

Reading Lucretius IN THE Renaissance

ADA PALMER

I TATTI STUDIES IN ITALIAN RENAISSANCE HISTORY



Sponsored by Villa I Tatti Harvard University Center for Italian Renaissance Studies Florence, Italy

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Preface

If you were told that reading this book could send you to Hell, would you keep reading? If you believed that heresy was contagious, that you could acquire a lethal mental illness from contact with incorrect ideas, would you choose to study them? Would you cross dangerous mountain ranges searching for unorthodox texts, and spend years working to correct and copy them? Would you publish such a book, and put your name on the title page as you turned one copy of a dangerous contagion into a thousand? Would you risk prosecution for it? And would you go through all this to preserve a book whose fundamental claims you thought were wrong?

Reading Lucretius in the Renaissance was no light undertaking, yet many hundreds of scholars chose to read him, defying social stigma and inviting very real danger by choosing to study and propagate a scientific theory that most of them did not believe in. These scholars saved and studied Lucretius's work, and with it the theories of the ancient atomists, which would prove critical to the development of modern science. How such readers read Lucretius, and why they read him, shaped the text and its distribution, and so shaped how heterodoxy really circulated in the premodern world—not on the conspicuous stage of heresy trials and public debates, but in the classrooms, libraries, studies, and bookshops where quiet scholars met the ideas that would soon transform the world.

When Lucretius first came to my attention as a factor in the history of thought, I was working not yet on the Renaissance, but on the French Enlightenment, on Diderot, Sade, Spinoza, and the most radical face of the eighteenth century. The broad, synthetic treatments of Enlightenment radicalism that I read in graduate school would occasionally, in passing, claim that the spread of Lucretius in the Renaissance was an important influence on the Enlightenment, but they usually cited nothing more specific than the fact that Voltaire and Montaigne read and praised Lucretius. That did not satisfy me. If I was to accept a causal connection between Diderot's *Encyclopédie* and Poggio bringing a grubby, halfillegible verse epic back to Florence in 1417, I wanted every link in that chain. In the intervening years, several excellent studies of Lucretius's early modern influence have filled in much that was previously obscure. We are confident now that Poggio's discovery of Lucretius was a turning point in the path toward modern thought, and that Lucretius's return to Florence made a powerful impact, whose ripples we can detect touching many corners of literature, science, religion, and philosophy over the fifteenth through eighteenth centuries. Building on these works, my own study traces how Lucretius's influence managed to spread so successfully in an intellectual world so hostile to his core ideas. It was no small step from a manuscript in Poggio's hands to an annotated print edition in Voltaire's, and thousands of other copies in the hands of Voltaire's contemporaries. Previous studies have described the epicenter or the ripples—I shall endeavor to describe the medium that carried the ripples so far.

The atomic theory, which Lucretius helped preserve and propagate, existed for 2,000 years before it achieved its current fame. This is not a story of its triumph. The Renaissance readers examined here were not, for the most part, atomists, nor are we atomists today. However central molecules and elements may be to our chemistry, at the frontiers of physics we look beyond the atom and the neutron and do not expect at the end to find what Epicurus described, a set of indivisible physical puzzle pieces that combine to form the perceptible world. Yet, just as the vast majority of surviving Latin literature was not written by native Latin speakers, so the great contributions of atomism were not necessarily made by atomists. Atomism, for most of its period of influence, has not

been a living theory but a tool for thinking. What if the world is made of small, rearrangeable pieces? This proposition dominates our current understanding of matter and lingers in our scientific vocabulary, where, like Aristotle's *genus* and *species*, it helps us describe the more elaborate science that has replaced it. Another Epicurean mental tool, even more central to the development of modern thought, is self-governing materialism, the concept of a universe that functions on its own, without the necessity of a chariot to pull the sun, nor even a hand to wind the Clock. Yet the majority of modern, and even early modern, materialists use neither Epicurus's model nor many of Epicurus's arguments for materialism. They retain merely the conceptual tool, supporting it with different, novel proofs.

These theories, which Lucretius brought us from the ancient atomists, are tools—tools that were indispensable in propelling modern science to its current state. Lucretius's epic poem, in which these ideas were preserved, is the toolbox. Yet a toolbox may exist for a long time before anyone lifts a particular tool from it, or puts that tool to any specific use. This is the story of a toolbox that was lost for centuries and recovered in the Renaissance, whose tools were found, repaired, sharpened, and used by men with goals very different from those of the tools' makers. Their goals were those of Renaissance humanism: the restoration of the lost glory of the ancient world, and the rehabilitation of a fallen Europe through the return of wisdom and virtue, which they expected to be propagated by Greek and Latin eloquence. These goals led Renaissance scholars to open Lucretius's toolbox, but that is only the first stage of reception. Epicureanism and other scandalous heterodoxies of the ancient world were not cans of living worms that, once opened, could spread themselves. Tools need to be used, carried, copied—no easy process when the books that contain them were difficult to find, onerous to correct, and expensive to reproduce. Nor can we ascribe the whole process to noble revolutionaries. This study demonstrates how Lucretius's atomism was rescued from the dust by men who were not atomists, how his radical heterodoxies were copied and preserved by men who were not radicals, and how his scientific theories were injected back into scientific discourse by poets and philologists rather than scientists. The machine of book production increased the potency and fame of Lucretius and other revolutionary authors rediscovered in the Renaissance, and readers allowed these disguised firebrands into their libraries, lured by a romantic trust in the products of the golden age, and by publishers' sincere belief, proclaimed in every preface, that reading about such "errors" as atoms and vacuum posed no danger. They believed this because of how they learned to read, and this demonstrates how centrally the transformation of modern thought depended not just on writing, but also on reading.



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Religion Trampled Underfoot

"RELIGIO PEDIBUS SUBIECTA"

Epicurus, Atomism, Atheism, and Skepticism in the Renaissance

UCRETIUS WAS AN ATHEIST. So were Epicurus, Thales, Pyrrho, → and all Pyrrhonists, Aristotle, Pliny the Elder, Ovid, Caligula, Nero, Judas, Mohammad, Averroes, Peter Abelard, Erasmus, Aretino, Pomponazzi, Marsilio Ficino, Martin Luther of course, Calvin, Zwingli and all their followers, Popes Clement VII and Alexander VI—in fact all popes—also Galileo, Descartes, Bacon, Hobbes, Spinoza, Pierre Bayle, all astrologers, all atomists, all Jansenists, all Stoics, all sodomites, all materialists, all Parisian satiric poets, most Parisian Aristotelians, and, thanks to the pernicious influences of the Vatican and the arch-atheist Machiavelli, a large portion of Italians. All these names come from lists of "famous atheists" composed in and across Europe in the sixteenth and seventeenth centuries. Such lists demonstrate admirably why any examination of heterodox belief in the early modern period must contend with the question of what definition, if any, the word "atheism" can be said to have had in a period when it was applied with equal ease to corrupt emperors, controversial theologians, and the Roman poet Lucretius, who explicitly insists on the existence of gods, just not the traditional concept of them.

Lucretius was also an atomist, subscribing to Epicurus's infamous Greek heresy that matter is composed of tiny particles whose varied shapes and arrangements produce the different substances we see around us. Epicurus believed in creation from chaos—that the world was formed when atoms floating in the void clumped randomly together to form substances. He believed that all operations of nature could be explained by the interacting properties of matter without involving the divine. He believed that there were multiple Earth-like worlds scattered throughout the heavens. He believed that government, languages, and social customs were not handed down by the gods but were gradually developed by humans themselves. He even believed that, in primordial days, the Earth had produced a wide variety of strange creatures, but that only those suited to their environments survived until the present era. If the third century B.C. possessed so many ideas that we associate with the twentieth century A.D., then we must ask why these peculiar theories have leapt to the fore only recently, after two millennia in virtual hiding.

Epicureanism has come down to us as possibly the most tangled ancient school of thought. It is tangled today, as it was in the Middle Ages, with gluttony—eat, drink, and be merry; truffles, chocolate, and wine none of which Epicurus, a vegetarian whose recommended food was porridge, would ever have encouraged. It was even more tangled, in the Renaissance especially, with atheism. At the time, the label "atheist" had not yet taken on its strict modern definition, but instead invoked a broad set of confused and contradictory meanings, into which Epicureanism, despite its overt theism, easily fit. Today atomism is, in its modern form, universal. Atheism, while far from universally accepted, is universally present as a relevant and coequal participant in contemporary theological discourse. Gone are the days when the author of a new physical theory did not have to address atomism as a potential rival. Gone too is the age when the word "atheist" conjured only vague notions of heresy and wickedness, rather than bringing to mind a body of loose but coherent secular concepts, as familiar to the modern theist as are the doctrines of Judaism, Buddhism, or Calvinism.

Epicureanism is vital to tracing how the concepts of atomism and atheism went from being rare, hidden, or illegal to being everywhere. It is the oldest organized school of thought that used atomism to supply a sophisticated mechanical model of the cosmos not dependent on divine participation. Its evolution therefore shows us the history of Europe's receptivity to mechanical science, what doctrines and attitudes prevented atomism and mechanical models of nature from having any serious following for so long, and what new attitudes brought about the current state of scientific thought in which mechanical models, atomism among them, have flourished.² As for atheism, Epicureanism is not atheism by our modern definition, but we can examine the attitudes that labeled it as such. By doing so, and by studying how the label "atheism" affected the transmission of atomism in the period from 1417 to 1600, we can trace how the interactions between religion and science were already changing before the centuries most commonly associated with modern secularization.

Another key player in the secularization of modern thought, and in the maturation of the scientific method, was philosophical skepticism. This was another vein of ancient philosophy that was tangled with atheism and general heterodoxy in the Renaissance, hence the presence of Pyrrho and "all Pyrrhonists" on our lists of "famous atheists." We can understand the Renaissance concern that a branch of philosophy designed to engender general doubt might sow specific doubts about God, the afterlife, and Providence. Yet skeptical argumentation has long been a tool of many theist and dogmatic systems, including both Epicureanism and many branches of Christianity. Epicureanism is primarily a dogmatic system, not a skeptical one, but both Epicurus and Lucretius employed sophisticated skeptical logical tools in their attacks on physical models of nature that depended on divine participation. Thus, while the return of Epicurean mechanical models of nature made a vital contribution to the development of modern mechanical science, at the same time the return of Epicurean skeptical arguments in Lucretius, supplementing those in Epictetus, Cicero, and Sextus Empiricus, facilitated the advent of modern skepticism. This is traceable through Lucretius's influence on Montaigne, and, later, on Gassendi and on the "constructive skepticism" of Marin Mersenne.3

Epicurus established his school in Athens around 307 B.C., but very few of his writings survive. Because he wrote in Greek, his works could not be widely read in the early modern period until they were translated into Latin in 1433.⁴ Epicurean interlocutors in Cicero's dialogues pro-

vided Renaissance Latinists with some good information, mainly on moral questions, but Cicero's goal was not to explicate Epicureanism as a system. Rather, he aimed to explore philosophical skepticism by contrasting the doctrines of multiple philosophical sects until their contradictions annihilated the persuasiveness of all, leaving only doubt.5 Unlike Cicero, Lucretius was a genuine Roman follower of Epicurus. In the years leading up to 54 B.C. he wrote his only surviving work, the epic poem De rerum natura (On the Nature of Things). 6 The poem, in six books, lays out all the key doctrines of Epicureanism, though focusing on physics and epistemology and treating ethics only sparsely. Lucretius says in the poem that he chose to circulate these lessons in verse in order to make his dense philosophical reasoning more palatable.7 The De rerum natura is a didactic and popularizing work, intended to spread Epicureanism and make converts. It covers a huge range of moral and scientific topics, from the functioning of magnets, to the symptoms of the plague, to how to avoid ruining the rest of your life when you fall head over heels in love.

Lucretius's epic disappeared in Europe after the ninth century but was rediscovered in 1417 by the renowned Italian book-hunter Poggio Bracciolini.⁸ Poggio brought a copy of it to a friend, the Florentine book collector Niccolò Niccoli, who guarded the manuscript jealously for more than a decade, not letting even Poggio himself make a duplicate.⁹ Niccolò eventually did let the poem circulate among Italy's eager humanist elite. Other scholars gained access in the 1430s, and more copies later surfaced.¹⁰ Fifty-four surviving manuscripts and thirty print editions of the poem were produced between 1417 and 1600. These spread Lucretius's Epicurean treatise across Europe, in Latin, which every learned person could read, and in rich and elegant verses, which the great Virgil himself had deigned to imitate.¹¹ Such enticements lured many to read Lucretius even if they had no particular interest in Epicurean philosophy.

From 1417 to 1600 Epicurean texts circulated, but there were not yet any self-proclaimed Epicureans. Lucretius was taught in schools in France and Italy in the early sixteenth century, frequently enough for the Florentine regional Church council in 1517 to ban the teaching of Lucretius, 12 and for teachers at Louvain in 1543 to complain of the absence of a suitable classroom edition. 13 Despite this extensive circulation, and the

comparatively broad appearance of Lucretian poetic themes in art and literature of the sixteenth century, 14 atomism remained extremely rare in scientific circles before the seventeenth century.¹⁵ Giordano Bruno's physics incorporates atomism, as does the medical work and sense theory of Girolamo Fracastoro, but neither can be called a systematic Epicurean.¹⁶ The first author to use atomism while specifically retaining the title "Epicureanism" was Pierre Gassendi, who in the seventeenth century attempted to hybridize Epicureanism, skepticism, and Christianity.¹⁷ This slow and relatively limited penetration of Epicurean atomism and mechanical theory into scientific circles before Gassendi cannot be attributed to a lack of access to Epicurean sources; by 1600 publishers had printed thousands of copies of Lucretius. Although Lucretius had thousands of readers before the seventeenth century, however, "Epicurean" remained less an intellectual label than a term of abuse, synonymous in public discourse with heresy, atheism, and, often, sodomy. The causes of this strange conjunction of fast dissemination and slow intellectual reception are exposed by reconstructing the real experience of reading Lucretius in the Renaissance.

