hellenistic philosophy generally, see Mansfeld (1999). For more information on the dates of the figures below (excluding Aristotle and Democritus), see Dorandi (1999).
Epicurus himself (341–270 BCE). Epicurus was a voluminous writer, but almost all of his writings are lost. However, some useful material is still left. Diogenes Laertius (c. 230 CE) wrote a ten-book *Lives of the Philosophers*, filled with digests of philosophers’ opinions and amusing tales of their lives and deaths, many of them spurious, along with samples of Diogenes’ own wretched poetry. Fortunately, his treatment of Epicureanism (in book 10) contains three letters Epicurus wrote which summarize his philosophy. The *Letter to Herodotus* (*Ep. Hdt.*) is a digest of Epicurus’ metaphysics, broadly conceived, which includes discussions of the causes of atomic motion (which surprisingly does not mention the swerve) and of the nature of the mind. The *Letter to Pythocles* (*Ep. Pyth.*) gives explanations of meteorological phenomena. The *Letter to Menoeceus* (*Ep. Men.*) is a summary of Epicurus’ ethics and an exhortation to the Epicurean way of life. In *Ep. Men.* 133–134 Epicurus says that one should reject the “fate of the natural philosophers,” because not all things occur of necessity—instead, some depend on us. Again, Epicurus does not mention the swerve here, and the exact point he is making is not entirely clear. Diogenes also preserves the *Principal Doctrines* (*KD*), a series of maxims that deal primarily with ethical matters. The *Principal Doctrines* and all three letters are invaluable starting-places for understanding Epicurus’ philosophy, but because they are merely summaries and maxims, they still leave many questions unanswered.

Another source that has figured quite prominently in recent discussions is the extant portions of *On Nature* book 25. *On Nature* is Epicurus’ *magnum opus*. The passages we have contain a self-refutation argument against those who hold that all things occur “of necessity,” and a description of human psychological development, including the relationship between psychological states and the atoms that constitute the mind. Unfortunately, the text is in terrible shape. It was contained in a library in an Epicurean villa in the village of Herculaneum, which was buried in the eruption of Mount Vesuvius in 79 CE that also destroyed Pompeii. The carbonized scrolls were unearthed in the eighteenth century, and work continues today in unrolling, deciphering, translating, and interpreting their contents. In addition to being riddled with lacunae, the text also bristles with unexplained technical terminology, making interpretation of it even more difficult.4

Lucretius (c. 94–55 BCE). Lucretius was a committed Epicurean and a remarkable poet; besides this, we know next to nothing about him. Lucretius is celebrated for his single work, De rerum natura (On the nature of things), a six-book exposition of the parts of Epicurean philosophy that in ancient times would have been known as ‘physics,’ quite broadly construed.1 DRN includes discussions of the existence of atoms and void, Epicurus’ philosophy of mind and theory of perception, the nature of the gods, the development of society, diseases, and much else.

Several sections of DRN are particularly important for my purposes. The first is DRN 2 216–293. It occurs in the middle of a discussion of atomic motion and contains two arguments for why there must be an atomic swerve – to explain why there are atomic collisions and to preserve our freedom. Second is DRN 4 877–906, where Lucretius briefly describes what is going on at the atomic level in Epicurean action theory. Also important is DRN 3 94–416, which gives an account of Epicurean philosophy of mind; particularly significant are lines 258–322, which concern how people can control their own natural temperaments through the use of reason. Surprisingly, Lucretius does not mention the swerve anywhere besides DRN 2 216–293.

Lucretius was a poet, not an original philosopher. It is possible that at points he might have misunderstood what is going on in Epicurean philosophy,6 but generally the presumption should be he is reliable, as a committed and intelligent Epicurean who was very likely drawing directly on Epicurus’ own writings.7

Cicero (106–43 BCE) was a Roman statesman and amateur philosopher, who was killed at the orders of Antony. He was an adherent of the skeptical Academy. During an enforced hiatus from Roman politics in 45 to 43 BCE, he decided to serve his countrymen by writing expositions in