A moment of first contact occurred when Poggio brought the De rerum natura before Renaissance eyes. Scholars had heard whispers of this lost masterpiece in passing references by Cicero, Ovid, St. Jerome, Macrobius, and others, enough to make them eager for copies of Poggio's transcription. The fossils, as it were, of the Renaissance's initial reaction to Lucretius are found, not in the writings and projects of scholars, but in the pen strokes preserved in physical copies of the poem itself, the manuscripts and printed books. First contact is not limited to the years just after 1417, or even to the fifteenth century. As sixteenth-century print editions made Lucretius widely available in Europe, increasing numbers of scholars experienced individual moments of first contact with this Epicurean handbook. As the print editions multiplied, so did editorial paratexts: the introductions, dedications, addresses to the learned reader, biographies, commentaries, and other supplements that directly shaped readers' experience. These paratexts directly show which aspects of the author and his work editors considered most valuable.

The notes left by Lucretius's readers reveal a characteristic agenda that governed how Renaissance humanists read, not just this text, but all

recovered classics. This agenda, detectable in the recurring patterns in the types and locations of annotation, reveals how deeply entrenched was the humanist concept of reading as a moral experience. Humanists believed that the written legacy of Greece and Rome would steep the reader in classical virtue. This was part of a program of elite education that fourteenth- and fifteenth-century humanists hoped would save Europe from corruption, strife, and warfare. Humanist education was supposed to produce virtuous men who would have absorbed in childhood the loyalty, nobility, courage, and patriotism that had made ancient Rome strong, and without which the modern world was, as Petrarch described it, wracked by corruption, petty ambition, and cowardly selfinterest. The beauty of ancient rhetoric would arm authors and orators to inspire virtue in others, especially princes. This educational agenda promoted many avenues of scholarship, and helped humanists win patronage and support from governments and princes. However, the patterns in manuscript annotation reveal that it also acted as a filter that dominated the reading experience, and thereby limited the capacity of atomism, and other unorthodox scientific theories, to circulate in Renaissance Europe even as the texts that contained them circulated broadly. Readers' notes also confirm in practice what many humanist educators voiced in theory: that a central goal of Renaissance reading was to absorb useful classical language regardless of content.¹⁸ Changes in the patterns in later sixteenth-century copies reveal when and why this moral filter broke down, as France eclipsed Italy as the center of the printing industry, and as the purpose of reading turned from resurrecting lost ancients toward a new emphasis on science, method, and innovation.

This two-century exploration of first contact with Lucretius thus reveals the very slow and complex process of the return, not just of a text, but of the text's ideas, to European intellectual discourse. It demonstrates why Renaissance readers read this strange new ancient, and how Renaissance attitudes toward the relationships between education, religion, natural philosophy, and classical literature affected Europe's receptivity to this Epicurean capsule that contained two concepts so vital to the modern world: atomistic science and the separation of natural science from theology.

Epicureanism

Epicurus established his school in Athens around 307 B.C.¹⁹ Like most of the Athenian philosophical schools, Epicureanism was eudaimonistic, in that it held that the primary goal of philosophical study was individual happiness. Epicureans, like Platonists, Stoics, Skeptics, and Cynics, argued that we should study, not to placate curiosity, nor to master nature, nor in expectation of practical applications of knowledge, but because philosophy makes its practitioners reliably and permanently happy. Nothing can prevent Fortune from snatching away one's wealth, career, freedom, health, or even one's flesh, but by studying philosophy one could achieve complete control over the inner self, over one's attitude, opinions, and affections. Humanity could not escape famine, poverty, shame, or bereavement, but mental discipline could armor the practitioner against grief, envy, anger, obsession, and the other passions and attachments that turn physical experience into emotional pain. For these ancient philosophical schools, philosophy was not a tool but a way of life. These schools were private societies as well as centers for propagating belief systems. Like the later monastic tradition, which owes them much, these schools provided guidelines for daily practice, customs, even dress and diet, all of which were intended to help followers achieve permanent interior happiness immune to the blows of Fortune.²⁰

Epicureanism is one form of philosophical hedonism, the broader category that encompasses all philosophical schools that posit that the highest good is pleasure (ἡδονή, hêdonê, usually translated voluptas in Latin), rather than centering on a divine, spiritual, or civic good. In a hedonist system, all human decisions should be based solely on the amount of pleasure or pain expected to result from them. The purpose of the human mind is to make such calculations. This leaves no room for such lofty operations of the soul as the participation in divine Truth described by Platonism, the moral virtue valued by Aristotelianism, or the many Christian adaptations of both. It was this focus on pleasure that led to the association of Epicureanism with gluttony. Taken by itself, "pursuit of pleasure" was easily interpreted as recommending sex, drink, dining, and excess. Yet even a cursory examination of Epicurean writings shows that the pleasures Epicurus promoted were far from

those imagined by later critics, who knew that hedonism advocated "pleasure" but did not know what ethics and lifestyle Epicurus derived from that doctrine.

Epicureanism is not like those branches of hedonism—such as the earlier Cyreniac school or the seventeenth-century Libertine movement that focus on positive pleasures. Epicurus defined happiness negatively, as the absence of pain or distress, rather than as an active experience of pleasure. Positive pleasures, like feasting, drinking, and such social pleasures as fame, rank, and power, would lead, not to long-term happiness, Epicurus believed, but to ill health, sexually transmitted diseases, stress, and disappointment. Even the earlier Cyreniacs, with their positive definition of pleasure, had counseled adherents to avoid pleasures that would result in later pain, and had therefore never recommended the uncontrolled orgies that later critics would associate with hedonism. Epicurus's negative definition of pleasure went even farther, and removed sensuality from the happiness equation entirely. Epicurus's followers were told to judge foods based on their effects on long-term health, and to treat sex as an emotionless release of bodily appetite, to be indulged in only as often as necessary for physical comfort, neither more nor less. The pleasures Epicurus recommended were long-term pleasures like healthy living, friendship, and above all ataraxia (ἀταραξία), the same philosophical tranquility valued by the Stoics. In the name of this tranquility, Epicurus prescribed a secluded life, without involvement in politics, art, or commerce, in which the Epicurean could spend his or her days in a garden eating simple meals and discussing philosophy with friends. While health and tranquility are wholly negative pleasures—the absence of bodily and emotional pain—Epicurus's praise of friendship and of the beauty of the garden do seem to leave a little room for positive pleasure in his thinking. It must be stressed, however, that only intellectual pleasures could be permitted—pleasures wholly divorced from the physical senses and from the high-risk emotional intensity of love.

Freedom from fear was necessary to tranquility in Epicurus's model, and this is where his atomism was essential. Epicurus saw fear of death and fear of the gods as two of the largest sources of distress for human beings. He sought to alleviate these fears through scientific understanding. Fear of death, he thought, derived from fear of punishment after

death, but if the soul is just a collection of atoms that disperse at death, then there are no torments of the underworld to fear, just nothingness. If you define pleasure as the absence of pain, nothingness is a perfectly acceptable end, because it guarantees the permanent end of pain. The *De rerum natura* contains numerous arguments against the immortality of the soul, all intended to be comforting to the reader who might otherwise fear the Furies and other torments of Acheron. Epicurus's attacks on the immortality of the soul were infamous enough in the Middle Ages for Dante, in his *Inferno*, to use "Epicurus and all his followers" as a general label for those who deny the afterlife. ²¹

Also infamous was the Epicurean school's denial of the gods' influence on human affairs. As Lucretius presents it, superstition, especially the ritual practices of classical pagan religion, perpetuates violence and fills people with wretched fear of wrathful gods. In the Epicurean view, superstition derived largely from humans' inability to explain natural phenomena without assuming divine participation. In the absence of other explanations, deadly earthquakes and heavenly thunderbolts seem to imply that there are powerful, dangerous beings behind the functioning of nature. If one explains lightning or the motions of the tides in terms of atoms, however, then one no longer needs to believe in a wrathful Jove or a capricious Neptune at work behind them. This frees the Epicurean from fearing that divine retribution will follow if one fails to make appropriate sacrifices to these hidden powers.

Lucretius's attack on traditional Greek religion is not atheist in the modern sense. Epicurus argues that the gods exist, but that they do not govern the universe or listen to prayer. This argument is based on the Greek understanding that anything divine must be eternal, unchanging, happy, and tranquil. Epicurus concludes that such a divine being cannot be burdened with governing the universe or listening to the constant, miserable prayers of humankind, because this would make the gods busy, depressed, and annoyed, if not downright wretched. Therefore the gods do not hear prayers or act in nature. Similarly, because any composite thing must be susceptible to being broken apart, Epicurus argues, a truly divine thing must be perfectly simple like an atom: indivisible, therefore unchanging; insensible, therefore unperturbed. The gods, as Epicurus understands them, are each the size of a single atom,

and dwell apart from the rest of the universe, neither perceiving nor interfering. Such gods truly experience an eternal, happy, tranquil state, and, if pleasure is the absence of pain, then sensory deprivation is Olympian paradise.

Later theologians easily recognized that these isolated, functionless gods are so close to not existing at all that the rest of Epicurus's system is functionally atheist. Epicurus does make gods necessary to his cosmos in one way. The Epicurean model of cognition posits that all thoughts are made out of shells of atoms cast off by real objects, which the human mind detects. If we think of something that does not exist—a Chimera—it is because shells from things that do exist—a lion, a goat, and a snake have become entangled. In such a model, our ideas of the gods—divine, perfect, eternal—must derive from beings with such attributes, so the gods must exist for us to be able to conceive of them. They also serve as intellectual models of concepts, Venus of voluptas, Mars of conflict, and so on. Thus, Epicurus says, the gods exist. But this is such a weak argument that as early as 45 B.C. Cicero voiced the suspicion that Epicurus did not actually believe in gods at all, but that he included his functionless atomic gods only to avoid popular criticism.²² But even if Epicurus's belief in atomic gods is sincere, those gods' lack of involvement leads the Epicurean to think about nature and the human condition precisely as one would if there were no gods, leading to theories compatible with atheism. In other words, the Epicurean mechanical model, if divorced from Epicurus's theology, was more compatible with atheism than any other physical model available in the ancient world or the Renaissance, because the physical theories of the Stoics, Platonists, and Aristotelians all require the existence of the divine in order to function, whereas the Skeptics and Cynics do not supply physical models at all.

As part of the Epicurean campaign against fear of the gods, the *De rerum natura* contains numerous attacks on *religio*, the practice of organized religion in the ancient world. The most famous is Lucretius's vivid description of the sacrifice of Iphigenia in the Trojan War legend, an act that he paints as an unnatural and destructive atrocity and connects with gory accounts of animal sacrifice and other bizarre religious rites.²³ These discussions are not anti-theist, but they might be termed anti-church, or irreligious in the sense of opposing the cultural and civic

institutions of religious practice, even though they do not attack divinity itself. As we shall see, many Renaissance Christian readers welcomed and even reused Lucretius's criticisms of religio, considering attacks on paganism wholly separate from anything that might endanger their True Faith.²⁴ Such passages were read differently in the eighteenth century, when Voltaire, in his deist writings, praised Lucretius's assaults on organized religion in general.²⁵

Atoms, according to Epicurus, are the smallest unit of space and matter. The Epicurean form of atomism is believed to largely follow Democritus and earlier Greek atomists. Not enough of Democritus's writings survive to let us be certain, but Cicero criticizes Epicurus for denying his debt to Democritus.²⁶ Atomism seems to have been developed as an answer to Zeno's paradox of motion. It defines the smallest possible motion: one atom-diameter per time increment. Like a single pixel on a pixelated screen, an atom is the smallest limit of a microscopic grid that makes up the structures of both space and time. As objects on a screen cannot make any smaller movement than one pixel-width, so objects in an atomistic universe cannot move less than one atom-width at a time. Thus, Zeno's subdivision of the distance between an arrow and its target cannot continue to infinity, and the paradox is solved.

It is important to keep in mind that Democritus, Epicurus, and Lucretius would not apply the label "atom" to those microscopic bodies called "atoms" by modern science. A hydrogen or carbon atom is itself made of smaller parts. An Epicurean atom is by definition the smallest unit of matter and cannot be subdivided. In contemporary terms, the quarks that make up protons and neutrons may merit the Epicurean label "atom," though the title must pass on if quarks turn out to be made of preons, strings, or even smaller units as yet undiscovered by modern scientists, but which ancient philosophers were already prepared to discuss. Splitting a true Epicurean atom is by definition impossible. Any system that has no smallest, indivisible unit underlying matter is not classical atomism, even if it continues to employ many elements of classical atomism, including the term "atom."

Though indivisible, Epicurean atoms vary in shape and size, and their microscopic structures correspond to various macroscopic qualities: roughness to bitterness, roundness to sweetness, and so on. Atoms with

interlocking hooks lock together to form solids, whereas smooth atoms form liquids; bulky atoms form heavy materials like earth or flesh, whereas tiny atoms, able to slip through the cracks between the bulky ones, produce rarified, invisible, interpenetrating substances like breath, sound, sense data, or the soul. The tiny atoms that compose sound, thoughts, and the soul slip through stone and flesh as sand slips between pebbles. In Epicurus's theory, the universe contains a finite number of types of atoms, but an infinite supply of each type is spread (unevenly) through infinite space.²⁷ The recurring patterns we see in nature are due to the finite number of substances that can be formed from a finite palette of components. Our Periodic Table does not disagree.

The swerve is the Epicurean principle that accounts for free will.²⁸ Though the Epicurean cosmos is mechanistic, it is not deterministic. In a mechanistic universe, if the motion of matter is perfectly linear, then all actions in the history of the universe are locked in from the point of the first motion, just as all the motions of pool balls on a table are determined by the initial push of the cue. This mathematical predictability leads materialistic fatalists, such as Diderot, to conclude that free will is an illusion. According to Epicurus, however, the motion of atoms is not linear, or predictable. Instead, atoms have a slight random swerve, which makes them curve and strike one another unpredictably. It was this random motion that led atoms floating in the void to clash, ricochet, tangle together, and eventually form substances, worlds, stars, and human beings, instead of continuing infinitely in parallel paths yielding nothing. Thanks to this swerve, the atoms that compose the thinking organ of the human being are not locked into mathematically predictable patterns, leaving room for thought and choice to be genuinely spontaneous. By making room for free will and chance within a materialist cosmos, Epicurus resolves one of the most uncomfortable aspects of materialism: fatalism. In fact, in a Europe where, for centuries, every educated man had studied Boethius's discomfort with Providential determinism in the Consolation of Philosophy, the Epicurean swerve offered a new and simpler model of free will than even theologians could supply.

Epicurus explains sensation using atomic shapes and shells.²⁹ In the case of taste and touch, the atoms of our bodies interact with the atoms within objects directly. Atoms are too small for us to perceive their

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shapes, so texture is translated into sensation: smoothness into sweetness, roughness into bitterness, and so on. Sensations that are perceptible at a distance, such as sound, sight, and smell, are produced by the fine shells or films that all objects constantly cast off, composed of extremely rarified atoms. These shells are not generated by individual atoms but by objects composed of many atoms, which shed shells constantly. These shells carry through the air the shapes and qualities of the objects that produce them and are detected by the sense organs. Atomic shells of different coarsenesses are detected by different organs, with the nose detecting the roughest ones, the eyes finer ones, and the ears extremely fine ones, much as filters with different grades of mesh filter different-sized particles from passing water.

The finest shells are detected by the mind.³⁰ Ideas, in this model, are not created by the thinker in some mental space, as in Descartes's nominalist model of the mind as a room with ideas as its furniture, which the thinker may fashion, organize, and purge. Rather, ideas are generated mechanistically when the mental organ receives extremely rarified atomic shells, just as images are generated when the eye is impacted by shells, with no decision making on the part of the viewer apart from the choice of where to aim the eye. The very fine shells that generate ideas pass easily through heavier bodies, such as buildings, and even the Earth itself, but are detected when they strike the equally fine atoms of the soul. We can think of things that are not nearby because elsewhere in the universe they are still present, generating shells that reach us despite objects between, as when we think of objects in far-off lands we have never seen, or absent objects, such as the sun, which our minds perceive through the Earth even at night. Ideas of nonexistent things, like unicorns, are generated when two shells clash in midair, horse with horn, and so on.

The Epicureans' closest rivals were the Stoics, who, though also materialists, took an opposite approach to solving Zeno's paradoxes of motion: the Epicureans employed pluralism, the Stoics monism. Whereas the Epicureans saw matter as an infinity of divided atoms, Stoics argued that the whole universe is a single contiguous being, varying only in quality. In such a system there is no such thing as number, mixture, or division, and the difference between fire and water or iron and human is no greater than the difference between blue and white stripes in a single piece of cloth. The Stoics and Epicureans also differed fundamentally on the question of freedom of choice. Both were materialists, but the Stoics argued for strict determinism and universal Providence, while the Epicurean swerve left room for free will and a random universe without a divine Plan. The schools' arguments on these questions have shaped disputes between determinism and libertarianism ever since. Yet despite these deep disagreements, the Stoics and the Epicureans agreed that the correct way to live was to achieve freedom from fear, destructive passions, and attachments, and to pursue tranquility. Due to these strong similarities in moral philosophy, and the fame of their debates over free will and pluralism, the two rival schools were closely associated in the Renaissance and the ancient world alike.

Compared with other Greek philosophical schools, the Epicureans were unusually active in proselytizing. Wealthy Epicureans commissioned public statues of Epicurus and inscriptions of Epicurean mottoes well into the Roman period, in order to spread happiness to as many as they could reach. ³¹ Lucretius's project to restate Epicurus's teachings in alluring and approachable Latin verse was thus just one of many efforts to spread and popularize the school, though in the extreme long term it has proved by far the most effective.

Apart from Lucretius, our primary surviving ancient source on Epicureanism is Diogenes Laertius, whose collection of biographies of famous philosophers includes in Book X a lengthy treatment of Epicurus. This includes three letters written by Epicurus, the titles of his thirtyseven books, all lost, and a list of Epicurean maxims, commonly referred to as the Kuriai doxai. Ambrogio Traversari's Latin translation of Diogenes Laertius circulated widely after 1433 and was first printed around 1472, followed closely by the 1473 editio princeps of the De rerum natura. 32 Marcus Aurelius also treats Epicureanism to some extent, though he was less well known in the Renaissance and his *Meditations* were not printed until 1559.33 Of the sources on Epicurean doctrine available in the Renaissance before Lucretius and Diogenes Laertius, Seneca was one of the most important, with his famous description of the Epicurean garden.34 Seneca was on every humanist's reading list, and one of the most frequently reprinted classical philosophers from 1475 on. 35 Also critical were Cicero's dialogues, particularly the Academica, De natura deorum,

and De finibus, but also the Tusculanae quaestiones, De divinatione, and De fato. 36 In the Renaissance, as now, these other sources were indispensable supplements, but the De rerum natura remains our most extensive Epicurean source and the only one written by an actual Epicurean.

As we consider Epicureanism today, there is a presentist danger of exaggerating its modern elements. Current science is full of materialism, atomism, and secularized approaches to physics and other natural sciences. From our modern perspective, the Epicureans were right about many things, but they were often wrong as well. For example, although Lucretius says that only species suited to their environments survived to the present, he goes on to say that now no new species come into being because Mother Earth has undergone menopause and giant placentas no longer grow out of the ground.37 The question is not why, if Epicurus was right, it took everyone else millennia to get the message; rather it is how the long-term transmission and reception of Epicureanism, with its many doctrines, affected and was affected by its two most revolutionary elements, atomistic materialism and separation of physics from the divine.

Epicureanism in the Renaissance

At the beginning of the Renaissance, most of these details of Epicurean doctrine were inaccessible, leaving Europe with a fractured and largely inaccurate impression. In the absence of Lucretius and Diogenes Laertius, and in a period when Cicero's philosophical works were less well known, information about Epicureanism was available primarily in the fierce attacks against it preserved in the works of Christian apologists, especially Arnobius, Lactantius, Jerome, Ambrose, and Isidore of Seville.38 Lactantius especially presented Epicureanism as a perverse and wrong-headed sect closer to madness and wanton sensualism than philosophical tranquility. Such sources did not predispose figures like Dante to categorize Lucretius and Epicurus with such "virtuous pagans" as Homer and Virgil.

A glance at Petrarch may demonstrate what one leading scholar thought he knew about Epicurus before Lucretius's return. Petrarch's opinion of Epicurus is sometimes positive, sometimes negative, but never more than a literary and moral treatment. In the Triumph of Fame,

Epicureans are presented as fools, and particularly base fools at that, unworthy even to follow after Fame. They are not men but "swine," an immortal cliché for which we must thank the poet Horace.³⁹ Yet in his letters, Petrarch describes Epicurus as "a philosopher held in disrepute among the vulgar but esteemed by those better able to judge."⁴⁰ He does not specify who hates and who esteems Epicurus or why, but the sense is present that Petrarch believes that the general characterization of Epicureans as "swine" is proved false if one examines Epicurus in more detail. Only the followers, as he presents them, are swinish, not the philosopher himself. In another letter Petrarch praises Epicurus for his temperance and moderation in eating only bread and water, referring to passages from Seneca.⁴¹ In Petrarch's philosophical writings, however, Epicurus is a flat character, not a source of serious or useful ideas. An anecdote in Petrarch's *On His Own Ignorance*, lifted from Cicero's *De natura deorum*, presents Epicurus as an exemplar of an arrogant philosopher:

Who has not heard of Epicurus, how he more than anyone else reviled everybody in intolerable arrogance or envy or both? He did so to Pythagoras, Empedocles, and Timocrates . . . merely because Timocrates disagreed but slightly with him and his crazy opinions. . . . Epicurus . . . disdains Plato and insults Aristotle and Democritus most injuriously. From Democritus he had learned whatever he knew of philosophical matters. . . . Nevertheless, he speaks ill of Democritus, all the more acrimoniously because he wanted to boast of not having had any master and to appear without one. 42

Here Petrarch compares Epicurus to the Bolognese Aristotelians who had unfairly reviled Petrarch himself, and perhaps issues a subtle warning that we should not have too high praise for Aristotle, who, like Epicurus, was so eager to disagree with his master. Later in the same invective, this time directly treating Cicero's *De natura deorum*, Petrarch sets Epicurus one notch above the scholastics:

God made the world by the Word which Epicurus and his followers could not know and our Aristotelian philosophers do not deign to know, in an attitude that makes them but more "inexcusable" than these ancient thinkers. Even a lynx cannot see in the darkness; he who does not see with open eyes in bright daylight is completely blind.⁴³

Epicurus is not, for Petrarch, a source of doctrines to be accepted or refuted, but a model of vices and of virtues, most notable for having had fewer vices than one might expect given his belief that pleasure is the highest good. He is arrogant but not gluttonous, wrong but not willfully so, blind to the real truth but not debauched or dangerous.⁴⁴

Zygmunt Baranski's recent examination of Boccaccio's approach to Epicurus has demonstrated similar efforts by Boccaccio to correct the gluttony stereotype and stress the Epicurean focus on friendship described by Seneca and Cicero. 45 Historians still often discuss the idea of an active "rehabilitation" of Epicurus in the Renaissance, a systematic project on the part of early humanists to fight the stigma and produce a new portrait of Epicurus, more faithful to the surviving texts and more acceptable by Christian standards. 46 Advocates of this reading cite a broad range of apologetic approaches, from attempts like Petrarch's and Boccaccio's simply to clarify Epicurus's position, to the efforts of philologists and publishers, to Gassendi's later attempt to systematically Christianize Epicureanism. 47

For a later sample of what was known about Epicureanism without Lucretius, we can do no better than to look to that most confrontational of humanists (and a personal enemy of our Poggio), Lorenzo Valla.⁴⁸ Valla's *De Voluptate* depicts an idealized fifteenth-century philosophical scene, in which a Franciscan, a Stoic, and an Epicurean convene to spend their leisure hours having a dialogue on the nature of the highest good.⁴⁹ The work was revised into its final form in 1433, when the *De rerum natura* was only barely beginning to circulate. It is very likely that Valla had no access to Lucretius apart from a few excerpts, found in Lactantius and elsewhere.⁵⁰ Valla's quotation of a Lucretian line that does not appear in any known circulating fragments does suggest that he might have had the whole poem, but even if he did obtain it, he clearly had not digested the poem in detail in 1433 when he scripted his supposedly Epicurean interlocutor.⁵¹ The elaborate "Epicureanism" outlined

in Valla's dialogue bears practically no resemblance to Lucretius, and instead is based primarily on Cicero, Seneca, and Valla's imagination. The Epicurean interlocutor's position occupies the bulk of the dialogue and is refuted in the end by the Christian, but so weakly as to leave one with an acute sense that, for Valla, the Epicurean triumph over Stoicism was the real goal, and that True Faith's final victory was more mandatory than heartfelt.