5 See, for instance, DL 10 29–30, who reports that Epicureans divide philosophy into three parts: canon (basically, epistemology), ethics, and physics, and that physics covers the entire study of nature.
6 A possible (though quite controversial) example of this is Lucretius’ representation of Epicurean theology. Long and Sedley (1987) vol. 1 144–149 argue that Epicurus views the gods merely as idealized thought-constructs of what supremely blessed humans would be, but that Epicurus’ coyness on the issue (in order to avoid censure) misled Lucretius and some other later Epicureans into thinking that the gods literally exist eternally as solid bodies living in the intermundia, the empty space between the cosmoi. I accept Long and Sedley’s thesis, but many do not.
7 See Sedley (1998), particularly chapters 3 through 4, for a quite detailed treatment of the way Lucretius draws on Epicurus. Even if one does not fully accept Sedley’s thesis that Lucretius’ ‘sole philosophical source and inspiration from early in book i until late in book vi is Epicurus’ great physical treatise, On nature’ (Sedley (1988) 91), he nonetheless demonstrates that Lucretius was intimately familiar with and dependent upon Epicurus’ own writings.
Latin of the major philosophical systems of the day. These included works on ethics, epistemology, the gods, etc. Two works are particularly important for this study. To a lesser extent, I will be drawing on De finibus (On ends), the first two books of which contain an extended exposition of Epicurean ethics, followed by Cicero’s scathing criticisms. But much more important is De fato (On fate), only portions of which survive. This treatise concerns the question of whether causal determinism is compatible with justified praise and blame. However, it also deals with arguments that try to draw fatalist conclusions from logical considerations concerning the fixity of the truth-value of statements about the future. In addition to talking about how Epicurus uses the swerve to combat such arguments, Cicero also lays out the positions of the Stoic Chrysippus and one of the heads of the skeptical Academy, Carneades, concerning these questions (see below for more on these figures).

Cicero must be used with more care than Epicurus or Lucretius, but he is still an important source. Cicero, like Lucretius, is not an original philosopher – he is more of a philosophical enthusiast, who may sometimes misunderstand the position he is talking about. Also, he admits that for many of his books he only paraphrased works written by Stoics and Epicureans, in which they laid out their views. Still, Cicero studied philosophy extensively. He was also very hostile toward Epicureanism. This sometimes causes him to be uncharitable when interpreting Epicurus’ views. Nonetheless, although he does not always succeed, Cicero tries to be fair in presenting the views of various philosophers before criticizing them. The purpose of his philosophical treatises – which is also consistent with his philosophical position – is to lay out, side by side, the arguments of various philosophers so as to allow the reader to make his own decision as to their merits. Many of his treatises (such as the De finibus) are in dialogue form, with spokesmen of various schools offering extended expositions of their positions.

Key predecessors of Epicurus. Epicurus said he was entirely self-taught, but this claim is usually not taken seriously. Philosophers often view Epicurus’ arguments on determinism and freedom as responding to two of his predecessors, Democritus and Aristotle, although there is little agreement on what exactly Epicurus is responding to, or in what way.

Democritus (c. 460–370 BCE). Along with Leucippus, Democritus was one of the originators of atomism. Epicurus largely appropriated his metaphysics from him. However, he objected to two aspects of Democritus’ thought. Democritus said that, in reality, only atoms and the void exist, while properties like whiteness and sweetness exist only “by
convention.” From this, Democritus derived pessimistic conclusions about our ability to gain knowledge about the world from our senses. Epicurus wished to resist this skepticism, which he thought untenable, and he insisted on the reality of sensible qualities. Secondly, Epicurus attributed to Democritus the view that all things occur ‘of necessity,’ which Epicurus thought amounts to denying that anything depends on us as agents. Such fatalism was as unacceptable to Epicurus as Democritus’ skepticism. 8

Aristotle (383–322 BCE). The most extensive treatment of issues of personal responsibility we have prior to the Hellenistic period is that of Aristotle in *Nicomachean Ethics* 3 1. Aristotle died about fifteen years before Epicurus arrived in Athens. His discussion is interesting and influential. However, it seems initially to bypass entirely issues of determinism and freedom of the will. Aristotle’s presumption is that agents are responsible for their actions, and he focuses on the types of excusing factors – varieties of force and ignorance – that render action involuntary and hence unfit candidates for praise and blame. At first, such an analysis would seem more at home in compatibilist than in libertarian theories of freedom. But in any case, Aristotle seems not even to raise the issue of free will and determinism. Aristotle’s ‘four causes’ – even his so-called ‘efficient cause’ – do not map easily onto the modern notion of an efficient cause.9 The thesis of universal causal determinism, as it is usually used in modern debates over free will and determinism, would be difficult to formulate in Aristotelian terms.

Despite this, several parts of Aristotle’s discussion have sometimes been thought to point toward the current debate and also to have influenced Epicurus. One is his assertion in *NE* 3 1 that voluntary actions are ones that have their ‘origin in the agent himself.’ A second is in *NE* 3 5 where Aristotle says that, when actions are up to us, we have the power either to act or not to act. A third is Aristotle’s discussion, in *NE* 3 5, of arguments that try to show that we are not responsible for our actions because the characters from which these actions spring are formed by factors which are ultimately beyond our control.

8 For a good selection of the reports on Democritus that attest to these features of his thought, see Kirk, Raven, and Schofield (1983) 402–433.