Valla's Epicurean interlocutor, a fictionalized depiction of the poet Maffeo Vegio, proposes *voluptas* as the highest good, but his definition is far from the stark tranquility Lucretius describes. Where Lucretius gives detailed depictions of the evils of drunkenness and the snares of love, Valla's fictitious Epicurean, Vegio, embarks on a long celebration of the senses. He praises food, wine, and especially pretty women, who he suggests should go naked for the benefit of passersby. ⁵² Vegio mocks those praised for temperance and moderate diets as comparable to the primitive men of ancient days who slept on leaves and ate acorns, quoting a passage from Juvenal that is a direct inversion of Lucretius's claim that primitive humans lived more happily before the development of luxuries spawned avarice and ambition. ⁵³

Valla had read Seneca, who, more clearly even than Lucretius, describes Epicurus's temperance and his diet of water and porridge. Valla's choice to make his Epicurean more a sensualist than a seeker of tranquility is, then, not primarily due to his lack of access to Epicurean moral thought. Rather, Vegio's sensualism serves Valla's own philosophical goals, particularly his desire to attack the elevated status Stoicism enjoyed in the Renaissance. Valla has Vegio criticize his Stoic opponent for foolishly ignoring the pleasures Nature makes available to all. Stories of Stoic sages like Cato, who took their lives with calm dignity when the times were too corrupt to make life worth facing, were a great part of what won Stoicism such respect in the Renaissance. To these, Vegio answers that an Epicurean is equally capable of taking his life with dignified calm, but, knowing how to enjoy life even if politics goes to pot, he does not want to.⁵⁴

Valla's Epicurean also strays from authentic Epicureanism by believing in Providence, or at least in a benevolent intelligent design, which

Epicurus fiercely denies. Vegio spends many pages praising Nature for creating so many wonderful things to give us pleasure. He criticizes his Stoic opponent's pessimism in concentrating on detachment from worldly desires, and on how easy it is to lose the blessings of this life when, in Vegio's view, Nature has designed so much for our benefit.⁵⁵ Valla's Epicurean quotes from Seneca the orthodox Epicurean view that "the immortal gods have neither the desire nor the ability to do injury,"56 a claim that Valla follows with the distinctly un-Lucretian argument that the world was made for humanity, as is proved by the fact that even poisonous plants and snakes exist because they can be made into useful medicines.⁵⁷ Valla's Epicurean does not depict an infinitely good Nature, but one who does her best, and in whose care a person may find happiness if one makes wise choices. One who moves to nicer climates needs not fear weather; one who avoids war needs not fear injury; one who does not sail need not fear tempests; and when there is a plague, the wise person skips town.⁵⁸ Although this reflects the authentic Epicurean conviction that the retired passive life is more tranquil than the socially engaged active one, this benevolent Nature does not feel like the unplanned world full of pains and inconveniences described in the De rerum natura, nor are these escapable evils the all-destroying Athenian plague that ends the unfinished Book VI.⁵⁹ Atoms, meanwhile, are nowhere in Valla's scheme; his Epicureanism is a moral system and to some degree a religious one, intended to provide guidelines for living, not for science or understanding.

Valla's "Epicurean" is largely engineered to suit his own philosophical ends. Nonetheless, the *De Voluptate* makes it clear that a well-read humanist, lacking Lucretius, will settle on a version of Epicureanism that is close to sensual hedonism, though still philosophically sophisticated and moral. The primary theological difference between Valla's Epicurean and authentic Epicureanism is the absence of the Epicurean rejection of Providence, which Valla contradicts so casually that it seems not an intentional reversal but a lack of understanding of the doctrine's importance. Even in a dialogue focused on the conflict between the Epicureans and Stoics, Providence, one of the hearts of that conflict, is absent. First place in Valla's Epicureanism goes to the project of rejecting

traditional moral virtues, both Stoic and Christian, which Valla's Epicurean sees as restricting happiness and driving people to such happinessdestroying follies as war, jealousy, and suicide.

Lucretius was not the first source to teach humanists that Epicureans denied the possibility of divine intervention in human affairs, nor that they were more moral than their sensualist stigma suggests: Cicero and Seneca communicated those facts successfully. Lucretius specifically taught humanists three new things. First, he made it indisputably clear that Epicurean efforts to avoid pain involved resisting sensual pleasures, especially food and romantic love, not embracing them. Second, Lucretius introduced the details of atomistic physics and demonstrated how central they are to the moral philosophy of Epicureanism; Cicero and Seneca largely discuss moral issues without any physics whatsoever. Third and finally, Lucretius clarified the Epicurean model of nature as being formed by chance completely without Providence. This denial of Providence, which Valla did not discuss, is so central to Epicureanism as Lucretius describes it that future publishers of the *De rerum natura* will all feel obliged to address it at length in their paratexts.

Lucretius's heterodox religious content reappeared at a moment when religious orthodoxy felt itself to be under an acute and new set of threats. Late medieval Europe had become accustomed to encountering a fairly limited palette of heterodoxies, in which the largest divisions were often over such questions as whether the Holy Spirit derives coequally from Father and Son or from the Father alone, and how to read Aristotle's model of the soul in such a way as to leave room for the Christian afterlife. Thus, the sudden presence of Stoics, Cynics, Skeptics, Platonists, Aristotelians, Neoplatonists, and Epicureans, all providing radically different rival solutions to the fundamentals of metaphysics, generated a dizzying moment in the history of heterodoxy. Just as humanists were digesting and distributing these rival systems, the advent of Protestantism produced dozens more, and fear of these heterodox strains of thought multiplied along with mounting religious tensions. The Church had never before felt itself to be under assault from so many different directions at once. Thus, the process of rehabilitating Epicurus, and the hostility that project faced, is not merely a moment in the history of humanism, but a critical intersection between humanism and the history of unbelief.

Atheism in the Renaissance

The history of atheism intersects with that of atomism in the Renaissance in three ways. First, the label "atheism," and the stigma it carried, powerfully affected the ability of the De rerum natura, and other philosophical classics that received such labels, to circulate in the premodern world. Thus, Lucretius's Renaissance fortuna cannot be fully explored without addressing both the consequences of this label and the reasons he received it. Second, the circulation of Lucretius's Epicurean philosophy, labeled as atheism, had a significant influence on developing concepts of what atheism was and what an atheist might be like. Just as Bayle's argument that it was possible for an atheist to be moral had a deep impact on attitudes toward atheism in the seventeenth century, 60 so the examples of Lucretius and Epicurus as supposed atheists affected the gradual process, ongoing in early modern Europe, of sorting out the variety of heterodox beliefs that had long been clumped under the label of atheism. Finally, the return of Lucretius contributed to modern secularization, but we must examine the state of secular thought before Lucretius's return in order to understand precisely how Epicurus's overtly theist system intersected with and strengthened atheist ideas. 61

Whatever "atheism" meant in an era when it applied equally well to Lucretius, Caligula, and Martin Luther, it was certainly not the strict denial of the existence of the divine. Protestant writers in Germany and France often referred to Catholics as atheists, particularly in accusations blaming Italians at Catherine de Medici's court for the St. Bartholomew's Day Massacre and other evils threatening France. 62 We find charges of atheism lodged by Catholics against Lutherans, Gallicans against Jansenists, and Anabaptists against the Pope, while Calvin and Machiavelli are cited alongside Aristotle and Epicurus as originators of the atheist heresy. 63 The actual content of philosophers' writings seems quite divorced from these accusations. We also have material taken from trials of so-called atheists whose status as actual philosophical atheists, or philosophers in any sense, is dubious at best. David Wootton cites the example of one Elijah Leach, who was charged with atheism by the general sessions in Plymouth, Massachusetts, on the grounds that he had bared his privates in public and declared "that he did not care a turd for God in

Heaven or on the Earth," a case clearly founded more on charges of public indecency than belief. ⁶⁴ In perhaps the most extreme example, Milton in *Paradise Lost* describes the fallen angels as "the atheist crew." ⁶⁵ Lucifer and his rebels cannot possibly doubt or deny the existence of the God with Whom they have walked and talked since time began, so Milton is clearly employing "atheist" as a general term for the rejection of God.

This wide range of uses of the term "atheist," many in contexts divorced from any real philosophical or theological issues, may make the term seem to operate as nothing but a generic term of abuse. ⁶⁶ Yet there are patterns to the contexts in which it appears most, sufficient to let us determine a partial definition, which, if not strict, certainly clarifies why certain overtly theist figures, including Epicurus and Lucretius, were particularly vulnerable to the "atheist" label.

David Wootton has suggested that early modern intellectuals applied the term "atheist" to philosophies that contained ideas that the speakers believed were likely to lead to denial of the divine, even if the philosophies in question were themselves overtly theist.⁶⁷ Lutheranism, for example, does not deny God, but it rejects so many traditional Catholic doctrines, among them many scholastic proofs of God's existence, that it can be seen as undermining the basis of Catholic faith. Similarly, Catholicism, by wedding belief in God with so many other doctrines, many weak or absurd in Protestant eyes, could be seen as undermining the credibility of the whole religion (as Rousseau's Savoyard Vicar argues). A pope like Alexander VI, by his conspicuously impious behavior, suggested to the public that even the pontifex maximus did not himself fear (or believe in) God, thereby leading others to doubt. Even something as seemingly innocent as the New World discovery of melon could engender doubt, because it disrupted Theophrastus's Aristotelian hierarchy of plants, and therefore the Aristotelian "Chain of Being" in general, thereby endangering the Thomist proofs of the existence of God from design and from teleology.⁶⁸ Given the damage done to the credibility of both sides of the Protestant-Catholic divide by the exchange of so many slings and arrows (doctrinal and literal), the presence of so many theologians on our lists of famous atheists at last makes sense. 69

There are problems with this expanded definition of early modern atheism. For one, it makes it difficult to clarify when one is discussing broad atheism and when strict atheism in the modern sense. For another, we cannot in fairness say that early modern intellectuals genuinely defined "atheism" this way, because we have no period discussions of such a definition. The definition is inductive, accurately describing surviving cases of the term's use, but it is unlikely that any Renaissance figure, if asked to define "atheism," would ever have supplied such a definition.

What this definition does do, very effectively, is introduce an important new category into our analysis: doctrines that do not themselves directly attack belief in the divine, but that nonetheless had the potential to do so in the early modern period, either by weakening traditional proofs of the existence of God or by facilitating the development of new atheist arguments. These are six specific arguments made by Epicurus and Lucretius that I argue fit in this category. Some of these six might be termed "secularized natural philosophy," that is to say accounts of natural philosophy without recourse to divine design or participation. But some of the six are not related to natural philosophy alone, touching instead upon soul theory or psychology, upon metaphysics, and upon philosophical religion. It will be useful, as we examine Lucretius and readers' reactions to his work, to have a single term to use to refer to these six Epicurean ideas. While diverse, they share the characteristic of being not novel and heterodox, from the Renaissance perspective, while also having a close association with the growth of the kinds of modern scientific atheism that emerged in the seventeenth and eighteenth centuries and later. For lack of a better term, I will refer to these six ideas as "protoatheist" ideas. This shorthand will let me discuss these six while excluding other radical Epicurean doctrines that do not bear directly on atheism, for example the existence of vacuum, and also excluding Epicurean doctrines that were associated with atheism in the early modern period but not thereafter, for example the focus on earthly happiness as a moral good. The six Lucretian theses that I term "proto-atheist" enable modern scientific atheism without enforcing or even intending it, and they also enable many new nonatheist positions that became powerful in the wake of the Renaissance. To characterize them as proto-atheist is thus, admittedly, an oversimplification of their influence, but I believe it is a useful one because all six of the ideas I wish to examine under this heading connect to atheism, while only some connect to deism, to emergent-order

Christianity, or to other post-Renaissance theisms. The term "protoatheist" is also useful for clarifying the relationship between these six Lucretian ideas and current historical debates over whether or not atheism in the modern sense existed in the Renaissance. The authors of our fifteenth- and sixteenth-century lists of famous atheists certainly believed that atheism was a real and living threat, and confidently identified those whom they considered probable culprits, despite the fact that no one on their lists was actually an admitted atheist. Descending in some sense from these lists, one historiographic strain, still common today, focuses on seeking hidden atheists in the premodern world, reminding us that no one with an interest in preserving life and limb would have openly admitted to unbelief in a period when atheism was a capital crime. This leads easily to the hypothesis, employed by many historians particularly in the nineteenth century, that there were numerous closet atheists in the early modern period, the most likely suspects being the figures whom we have on record defending themselves against charges of atheism, such as Giovanni Pico della Mirandola, Pomponazzi, Montaigne, Rabelais, Hobbes, Pierre Bayle, and John Toland.⁷⁰

This approach of seeking hidden atheists was first challenged by Lucien Febvre, who argued that historians should seek atheism, not by looking for the word "atheist" in sixteenth-century documents, but by tracking the presence or absence of key concepts that enable atheism, such as denial of Providence.⁷¹ Febvre suggested, in effect, that when we moderns look back at the early modern world with the question of atheism's origins already in our minds, we are bound to see that rare beast the atheist in every dark corner; instead, Febvre argues, we should search for an intellectual habitat capable of supporting him, for only then can we safely claim that we have found him, not his shadow. Applying this technique, Febvre argued that atheism was psychologically impossible in Europe before the seventeenth century, due to the absence of certain necessary intellectual precursors.72 The timeline shared by Febvre and many who have applied his method thus usually locates the first real atheism in the seventeenth century, treating Renaissance atheism as a prehistory. Although Febvre's timeline is far from universally accepted,73 his critique created a new and fertile method for studying the development of atheism and other heterodox beliefs. Instead of examining figures accused of atheism, or seeking extremely rare overt statements by figures who claim to deny the divine,⁷⁴ Febvre's technique involves tracking the presence of ideas that enable or facilitate denial of the divine without attacking belief directly.⁷⁵

As I respond to the conversations that have evolved from Febvre's proposal, it is valuable to have the shorthand "proto-atheist" to describe the ideas, Epicurean and otherwise, that Febvre would say provided the "habitat" of the pre-modern atheist. In such discussions, the term "proto-atheist" may be useful beyond treating Lucretius, as a broader label for talking about other ideas that may facilitate atheism without attacking belief directly. Materialism, for example, is fully compatible with theism, as Epicureanism and Stoicism demonstrate, but it could be termed proto-atheist in that it is also a necessary precursor for materialist attacks on the divine, one piece of Febvre's atheist habitat. Similarly, Darwinian evolution is wholly compatible with many forms of theism, but its advent also enabled new atheist attacks on the traditional proof of God's existence from design. But for the moment, I will use proto-atheist primarily as a tag for discussing six specific Lucretian theses and readers' reactions to them.

The Six Proto-Atheist Arguments within Lucretius

The six arguments made by Lucretius that I identify as proto-atheist are closely interrelated. These are, first, creation from chaos, or emergent order, the idea that the cosmos, Earth, nature, life, and human civilization developed gradually from an unplanned and chaotic system. This is closely related to the second thesis, denial of Providence or any kind of design or purpose in nature or human life, history, or experience. The third thesis, denial of divine participation in the everyday functioning of the natural world, is closely related to the fourth, denial of miraculous intervention or any other action by the gods affecting the natural world or human experience, and to the fifth, the argument that the gods do not hear human prayer and never act upon it. The last of the six is the denial of the immortality of the soul and the rejection of any afterlife. This, combined with denial of divine action, denial of the power of prayer, and denial of Providence or any planned structure to nature or history, leads

to the impossibility of any divine law, system of rewards and punishments, transcendent Good, or other inherent moral structure in the universe apart from rational, self-interested pursuit of earthly pleasure. These six theses are sufficiently interrelated that others may subdivide them differently, identifying four, or seven, or a different number of separate arguments, but I divide this interlinked set into six because I have seen each of the six treated individually by Renaissance readers.

In examining these six arguments, our goal is not to uncover secret atheists by spotting their enthusiasm for proto-atheist ideas. Instead we aim to discover how and why orthodox theist readers chose to read, edit, publish, and even teach this text while the presence of these arguments led many of them to consider Lucretius an atheist (in the amorphously broad Renaissance sense) and to consider the poem dangerous to orthodoxy, to society, and to the reader's immortal soul. The shorthand "proto-atheist" makes it easier to discuss cases when a particular individual, circle, or region demonstrates more or less interest in or receptivity or hostility toward these six Lucretian theses, or when a particular critic targets or does not target the proto-atheist passages within the text.

The term "proto-atheism" is not unproblematic. It can be misread in a teleological way, as implying a forward-looking narrative of the "triumph" of atheism. It can also be misread as implying that Lucretius and Epicurus themselves supported atheism, or that anyone who embraces any proto-atheist thesis is an atheist or an ally of atheism. None of these implications is intended. Lucretius was a theist, and the six Lucretian ideas that I term proto-atheist are, in fact, commonly found in various theisms, not only Epicurus's inert atomic gods, but the deist noninterventionist Great Architect, contemporary arguments for the compatibility of emergent-order creation with Intelligent Design, and many other variants. The term "proto-atheist" may also seem presentist in its focus on the modern descendants of older ideas, but, like the term "Proto-Indo-European," it allows us to identify and discuss a body of diverse and difficult-to-access subjects connected primarily by our knowledge of what they will produce. It is in no sense inevitable that any protoatheist idea will generate atheism immediately, or ever. After all, the proto-atheist arguments in Epicureanism existed for nearly two millennia before the "swerve" toward modernity and mechanical science.⁷⁶ More narrowly, in the period from 1417 to 1600, the six proto-atheist Lucretian theses circulated widely and were widely discussed as potential dangers to theism, yet the surge of materialistic atheism that it was feared they might generate did not follow, at least not for many more decades. As we examine this period of diffusion, the term "proto-atheist" allows us to discuss those six elements of Epicureanism that are connected to the history of atheism, and to easily contrast their circulation with the circulation of other central tenets of Epicurean thought, such as its rejection of emotional love, or its praise of the passive life.

Not only censors and officers of the Inquisition, but all the early modern readers who approached the *De rerum natura* were well prepared to recognize how these particular theses undermined many traditional arguments for the existence of God, from Aristotle, Aquinas, and others, and such critics often categorized these ideas as "impious," "atheist," or "unchristian." Renaissance readers were taught to consider such ideas dangerous, as Poliziano did when he compared Lucretius's madness (furor) and Epicurus's "errors" to a physical disease, which he praised Ficino for curing with his Christian-Platonic refutations defending the immortality of the soul and the reality of Providence.⁷⁷ In one of the most radical moments in More's *Utopia*, the laws laid down by the founding king Utopus permit all religions equally, and allow anyone who wishes to try to win others over to his or her own faith, with one exception:

He made a solemn and severe law against such as should so far degenerate from the dignity of human nature, as to think that our souls died with our bodies, or that the world was governed by chance, without a wise overruling Providence: for they all formerly believed that there was a state of rewards and punishments to the good and bad after this life; and they now look on those that think otherwise as scarce fit to be counted men, since they degrade so noble a being as the soul, and reckon it no better than a beast's: thus they are far from looking on such men as fit for human society, or to be citizens of a well-ordered commonwealth . . . for there is no doubt to be made, that a man who is afraid of nothing but the law, and apprehends nothing after death, will not scruple to break through all the laws of his country, either by fraud or force, when by this means he may satisfy his appetites.⁷⁸

Anyone who has read Lucretius immediately recognizes Epicurus among More's targets.

In the early modern world, the term "Epicureanism" was frequently used in the same loose ways in which heretic-hunters employed the terms "atheism," "deism," "Lutheranism," and so on. Erasmus, for example, was called both an atheist and an Epicurean by his learned enemies,79 and in the siege of Bourges in 1562 the Huguenots insulted their Catholic attackers by calling them "epicoriens," a term the chronicler Pierre Belon says they learned from their Protestant ministers. 80 Le Reveille-Matin des Francois, a masterwork of Protestant propaganda depicting the Catholic siege of La Rochelle, describes two brothers of the king arriving outside the city with a great train of their favorites, including Catholic lords, courtesans, atheists, Epicureans, blasphemers, and sodomites, all of which the chronicler seems to see as natural associates.⁸¹ Nicholas Davidson has cited the sixteenth-century case of a group of friars in Verona accused of wanting to live "as sons of iniquity . . . as Epicureans and Lutherans."82 No one would suggest that the term "Lutheran," even if often misused, did not refer to something real and specific in the period, if only to communicate a generic sense of "other" when used by those who self-identified as enemies of the Lutheran movement. 83 We find this loose usage in the post-Reformation period too, when Epicureanism also comes to be applied, along with atheism, to early deists.84

Though such labels as "atheist," "Epicurean," and "Lutheran" continue to be loosely applied as terms of abuse well into the Enlightenment, a new phase of greater differentiation among specific terms has been linked to the Reformation. When the fundamentals of Christianity were in doubt, doctrines like transubstantiation, denial of prayer, denial of the afterlife, or denial of the magical power of relics were suddenly critically different because they were associated with particular groups. Protestant sects especially needed a vocabulary with which to articulate the differences between their objections to Catholicism and those of other rival splinter sects. Increased sixteenth-century attention to doctrinal specifics is demonstrated by a pamphlet, published in Ingolstadt in 1582

by Albert Hunger, that sets out to demonstrate similarities between Lutheranism and Epicureanism, a charge refuted by another pamphlet printed in the same city the following year. 85 Following Lactantius, Hunger sees the salient characteristic of Epicureanism as its tendency to pander to the weaknesses of the masses by offering a religion that will allow them to continue in their present sins. For Hunger, the Epicurean doctrine of pleasure as the highest good is equivalent to Luther's doctrine of salvation through faith alone without good works, because both allow the sinner to continue without reforming his earthly habits. Epicurean denial of the afterlife is, Hunger says, easily turned into Lutheran sola fide, which he reads as a low-effort salvation without requiring good behavior; thus, both systems free gluttons and cowards from fear of punishment after death. The characteristics Hunger is criticizing here are not specific doctrines but the consequences of those doctrines, particularly Epicurean eudaimonism and freedom from fear, which for Hunger translates to moral license. Hunger is thus using "Epicureanism" neither as a generic term of abuse nor in its strict denotation, but as a label for any religion that tells its subscribers that they need not worry about the posthumous consequences of their actions.

Epicurean denial of the afterlife had been one of its most infamous doctrines from Cicero through to Dante. The immortality of the soul was particularly a critical issue in the fifteenth and early sixteenth centuries. In fact, the Fifth Lateran Council of 1513 took care to finally make it official and mandatory that all Christians believe in the immortality of the soul, an act necessitated by concerns that the soul's immortality was being freshly thrown into doubt. The Epicurean hedonist thesis that pleasure is the highest good also contributed greatly to the association of Epicureanism with atheism, because the association of sinful living with atheism was widespread. Dozens of court cases survive from the fifteenth and sixteenth centuries in which accusations of atheism or Epicureanism are justified exclusively on the grounds of behaviors, such as homosexuality, bestiality, drunkenness, or common brawling, with no reference whatsoever to doctrine.86 François Berriot and Alan Charles Kors have discussed the case of a Venetian "denier of god" who was accused of atheism, blasphemy, and sacrilege not because of any beliefs, admitted or imputed, but because he did not attend church and was said

to live only for pleasure, a lifestyle his accusers considered proof of atheism. ⁸⁷ In other contexts we find atheism used in accusations against suicides, against opponents of belief in witchcraft, and against gluttons and other immoral persons. The assumption is that an atheist, who feels neither love of God nor fear of Hell, would have no reason to refrain from sin, and thus that a life of consistent sin is evidence of atheism. One treatise on atheism published in the mid-seventeenth century by David Derodon divides atheists into three types: the ignorant, the debauched, and, the rarest kind, those who practice a refined denial of God disguised as philosophy, the only kind a modern would recognize as "real" atheism. ⁸⁸ Indeed, so fierce was the association of atheism with immorality that in the seventeenth century Pierre Bayle was himself accused of atheism because he claimed that there was such a thing as a moral atheist, naming, among other examples, Spinoza, Epicurus, and Lucretius.

Why is it atheism for Bayle to say that an atheist can be moral? For largely the same reason that Machiavelli was labeled an arch-atheist for teaching that the wisest course for a monarch or republic is not always the moral one: it denies the principle that Christianity is necessary for a good state. A Christian monarch will rule well, the argument tells us, and a Christian citizen will obey well, following divine law and conscience as well as earthly law. Christian theologians and statesmen frequently repeated the claim that without religion's absolute rewards and punishments the world would degenerate into a chaos of self-interested violence—rather like that depicted by Hobbes.89 As More's Utopus judged, he who denies the afterlife cannot be a citizen. This argument was hot well into the eighteenth century, when figures like Paine and Franklin debated whether, despite America's commitment to religious freedom, public schools should teach some sort of religion in order to ensure that young citizens would fear God and thus obey the law. When Voltaire devoted almost the entire entry on atheism in his Dictionnaire Philosophique Portative to the question of whether atheists could form a society—even Voltaire admits to fearing what a prince who did not fear God might do, but points out that, throughout history, religious fanaticism has been guilty of far more violence than atheism.

By the fifteenth century, the entrenched assumption that only Christians could be citizens was one of the traditional proofs of the truth of

Christianity: if Christianity were false, civilization would collapse, therefore Christianity must be true and everyone must be Christian in order for civilization to continue. Our court cases where defendants are accused of atheism for behavioral reasons apply this conviction in the reverse: any person behaving in a manifestly sinful way must not believe in God or an afterlife. Bayle's case for a moral atheist, then, undermined God's necessity, which his contemporaries thought would lead to atheism.

One Epicurean antidote to fear of the gods is the argument that the gods do not perceive, participate in, or care about the everyday world in which people live their lives. It is to this end that Epicureanism attacks divine participation in the daily functioning of the cosmos, undermining God's necessity. Lucretius describes atomistic theories about lightning, magnets, tides, and phases of the moon in order to demonstrate that it is not necessary to believe that irascible gods are out there governing them. At the same time, Epicurus expects moral behavior from his followers, and sets out moral guidelines for them. 90 Epicureanism insists, not only that moral behavior is possible for those who deny the afterlife, but that fear of the gods and of the afterlife causes many wicked acts, from cowardice to human sacrifice (a sentiment echoed by Voltaire). Through Lucretius, then, the argument for a good atheist circulated in early modern Europe more than two hundred years before Bayle voiced it. Given Bayle's hot reception, we may well expect a hostile audience for Lucretius, though Lucretius's opponents do not typically name the argument for a moral atheist among their objections to the De rerum natura.

Denial of Providence was a far more central problem. Returning to our later treatises on atheism, sixteenth-century classifier Laurent Pollot divided atheists into three categories: the ignorant; those who will themselves to deny divinity through fear of punishment; and an independent category of doubters of Providence. I Marsilio Ficino lists Epicurus among those who "judge ill of religion out of impiety," and divides this group into three categories: those who, like Diagoras, deny that God exists; those who, like Protagoras, wonder whether there is a God or not; and those who, like Democritus and Epicurus, deny God's Providence. The proof of God's existence from design, repeated all the way from Plato, rests upon the assumption that there is no possible explanation for the origin and order of the world except that a Creator stands behind it.

Similarly, the teleological proof depends on the assumption that God is the only possible explanation of where the universe is going. Without Providence one lost both, so it was an easy step from denial of Providence to denial of God, but it was not at all easy to deny Providence in the first place.