9 See e.g., *Physics* 2 3 194b23–35 for a quick summary of Aristotle’s four causes, and Hocutt (1974) and Vlastos (1966/1973) section 1 for how Aristotle’s notion of aitia differs from the modern notion of cause. Further discussion of this claim about Aristotle’s ‘four causes’ can be found in section 3.1.
Another important text is *De Interpretatione*. *De Interpretatione* is primarily a text in semantics. In *De Int.*, Aristotle considers whether the Principle of Bivalence – the principle that every statement either is true or is false – holds universally. Aristotle considers a fatalist argument based on the Principle of Bivalence. According to this argument, if all statements have been true or false all along, this would include statements about what will occur in the future, and this would make it impossible for us to affect the future. Aristotle rejects this fatalist conclusion, and (on most but not all interpretations of *De Int.* 9) as a result thinks that the Principle of Bivalence does not hold true of all statements. Statements about particular, contingent events in the future (such as “there will be a sea battle tomorrow”) are, at least for now, neither true nor false. A similar argument for the necessity of the future that was taken to have fatalist implications, the ‘Master Argument,’ is both put forward and endorsed by Diodorus Cronus (died c. 284 BCE); this formulation of the argument was much debated by philosophers in the Hellenistic period, and is no less a subject of modern controversy.

**Key Successors of Epicurus.** Epicurus is the main subject of this book, but part of the story I wish to tell concerns how Epicurus’ account had an impact on subsequent controversy, and how later thinkers remolded his account for their own purposes. Two figures play a crucial role: **Chrysippus** (c. 280–207 BCE). Chrysippus was third head of the Stoa, which was founded by Zeno of Citium around 300 BCE. The Stoics were sharply opposed to the Epicureans on many topics. For instance, they emphasized that virtue is the only thing that is intrinsically good, whereas Epicureans held that virtue is only instrumentally valuable. More important for this book are the Stoic views on God and fate. According to the Stoics, God and the cosmos are identical. The world is organized in accordance with God’s benevolent plan, which ensures that things will turn out the way they do. Epicurus vehemently disagreed with all this. However, the earlier heads of the Stoa, Zeno and Cleanthes, had not clearly worked out exactly how fate operated, as far as we know. Chrysippus was the first person to link up fate and causal determinism explicitly. He identified fate with the unwinding of a sequence of causes, affirming that every single event that occurs is both causally determined and fated. Chrysippus also gave an analysis of how causal determinism is compatible both with effective agency and with justified praise and blame.

---

10 This orthodox interpretation of *De Int.* 9 has been challenged; see section 6.2.1 for further discussion.
Carneades (214–129/8 BCE). Carneades was one of the most influential leaders of the skeptical Academy. Arcesilaus (316/5–241/0 BCE) moved Plato’s Academy in a skeptical direction c. 265, shortly after Epicurus’ death. Arcesilaus turned away from system building and instead concentrated on attacking the doctrines of others, particularly the Stoics. In doing so, he could claim to be following the example of Socrates, as depicted in many of Plato’s dialogues. Carneades continued Arcesilaus’ practice and developed an array of arguments against others’ positions, particularly the epistemology of the Stoics as laid out by Chrysippus. However, he went beyond Arcesilaus in his procedure. Not content with rebutting others’ arguments, Carneades also developed positive arguments of his own in favor of various views — not because he endorsed them himself, but in order to counterbalance the arguments of others for opposing views. Carneades employed this tactic in the case of determinism and freedom. In order to battle Chrysippus, Carneades modified Epicurus’ position. He reaffirmed that freedom is incompatible with causal determinism but argued that it is compatible with the Principle of Bivalence’s holding true universally. He also argued that free agency can be defended without recourse to any fundamental physical indeterminacy like the swerve.

O.2 MAP OF WHAT WILL COME

I begin chapter 1 with a survey of different types of possible “free will and determinism” problems. I then summarize some of the main interpretations of Epicurus and categorize them based upon what problem they take Epicurus to be addressing with the swerve. After that, I look at the way in which Epicurus (and Epicureans) describe the sort of freedom they are concerned to defend, as well as what they should care about, given their ethics and metaphysics. I argue that most interpreters have mistakenly assimilated Epicurus’ concerns to those of modern libertarians. It is both much more plausible and more charitable to ascribe to Epicurus a concern to defend rational agency rather than libertarian free will.

In chapter 2, I look at Lucretius’ poem De rerum natura. I argue that Lucretius’ description of the swerve in DRN 2.251–293 does not give us good reason to think that there is a swerve involved in the production of every free action. In fact, he gives us little information about how the swerve is supposed to help preserve our freedom, other than that it somehow prevents what will occur from being predetermined. However, his description of the libera voluntas that the swerve helps safeguard makes it clear that libera voluntas is not a libertarian freedom of the will. Instead,
Lucretius cares about our ability to move ourselves as we wish, in order to get what we desire.