Traditionally, denial of Providence stems from theodicy, debates over the problem of evil. In his treatise of 1707, Jean La Placette wrote that arguments regarding the incompatibility between the existence of God and the reality of evil would "give proselytes to atheism and to the philosophy of Epicurus,"93 which he further defines as denial of Providence. But even if the evils apparent in the world might make an individual doubt that there was an omnipotent, omnibenevolent power governing all things, it was still very hard to surrender belief in Providence, because all of Europe's models of physics, cosmology, medicine, and history were based on it. Indeed, in 1641 a French scholar, D'Abillon, offered a set of proofs of God's existence of which the eighth was that conscience and morals derive from God, and the ninth that certainty in all sciences rested on the existence of God.94 Just as it was assumed that an atheist could have no morals, for sixteenth- or seventeenth-century persons to deny God and Providence, they had to throw away practically all established science. When asked why animals are born with the tools they need to survive, or how it is that nations came into existence, they had to answer, "I don't know." No surprise, then, that Ficino and others would take special care to defend Providence when faced with Lucretius, who describes how men made nations without divine influence, and who provides the now-familiar argument that only those species suited to their environments survived to the present. Even though individual proto-atheist theses, such as denial of the afterlife, of Providence, or of divine action, existed in other forms, or could even be invented afresh by individual unbelievers, in the Renaissance only Lucretius supplied a systematic cosmological model with which such an unbeliever could explain how nature might function without God.

Lucretius and Skepticism

"Might" is the operative word in Epicurean natural philosophy. Epicureans do not claim to offer facts about the details of nature; they merely

propose theories about how they might work. In this sense, Epicureanism is a skeptical system as well as a dogmatic one. In his histories of skepticism Richard Popkin has rightly focused on the importance of the Renaissance recovery of Sextus Empiricus, who influenced, among others, Savonarola and the elder and younger Picos. 95 Epictetus and Cicero have also been examined as major sources of classical skepticism. 96 Now Lucretius must be added to the list as another vein of transmission, and one that carried a distinct form of skeptical argumentation not highlighted by any other surviving ancient skeptic.

Classical skepticism, like Epicureanism and Stoicism, was eudaimonist and aimed at tranquility—in this case the tranquility achieved when the adherent accepts that neither the senses nor human reason can achieve any reliable certainty. It had two main branches. Academic skepticism was founded on the belief that nothing could be known with certainty. In contrast, Pyrrhonian skepticism argues that nothing can be known with certainty, not even that nothing can be known with certainty, and therefore that the skeptic must suspend judgment on all questions at all times. Thus, while no skeptic could declare something to be proved true, an academic skeptic could declare something to be proved false, while a true Pyrrhonian could come to no judgment about the truth or falseness of anything. Academic skepticism also admitted different degrees of probability. The academic skeptic could therefore base decisions on probable propositions, relying more on those that are most probable, while remaining constantly prepared for the possibility that any proposition might be proved false.

In both cases the skeptic's goal was happiness, and the ease of mind that came with resignation to ignorance. After accepting the impossibility of certain knowledge, the philosophical skeptic will no longer be plagued by the restless hunger to understand, and the skeptic will never experience the emotional pain that results when something one believes is proved false. To cite a modern example, Mike Brown, infamous as one of the leaders of the push to strip Pluto of its status as a planet, has received a torrent of hate mail from people hurt and angry at the upheaval of the solar system they studied in childhood. ⁹⁷ The skeptic would argue that there was no practical benefit to teaching elementary-school children about a distant and imperceptible stellar body, and that this unnecessary "knowledge" only led to distress when it was proved false.

The distress in this specific case was actually caused by people erroneously viewing scientific theories as proven truth. The scientific method is itself a descendant of academic skepticism, and all its theories, from the categorization of planets to the Big Bang, remain theories, which the true scientist is prepared to abandon and replace at any time as new discoveries require. This demands the exercise of provisional belief, the mental ability to act on an unproven principle as if it were true while simultaneously knowing it may be false. The user must be willing to base serious decisions on a theory while remaining intellectually prepared for that theory to be disproved at any time and replaced by a better one, or, temporarily, by none at all. Such an unstable system makes an uncomfortable foundation for decision making, especially in contrast with the stability of the dogmatic systems that dominated in the premodern world.

Epicureanism is in some senses a dogmatic system, teaching that Epicurus's core principles about atoms, void, the primacy of pleasure, and the road to happiness are true. Yet it is also, in two essential ways, skeptical. The first skeptical element is its atomist epistemology. According to Epicureanism, all our knowledge of the world derives from the senses, but not from direct perception. Atoms are too small to be perceived, so no human sense ever actually perceives the true structure of any substance. What we perceive instead are sensations generated by our sense organs, which are radically different from the atomic realities. The sensation of honey's sweetness, for example, is due to the smooth surfaces of its constituent atoms, but sweetness does not communicate smoothness to our minds.98 The perception gives us no real understanding of the material itself. Lucretius argues at length that atoms have no color, but that what we perceive as color is merely an effect of the mind's interpretation of the atomic shells received by the eye. 99 Color is a function of sight, and sight is caused by touch, by atomic shells touching sensory organs, so color is generated by shape alone. 100 Similarly, atoms, Lucretius argues, have no temperature, moisture, or smell. These too are effects that come from the sense organs themselves, and, ultimately, from touch.¹⁰¹ In such a system, sense perceptions are not based on any reality, and, in fact, the true reality of matter is permanently beyond the capacity of humans to perceive directly. Yet Epicurus insists that our sensory knowledge of material nature is our only source of information. His materialism does not permit immaterial sources, such as Platonic Forms. And because Epicurean Nature is chaotic and ever-changing, it also has no room for eternal material sources of truth, such as Aristotle's categories. Aristotle agrees with Epicurus that humans cannot perceive the unformed material substructure of the perceived natural world, but Aristotle permits certain knowledge of forms and categories; the Epicurean human has no such access to Truth. Thus Epicurean epistemology is, like Aristotle's, empirical, but we may term it "weak empiricism" or "limited empiricism." The weakness of the sense organs permanently separates humans from real knowledge of nature. And because the mind too is a passive sense organ, thought is as flawed and removed from atomic reality as sight or hearing. This makes Reason and deductive logic unreliable as well, a doubt surpassing even Descartes's, who challenges the senses but never the reliability of thought itself, and approaching Pierre Bayle's simultaneous attacks on logic and evidence, which in Bayle's case serve not atheism, but fideism. This Epicurean weak empiricism appears nowhere else in ancient philosophy, but it is central to our modern understanding of the vast distance that separates our senses from the microscopic world, and from such invisible phenomena as radio waves.

The other skeptical element of Epicureanism is its antidogmatic campaign against superstition. Many Epicurean eudaimonist goals are negative, aiming to erase belief in the afterlife, wrathful gods, and religio. In addressing physical questions such as why days and nights vary in length, Lucretius's goal is not to expand knowledge, or to give humans power over Nature, but simply to demonstrate that day and night can be explained without Nix, Aurora, and Helios. 102 Lucretius supplies multiple, contradictory atomistic explanations for how planetary motions might affect the lengths of day and night, making no claim about which, if any, is true. By presenting the divine explanation as one among several coequal alternatives, Lucretius makes no version seem more convincing than any other, freeing the reader from belief, in good skeptical form. An Epicurean has no need to determine which explanation is true. In fact, because weak empiricism denies the possibility of direct knowledge of the operations underlying the perceived world, it is likely impossible to determine which is true.

Atoms cannot be perceived, and therefore physical theories can never be proved—only accepted as substitutes for truth so long as no counterevidence undermines them. If counterevidence does undermine one, a substitute can easily be developed. This, like the modern scientific method, is provisional belief.

Cicero, who summarizes the contradictory positions of Epicureans, Skeptics, and other schools in his philosophical writings, likewise aims to erode belief by presenting many equal alternatives. Yet the skeptical form preserved by Lucretius is unique. First, by using skepticism to advance Epicureanism's central dogmas about atomism, Lucretius demonstrates how this skeptical technique can serve dogmatic systems, such as, later, Christianity. Second, by concentrating on the technical details of natural philosophy, Lucretius connects provisional belief with the study of natural phenomena, a direct avenue to its entry into the realm of natural science. Lucretius's goal is the annihilation of superstition, but he also establishes the value of skepticism in evaluating mechanical models of nature. Thus, the return of Epicurean mechanical models of nature made a vital contribution to the development of modern mechanical science, and at the same time the return of Epicurean skeptical arguments facilitated the development of modern skepticism, which, through the capacity for provisional belief, in turn enabled science to assume the central role it plays in modern thought and society. Provisional belief and weak empiricism, both indispensable to modern thought, survived from the ancient world only in Epicureanism, and their revival in the sixteenth century can be directly connected with the presence of Lucretius. 103

Lucretius in the Renaissance

Poggio recovered the *De rerum natura* in 1417.¹⁰⁴ After nearly two decades in which few apart from Niccolò Niccolì had access, it seems to have entered broader manuscript circulation in the 1440s and was printed in 1473.¹⁰⁵ In 1513, Lateran V made belief in the afterlife mandatory for all Christians. Italy's last Renaissance print edition of Lucretius was produced in 1515, and in 1517,¹⁰⁶ precisely one hundred years after Poggio sent Lucretius to Niccolò in Florence, the *Concilium Florentinum*, the Church council governing Florence and its territories, banned

the teaching of Lucretius in schools in an edict that targeted "lascivious and impious works" in general, but specifically the De rerum natura. 107 The famous sex scene in Book IV may be part of the reason for concern about its classroom application, but although the edict targets lascivious and impious poetry in general, Lucretius is the only author named, and the edict specifically mentions his insistence on the mortality of the soul. The association of lascivious poetry with denial of the afterlife clearly reflects the larger association of atheism with sinful living. The penalty for violating the edict-eternal damnation and a fine of ten ducatsseems to be particularly targeted at atheists, who may not fear eternal damnation but would feel the sting of a hefty fee. Coming as it did in the very year the Reformation would launch, this Florentine ban is clearly not part of any post-Reformation concern over the multiplication of heresies. Indeed, as the Reformation progressed, the Church seems, if anything, to have grown less concerned about Lucretius. During the revisions made in preparing for the 1557 edition of the Index, Commissioner General of the Inquisition Michele Ghislieri wrote to the Inquisitor General of his concern that, in aiming to stifle truly dangerous works, they might draft language that would also target such authors as Lucian and Lucretius, whose works, like Orlando Furioso and the Decameron, were not dangerous because everyone knew to read them as fables, not seriously.108 The 1517 ban must therefore reflect earlier fear, related to the impetus behind Lateran V, though specifically Florentine and concerned about the possibility of a Lucretian movement already present in 1517 spreading licentiousness, atheism, and denial of the afterlife.

Florence, the first recipient of Poggio's transcribed text, the home of ten of the surviving manuscripts, and the point of origin for several more, is the logical place to look for early Lucretian influence. The dedication of two major Lucretius publications, in 1504 and 1512, to Tommaso Soderini, nephew of the Gonfaloniere, also indicates Florentine interest in Lucretius at the highest levels. The question invited by the 1517 ban is whether the pernicious *Lucreziani* feared by the Florentine synod reflected the presence of a real community of Epicurean radicals, or whether it was paranoia, of which we know Florence in general and Ficino in particular were very capable. The well-known anecdote that the young Ficino wrote and later burned some writings on Lucretius as

part of a youthful religious crisis demonstrates a powerful antipathy toward Lucretius on the part of one of the intellectual leaders of Florence. Ficino, whose Christian Platonism would itself be labeled as atheism in the seventeenth century, spends much of his own *Platonic Theology* systematically refuting Lucretius's arguments against the immortality of the soul. Given Ficino's enormous influence, his personal fear of Lucretius might have fueled more general paranoia.

Alison Brown has argued for the real presence of Lucretianism in Florence from the 1440s on. 112 She has identified Lucretian traces in the works of major Florentine figures, lay and clerical, uncovering references to and uses of Lucretius in the works of many major figures, from Leon Battista Alberti to Machiavelli. 113 A conjunction of letters by Ficino and Bartolomeo Scala in 1457-1458 that treat philosophical sects, including Lucretius and Epicureanism, has led Brown to suggest that Lucretius and Epicureanism may have been treated in a course on Cicero's Tusculan Disputations given by Cristoforo Landino that same year. She finds three dominant Lucretian themes in Scala's later works: Fortune and chance at work in the world, the debate over the afterlife, and above all primitivism, based on the Lucretian account of the gradual development of humans from beast to civilized. The last topic was of particular interest in a period when Florence experienced a constant influx of explorers' and merchants' stories of exotic realms.¹¹⁴ Brown also focuses on Marcello Adriani, who succeeded Poliziano in 1494 as professor of poetry and oratory in Florence, and referenced Lucretius in his lectures and works, particularly those written in debate with Savonarola. 115 Brown finds primitivism a major theme in Adriani as well, along with attacks on superstitious religion and religious fear (often wielded against Savonarola). Adriani also uses the atomism itself, particularly in his Commentary on Dioscorides's De materia medica. 116 As I will demonstrate, Adriani's confirmed interest in atomism is a particularly critical discovery. These cases of clear Lucretian influence, along with a treatment of Lucretianism in the works of Adriani's colleague and possible student Niccolò Machiavelli,117 led Brown to argue that Lucretius was a significant intellectual presence in both lay and clerical circles in Florence in the years leading to the ban.

Because Brown's analysis rests on the presence of Lucretian content in the works of a small circle of Florentine humanist figures, most of whom were in direct contact with one another, it is able to establish the importance of Lucretius only within a narrow sliver of the scholarly populace of one (albeit extremely important) city. This makes it hard to determine whether we are seeing evidence of a Lucretian pocket or a more general reception. Charlotte Goddard's study focuses on Naples and has powerful evidence that the circle of Lucretius studies in Naples maintained an orthodox and Christianizing approach, a valuable contrast when paired with Brown's study. My own work moves outward from these two vital centers, Florence and Naples, and the third center around Pomponio Leto's circle in Rome, to follow the broader circulation of manuscripts and printed texts in Italy and across Europe.

The question of diffusion is central. Valentina Prosperi's study of Lucretius has focused on his place in the Renaissance debate over whether poetry is a useful medium for teaching good, or, conversely, bad, philosophy.119 The debate derives largely from Lucretius's claim in Book I that he chose to couch difficult Epicurean philosophy in poetry to make it more palatable, as a doctor smears honey around the rim of a cup of bitter wormwood to trick a child into drinking it.¹²⁰ The question in the Renaissance was whether Lucretius indeed posed a danger of spreading unorthodoxy with his honeyed words, as he did for the young Ficino. This fed a broader concern about whether readers must beware all ancients, who might have similar seeds of atheism hidden behind their charms. After establishing a long tradition of association between Lucretius and the idea of poetry as a didactic tool, Prosperi argues that Counter-Reformation concerns that poetry could honey-coat heretical ideas derived largely from a long association between didactic poetry and Lucretius's infamous Epicureanism. Close to half of her study is spent on Tasso's use of Lucretius in his attempt to defend the poetic genre against Counter-Reformation criticism. Prosperi's review of many poets and literary figures who used Lucretius, as well as his many close calls with the *Index*, establishes Lucretius's place at the center of debates over whether or not poetry, and the classics in general, were dangerous. Prosperi's study remains focused on Italy, but, as my review of print

edition paratexts will show, the question of honeyed words remained a hot one as Lucretian activity spread north.

In France, publishers hoping to sell classroom editions struggled with Lucretius's position on the margins of acceptability. This problem was often addressed overtly by Renaissance editors in the introductions and biographies they included in print traditions, which strongly colored new readers' first taste of this recovered classic. Editors' paratexts demonstrate the techniques humanists used to defend the reading of unorthodox authors. Changes in the justifications given by editors over the course of the sixteenth century reflect changes in attitudes toward humanism, and toward the relationship between moral education and scientific education. The thirty pre-1600 print editions of Lucretius are a testimony, not just to the poem's enduring appeal, but also to the continuous efforts of editors to repair, explain, and legitimize this controversial work. The threat of accusations of atheism that loomed over Lucretius's publishers might lead a modern historian to look for insincerities in their words and unorthodox motives hidden beneath their claims of piety. We can test this assumption by examining readers' manuscript annotations and comparing what they actually marked to what the editors in their apologetic introductions said they should be reading for.

As Prosperi's treatment of the diffusion of Lucretian poetic imagery highlights, Lucretius's more radical elements are few among a vast range of themes treated by the epic poem. Gerard Passannante, in his exploration of the diffusion of Lucretian influence through philological, literary, and scientific circles after its Renaissance return, very fruitfully compared the many subcomponents of the *De rerum natura* to the diverse atoms that make up an Epicurean object.¹²¹ When the atoms within a material object are broken up at its destruction, they diffuse independently and may find their way into many other objects. Just so, the numerous elements of the poem often diffused separately, Lucretian descriptions of disease traveling independently from his attacks on superstition, his pastoral similes, his archaic vocabulary, and his atomism. While Lucretius's reputation for heresy dominated Renaissance debates over whether he was or was not an appropriate addition to a library or classroom, his influence diffused through numerous avenues far from questions of heresy or atheism. These disparate elements translate to different motives that

might bring a Renaissance reader to the text, and very different effects the reading process might have on those who undertook it. In mapping Lucretian traces, we must remain attentive to the fact that different elements diffuse separately. The presence of a Lucretian poetic image or moral principle in one corner of Renaissance discourse does not necessarily imply the presence of radical materialism. Like the chaotic swerve that prevents Epicurean atoms from having mechanistic predictability, the complex process of reading permits no straight path from an idea on the page to the mind of the reader to the broader currents of the intellectual world.

Conclusion: Reading Lucretius in the Renaissance

Reading is never a simple process, as the motives of readers, editors, publishers, and authors clash with one another, and with social expectations, stigma, and, often, law. This is especially true of Lucretius, whose book was approached by a huge range of readers, from medical doctors researching the history of plague, to Latin students practicing their scansion, to inquisitors seeking to know the enemy. Happily, the Renaissance habit of annotating texts makes it possible to reconstruct the reading process and, often, to identify individual readers' interests.

The relative frequency of different types of notes sketches out a characteristic reading agenda shared by humanist readers—certain topics and elements that drew their attention most often. This agenda strongly affected their receptivity to the poem's content. As publishing spread in the sixteenth century, classical texts like Lucretius were increasingly embellished by introductions, commentaries, and supplements that further filtered the experience of reading. Apologetic printed paratexts reflected and exploited the same agenda that guided readers, as editors attempted to defuse Lucretius's unorthodoxy and thus win entry into schools, libraries, and circles that would not otherwise have admitted a text with proto-atheist ideas contained within. This humanist reading agenda affected the reception and distribution of all classics, but in Lucretius's specific case we see its impact on the commingling histories of science and religious heterodoxy.

Reading is the focus and limit of this book—the actual process of reading Lucretius in the Renaissance and how that process affected the diffusion of the text and, separately, of its intellectual contents. I do not seek to examine what scholars did with Lucretius in their own work. Other historians have admirably traced the diffusion and influence of Lucretianism, Epicureanism, and atomism after 1417, and identified dozens of scholars and artists who were powerfully influenced by the *De rerum natura*. Yet these dozens of identified figures are a tiny fraction of the more than 30,000 individuals who bought the book in the Renaissance, making thirty print editions profitable. The poem had a huge audience, and the majority of its readers never wrote anything about Lucretius beyond what they left in the margins of the book itself. In what follows I will tap, for the first time, the anonymous reading audience of the Renaissance, unmasking the unique reading practices that allowed such an infamous text to circulate so broadly.

The *De rerum natura* had enormous radical potential in the Renaissance, and contemporaries knew it did. Yet the Florentine ban is the exception. Lucretius circulated, not as an underground text, but with the support of patrons and popes, and later France's elaborate system of royal and Church censorship. Lucretius was an infamous atheist, and Europe had powerful networks, intellectual and institutional, set up to combat and restrict such authors. Something made the text seem safe, and in some sense the text was safe for the majority who read it, because the Lucretian traces unearthed by other historians are indeed traces, veiled and piecemeal and, often, localized. As physical copies of the book themselves reveal, the buffer, which both enabled Lucretius's free circulation and slowed the radical aspects of his influence enough to make him safe, was the reading process itself. Later copies show how the reading process changed, and how a rediscovered classic was rediscovered again by a new kind of reader as the seventeenth century approached.

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Unchristian Opinion

"OPINIO NON CHRISTIANA"

Lucretius's First Renaissance Readers

PINIO NON CHRISTIANA." This warning appears in red in the margin beside Book III. line 417, of a manuscript of Lyopetius? Description gin beside Book III, line 417, of a manuscript of Lucretius's De rerum natura preserved in Oxford's Bodleian Library. The section in question, known in the Renaissance by the subheading "That the soul is born with the body and is mortal" (Animam nativam & mortalem esse), lays out classical Epicurean arguments against the immortality of the soul and the existence of the afterlife. In this particular copy, the rubricator individually marked three main arguments: first, that the mind ages with the body; second, that the mind is affected by diseases and pain; and third, that any eternal thing must by nature be impenetrable and unfeeling, like atoms, not like the changing and sensitive soul.² This Bodleian manuscript, which philological comparison lets us date to sometime after 1458,3 contains very few notes, only twenty in the entire volume, fully a quarter of them devoted to this issue of the immortality of the soul. Our annotator copied both these notes, and the text of the poem itself, from a much-prized manuscript made in Rome, now preserved at Naples, which had been annotated by the distinguished philologist (and student and successor of Lorenzo Valla) Pomponio Leto (Figure 17).4 Leto's Neapolitan copy is packed with notes, and in it Leto individually counts seven, not three, Lucretian arguments against the immortality of the soul. The fact that the copyist of the Bodleianus duplicated these few notes out of the many hundreds in Leto's original indicates that, even more than Leto, he wanted to highlight these specific points. The copyist also duplicated Leto's notes on Lucretius's argument that we should not worry about what happens to our corpses after death,⁵ his notes on Lucretius's derisive parody of mourning,⁶ his note disagreeing with the argument that the gods do not govern the world, and his note marking a passage where Epicurus disagrees with Pythagoras about reincarnation.⁷

Clearly, Lucretius's arguments against the immortality of the soul stood out for the reader of the Bodleian copy. What is unexpected, from the modern perspective, is that, in the fifty-two manuscripts whose annotations I have examined, the only four that mark out these passages about the mortality of the soul are Leto's Neapolitanus and three copied from it, of which this Bodleianus is one. Our task is to set aside our modern expectations of what elements of the poem should be most striking, and to look to the marginalia to expose what actually caught the eyes of the first scholars to examine the book in six hundred years.

My technique for analyzing the marginalia is largely quantitative. In a long text like the *De rerum natura*, notes are typically sparse in some sections and frequent in others, indicating areas of varying reader interest. An annotator may mark a line because it strikes him, because he wants to be able to find it easily, as an aid to memory, to help other later users of the manuscript, or to correct a textual error. All but the last indicate an interest in the subject matter of the line in question, and even corrections are often more frequent in one section of a manuscript, indicating more careful reading. When notes cluster around the same lines in multiple independent copies, it is possible to map the interests of a typical Renaissance reader, and to identify individuals, anonymous and known, whose interests are unusual.

Key here is the fact that the *De rerum natura* covers a huge range of topics, from the rituals of the cult of Cybele, to the functioning of magnets, to the symptoms of the plague—always of interest to Renaissance figures, for whom plague was an ever-present neighbor. Thus, a great range of interests might bring readers to the text. It is often easy to determine which topics interested a particular reader, because the sections of

the text focused on by an historian are different from those focused on by a medical doctor, an astronomer, a biologist, and so on. For example, one manuscript preserved at the Laurenziana contains only two notes, one on a line with unusual meter and another marking a parallel to Virgil, clearly left by a reader interested in poetry above all else.¹⁰ In contrast, one Vaticanus contains only six notes, of which two mark points where Lucretius mentions natural perfumes with strange effects, the flowers of a poison tree on Mount Helicon, and somniferous castor oil.11 This annotator was clearly interested in the medical effects of natural extracts, in the same way the annotator of our Bodleian manuscript was especially concerned with the immortality of the soul. Patterns in the notes make it possible to tell which interests were common and which rare. Atomism crops up throughout the poem, but the technical details of first principles, creation, and the nature of matter are concentrated in Book II and the early portions of Book III. We can therefore determine the portion of annotators interested specifically in atomism by identifying the proportion of manuscripts that contain extensive annotation in these areas.

This quantitative technique has limitations. One is the small sample size; with only fifty-two samples, a single manuscript alters the statistics by 2 percent. To minimize the chances of unusual copies distorting the numbers, I concentrate on patterns present in at least one-quarter of manuscripts; anything less common will be treated on a manuscript-by-manuscript basis, not statistically. Annotation in printed editions supplies a larger sample for later periods.

Another limitation is the question of whether, and to what degree, annotation is a true indicator of reader interest. As Michael Screech observed in his analysis of Montaigne's annotated copy, while the presence of notes in one particular area does prove interest, at least at the time of reading, the absence of notes does not prove a lack of interest. Readers were acutely aware that others would use manuscripts after them, and that notes suggestive of unorthodoxy could be used against them. Nonetheless, I do not believe this fear would have kept interested readers from neutrally marking unorthodox lines with a dot or bracket, as they often marked other passages. In such a long text, even a snooping inquisitor would hardly have had the patience or expertise to realize that one

bracket out of a hundred marked unchristian material. The *opinio non christiana* note in the Bodleian manuscript and its siblings proves that a few readers were willing to mark dangerous passages. If few did, few desired to, and when such patterns repeat in many volumes, we can conclude that the patterns prove a common focus.

Even when critical passages are not clearly marked, we can learn about the degree of interest in a section of the poem by noting the frequency of other types of notes, such as philological corrections. Many readers corrected some sections of the text intensively and others scarcely, if at all. When these patterns of interest repeat, we may conclude that many scholars were more interested in one part of a text than in another. Fear cannot be a factor in this data, because an inquisitor would certainly find nothing more damning in the fact that a scholar corrected the grammar of an argument against the immortality of the soul than in the fact that the scholar read the book in the first place.

Dating is the final challenge. The date of a manuscript's creation provides the earliest possible date of its annotation, but manuscripts might be used and annotated over many decades. In a few cases notes contain datable references; for example, the Lucretius fragment in Milan whose annotator mentions Lambin cannot have been annotated before 1563. Usually, however, the date of the creation of a book and the style of the handwriting are our only clues, making it functionally impossible to contrast patterns in mid- or late-fifteenth-century manuscripts with those produced in the early sixteenth century.

Printed copies, particularly incunables, demonstrate the same patterns of annotation as the manuscripts they sought to imitate. ¹⁴ Current scholarship on Renaissance marginalia is divided between those who argue that the strong medieval tradition of marginal annotation was effectively destroyed when the print revolution replaced malleable manuscripts with definitive texts, and those struck by the scholarly energy that continued to leave hand annotations in more than half of printed books through the end of the sixteenth century. ¹⁵ Hand annotations must be differentiated from printed marginalia added by editors, which were common from the earliest stages of Western printing and appear in Lucretius as early as the second edition of 1486. Printed marginalia are often used to argue for a decline in readers' desire to annotate by hand;

however, surviving examples of the six Lucretius editions printed up to 1512 are almost all hand-annotated, and it is not until the 1550s that the frequency of hand marginalia drops to half or below. This supports William Sherman's findings that 60 to 70 percent of incunables contain hand annotation, a ratio that drops to 50 percent at the end of the sixteenth century. Thus, it is appropriate to examine annotations in manuscripts, incunables, and early sixteenth-century editions together, because all represent the experience of reading Lucretius in the first century after the text's return. Notes in later copies, produced after manuscript production dwindled, represent a separate stage of reception as the experience of encountering Lucretius was transformed by three critical changes: the circulation of critically corrected versions of the text; the proliferation of editorial paratexts; and the relocation of the center of book production from Italy to France.