In chapter 3, I consider supposed Aristotelian antecedents in the Nicomachean Ethics to Epicurus' position. I agree with others who have thought that both Aristotle and Epicurus wish the agent to be the ‘origin’ of both his actions and his own character. However, for neither Aristotle nor Epicurus does this have any anti-determinist implications.

Chapter 4 is primarily an examination of Epicurus' philosophy of mind. I argue that Epicurus has an identity theory of mind: the mind is identified with a group of atoms in the chest, and mental events and states are identified with atomic events and states. I give an extended analysis of the extant portions of Epicurus' On Nature. In these passages, Epicurus is concerned to rebut the fatalist implications of Democritean eliminative materialism, not the deterministic implications of his reductionist materialism. (I also argue, inter alia, that Epicurus' response to the skeptical implication of Democritus' metaphysics, in which Epicurus defends the reality of properties like whiteness and sourness, is consistent with his having a reductionist metaphysics.)

The overarching negative conclusion of chapters 2, 3 and 4 is that none of these texts allow us to discern the role of the swerve, and that the various attempts to use them for this purpose fail. The main positive doctrine that emerges from considering these texts is that Epicurus wishes to preserve our ability to use our reason to control our action and shape our character, a view that is (in itself) compatible both with causal determinism and with an identity theory of the mind.

In chapters 5 and 6, I turn to my own view of the swerve. Chapter 5 concerns the role the swerve plays in explaining atomic collisions. In chapter 6, I describe how the swerve is supposed to help preserve human freedom. Epicurus' reasons for positing the swerve are inadequate; he makes a number of mistakes that are subsequently uncovered by Chrysippus and Carneades. Nonetheless, I argue that my interpretation is preferable to the others both on textual grounds and on grounds of charity. In the Epilogue, I take up the question of how the traditional ‘problem of free will’ arose, if Epicurus was not concerned with it, and I look at the way in which Epicurus inadvertently contributed to its birth. I argue that Carneades should be credited (or blamed) for first formulating a libertarian position on the ‘traditional’ problem of free will and determinism, and that via Cicero’s De fato, it was transmitted to the western philosophical tradition in St. Augustine’s On Free Choice of the Will.
Chapter I

What sort of an incompatibilist is Epicurus?

If our sources can be trusted, Epicurus asserts an incompatibility between *libera voluntas* (sometimes translated as ‘free will’) and determinism, and he denies that determinism is true, positing a mechanism, the swerve, by which it is rendered false, saying that the swerve is needed in order for us to be free. Because of this, Epicurus has been hailed as the first person to discover the free will problem. But this is too hasty. Much of the recent discussion of Epicurus has been muddled by assimilating his position and his concerns to those of modern libertarians. Before we answer the question of how the swerve is supposed to secure our freedom, at least two other questions need to be addressed: What type of freedom is the swerve supposed to secure? And why should we care about having freedom in this sense – that is, why does it matter? Only if Epicurus is concerned to secure the same type of freedom as are modern libertarians, and for the same sort of ethical concerns, are we justified in calling Epicurus a ‘libertarian.’ ¹ Before considering in detail the passages in which

¹ So, for instance, I find Jeffrey Purinton’s discussion highly unsatisfactory. Purinton writes that Epicurus is a ‘libertarian’ because he asserts (1) that, although some things happen ‘by necessity’ and others happen ‘by chance’ some things are genuinely ‘due to us,’ (2) that praise and blame properly attach to ‘what is due to us,’ and therefore (3) that we are not ‘enslaved to the fate of the physicists,’ not subject, that is, to physical determinism.’ (Purinton (1999) 254). Each step (1)–(3) is questionable as a support for attributing libertarianism to Epicurus, since one could accept that Epicurus advances each of them (as I do) and yet still reject the identification of Epicurus’ with the libertarian position. This is because what Epicurus means by phrases like some things being “up to us” and some things being “by necessity” is still at issue, it is not obvious that Epicurus’ primary concern is with praise and blame, and one cannot simply straightforwardly identify the “fate of the physicists’ with physical determinism. Because of this, when Purinton says, “Now set aside all textual evidence and simply ask what a would-be libertarian atomist is obliged to say” (p. 258), and then goes on to criticize various other interpretations of Epicurus because they do not sufficiently respect either his libertarianism or his atomism, many of his criticisms are question-begging. That is because much of his argument presuposes his definitions of libertarianism and atomism, and other parties to the debate would simply deny that Epicurus is a libertarian or an atomist, as Purinton uses the terms.