Because the larger number of surviving printed copies makes a comprehensive survey impractical, I have used statistical sampling for print copies, examining 172 copies. I have prioritized earlier copies, attempting to examine at least ten copies of each edition through 1515. ¹⁷ I have employed collections in several countries, and made an effort to survey copies of diverse provenance and with original bindings of variable expense, in an attempt to survey owners of different degrees of affluence. ¹⁸ As with manuscripts, annotation of print copies continued long after the publication of each edition, so notes in later copies may well date from the seventeenth century. In incunables, however, handwriting can be used to date annotations to within a few decades, and the radical improvement of the quality of the text, and thus the ease of reading, after the incunabular period makes it unlikely that very early copies would have been used in the later sixteenth century except by those specifically interested in examining old versions.

The Surviving Manuscripts

Fifty-four manuscripts of the *De rerum natura* survive from the period after 1417.¹⁹ Two complete manuscript copies, the Codex Oblongus and Codex Quadratus, plus two fragments of a third codex survive from the ninth century. Recently sixteen further possible fragments have been

extracted from the ashes of Herculaneum.²⁰ Poggio's transcription of what he found at the Council of Constance does not survive, but Niccolò Niccolò's copy of it does, as do several siblings of Niccolò's copy. These descendants of Poggio's text must derive from the Codex Oblongus, though it is unknown whether what Poggio found at Constance was the Oblongus or a lost copy of it. While many Renaissance copies, particularly Florentine ones, descend solely from Poggio's transcription, others contain independent text, which proves that other sources must have come to light in the Renaissance, and the Codex Quadratus itself contains Renaissance marginalia.²¹ Those manuscripts whose origins can be firmly traced were produced in Florence, Rome, or Naples. I shall generally follow Michael Reeve's stemma for the purpose of dating or locating manuscripts and notes.²²

The design and expense of books reveal much about their owners. Half of the surviving Lucretius manuscripts, twenty-seven out of fifty-four, are on expensive vellum, and the remaining twenty-seven on more affordable paper (see Table 2.1). Half are octavos, between 20 and 30 centimeters in height, moderately sized and comparatively inexpensive, at least by the standards of a day when a book could cost as much as a small house. Eleven percent are very small copies; the remaining 39 percent are larger quarto-sized volumes.²³ Most of the larger copies are vellum and most of the smaller copies paper, but there are exceptions.

All but five of the vellum copies have expensive decoration, usually the characteristic Italian white vine decoration, but others include more elaborate frontispieces featuring flowers, cherubs, a world map, a portrait of what may be intended to be Lucretius, or an illustration of the opening image of Mars lying in the lap of Venus.²⁴ Of the five undecorated vellum manuscripts, four have spaces left for decoration that was never applied,²⁵ and the other has technical illustrations.²⁶ Half of the vel-

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Table 2.1	Manus	cript sizes	and materia	ils.

	Total	Portion	
Paper	27	50%	
Vellum	27	50%	
$4^{ m o}$	21	39%	
8°	27	50%	
16°	6	11%	

lum copies have family crests or room left for crests on the title pages, proving they were created for noble patrons. Known owners include Lorenzo, Giuliano and Piero de Medici, the Pazzi and Orsini families, the Arcimboldi of Milan, Ferdinand II and Andrea Matteo III Aquaviva of Aragon, Matthias Corvinus of Hungary, and John Tiptoft Earl of Worcester.²⁷ These elaborate showpieces were created for ornament as much as use, to suit the sort of ostentatious book collecting that made Petrarch and Ficino complain of those who surrounded themselves with copies of the classics more for self-advertisement than for self-improvement.²⁸ Thus, in the fifteenth and early sixteenth centuries, a respected nobleman was eager, rather than reluctant, to advertise the fact that he owned this rare Epicurean text. That Lucretius was considered acceptable reading for clerics is established by two copies that belonged to bishops of Padua, Jacopo Zeno and Petrus Barocius, who copied the poem out himself, and by the two copies created for Popes Pius II and Sixtus IV.

Of the paper copies, 68 percent have no decoration, though close to half do have some rubrication or gaps left for intended decoration. Two have vine decoration,²⁹ another a less expensive monochrome vine motif,³⁰ and one has traces of gilding on the initial A.³¹ Cost alone is enough to tell us that these plainer copies were more likely to be owned by scholars, a conclusion that the marginalia corroborate. Scholars who possessed and annotated manuscripts include Niccolò Niccoli, Pomponio Leto, Poliziano, Pontano, Piero Vettori, Panormita, and Machiavelli.

Extensive marginalia are the norm in all copies. Of the fifty-two manuscripts for which I have data on the annotations, 62 percent contain at least one note per two pages, 27 percent average two or more notes per page, and only 6 percent contain no notes (see Table 2.2). In 13 percent the majority of the annotation consists, not of whole words, but of brackets, dots, or other small symbols, usually used to mark defective or exceptional lines. A quarter of the time, more commonly in paper copies, annotation is concentrated in one particular section of the text and less common or absent elsewhere.

The only three copies that are completely without annotation are all large vellum copies,³² and of the sixteen that contain only a small amount of annotation, only three are on paper. One of these three lightly annotated paper manuscripts is decorated; the other two have spaces intended for decoration, suggesting that they too belonged, at

	All copies	Vellum	Paper
No annotation	6%ª	12%	0%
1–6 notes	21%	23%	19%
6-20 notes	11%	15%	8%
More than 20, averaging close to 1 per page	35%	35%	35%
Averaging 2 per page or more	27%	15%	38%
Notes concentrated in mainly one part of the text	29%	27%	30%
Frequent nonverbal annotation	13%	12%	15%
Decoration	56%	89%	37%

Table 2.2 Frequency of annotation in different types of Lucretius manuscripts

least at first, to wealthier collectors rather than poorer scholars. Of the vellum copies only 35 percent have six or fewer notes in the whole volume, while only 19 percent of the paper copies have so little annotation. Manuscripts containing only seven to twenty notes are twice as often vellum as paper, while of the thirty that have extensive annotation, 60 percent are paper and 40 percent are vellum. This proves that cheaper copies were more often used by serious scholars, but 40 percent of the expensive decorated copies still contain extensive annotation. The numerous copies in which notes are concentrated in one part of the text, most often the beginning, establish that our scholarly predecessors (no less often than ourselves) did not have time to finish every book they started. As for the production of the notes, whether the annotations were made during private study or in classrooms, there is no clear evidence to suggest that the annotations are anything but the produce of independent scholarly study, with a few exceptions discussed below—notably the circles surrounding Pontano, Pomponio Leto, and Marcello Adriani. Arms and owners confirm Lucretius to have been particularly present in the elite circles of Florence, Rome, and Naples, but also in other centers, including Padua and Aragon.33

Categories of Marginalia

Seven distinct types of marginalia appear repeatedly throughout the manuscripts. These are: philological corrections; notes on Latin and

a. Cesena Biblioteca Malatestiana S. 20.4 has no annotation near the text of Lucretius, but notes accompany the text of Hesiod bound with it. For the purpose of statistics, it is counted as containing no annotation.

Greek vocabulary; notes marking aspects of poetic language, such as scansion or lines similar to other poets; notabilia marking elements of Roman history and culture; and three categories of philosophical notes. These three are notes on natural philosophy, frequently relating to such specialties as natural history, geology, astronomy, or medicine; notes on atomism, Epicurean theology, or metaphysics; and finally notes on Epicurean moral philosophy. The majority of manuscripts have more than one type, and the relative frequency of different categories makes it abundantly clear which interests were common among most Renaissance readers.

Philological Corrections

Corrections appear in virtually all Renaissance copies of the classics, and the only Lucretius manuscripts without corrections are those with no annotation at all, and a couple with only one or two notes in the whole text.³⁴ In those copies marked by multiple hands, all hands usually supply corrections, and often later annotations modify earlier ones.³⁵ Several copies, including Niccoli's copy and one with notes ascribed to Poliziano, have effectively no notes that are not philological in nature.³⁶ While some have fewer than a dozen corrections throughout the text, three-fifths of the manuscripts have multiple corrections per page on average. Thus, all the scholars who laid pen to Lucretius were interested in correcting the Latin, and three-fifths were willing to spend many hours doing so.

Most of the creative energy that went into annotating Lucretius went into this philological work, which was in no way unique to Lucretius. Correcting a text does not by itself prove that a scholar cared about or even understood the volume's philosophical content. Many Renaissance philologists were also serious philosophers, but the drive to rescue the Latin canon was more than enough to bring a scholar to a classic, regardless of its content. Indeed, so bad was the state of the medieval text of Lucretius that it was entirely possible for a Latinist to slog through the verses and come away with very little sense of Lucretius's actual arguments. This is not to dismiss the great contributions made by those who labored to restore the *De rerum natura* for posterity, nor do I intend to argue that philology and philosophy are mutually exclusive interests. Rather, I simply argue that the presence of philological annotation alone

does not prove that an annotator was also interested in atomism, radical heterodoxy, or any other specific aspect of the text's content. Other types of evidence are necessary to establish reader interest in specific aspects of the poem's content.

Philological annotations do indicate interest in content when only some sections of the text are corrected. In one-quarter of the manuscripts, corrections are concentrated on, or confined exclusively to, particular sections of the text. For example, corrections in one copy in the British Library are confined to a section in early Book V in which Lucretius introduces his discussion of the formation and origins of the world.³⁷ It is very common for the first few folios to be marked far more intensively, and later pages less or not at all.38 Indeed, it would not be out of place to conduct a study of the reception of the first hundred lines of Lucretius in the Renaissance, Book I 1–111, cutting off at the first discussion of the soul, because this section clearly was read far more often than the rest of the text. Two other sections often annotated by those who left the rest of the text blank are IV 1030-1287 (on love) and VI 1090-1286 (on the cause of plague and the Athenian plague). In those copies that have corrections throughout the text, the frequency of corrections is usually consistent throughout, but sometimes the annotations are more thorough in particular sections. In these cases, which constitute around a quarter of the whole, corrections are usually most scarce in Book II and the early part of Book III, and to some extent in Book V. The significance of these patterns will become clearer when considered alongside the other categories of marginalia.

Vocabulary

Vocabulary commanded a vast slice of readers' attention. Annotators mark vocabulary in 44 percent of the manuscripts, usually in the form of single words copied into the margin next to the line. Sometimes the word is copied exactly, but more frequently the basic form is provided, the nominative for nouns and adjectives and the infinitive for verbs. Although some manuscripts mark only a few words, most manuscripts featuring this type of marginalia have a large and consistent amount, with some averaging four or more vocabulary notes per folio throughout the text.³⁹ Occasionally the commentator adds a definition or synonym.

In Book I line 326 the phrase "vesco sale" uses an adjectival form of *vescor*, a *hapax legomenon* that is marked in three manuscripts, one of which offers the definition "id est comestibili," interpreting this unfamiliar word as "edible." Yet among hundreds of notes of this kind, fewer than a dozen actually supply definitions. The purpose of this annotation is not to help the next reader understand the text without looking up the rare word, but to draw attention to a new term to be memorized. Pomponio Leto's Neapolitanus even contains a set of pages inserted at the front that list, by page number, those vocabulary words that are copied in the margin (Figure 14). 41

Frequently, the same words are noted in multiple different copies, sometimes because a copyist duplicated an earlier vocabulary note, but more often independently. This makes it possible to identify which words were not generally known to Renaissance scholars before their first encounter with Lucretius. One example is parvissima, which Lucretius uses instead of minimus as the superlative of parvus in Book I line 616, which I have found copied into the margin in ten manuscripts, 19 percent of the total, and in many print copies as well.⁴² Other frequently noted examples include glomeramen (a round ball, II 454) and the verb cluere (to be called, known, or esteemed). Cluere is common in Plautus and Lucretius but extremely rare in other Latin authors—even Cicero only uses it once. 43 Twenty-six percent of manuscripts mark cluere. 44 One commentator supplies two synonyms, nominat and splendescere, at two different points; another supplies clareret, and a third writes clueo inlustro celebro. 45 Straying to print editions for a moment, cluere is glossed or noted by the editors in some way in the majority of editions, including a printed marginal gloss in the 1486 edition, which has very few such glosses, all of which match common marginal notes (Figure 21). Cluere is frequently marked by hand in print copies as well. Annotators also often mark in the margins what seem to be new words but are in fact the creations of scribal errors, making Lucretius a source, not only of good new Latin, but of bad new Latin.

Visiting the print tradition briefly, the 1565 pocket edition, for which Denys Lambin struggled to trim the 300,000 words of paratext of his 1563 edition down to the bare essentials, still included a list of notable vocabulary words, including *parvissima* and *cluere*.⁴⁶ Thus, from

Lucretius's reappearance on the scholarly scene to the beginning of the seventeenth century, one major interest for readers, and for editors, was Lucretius's supply of new vocabulary.

Though the text is Latin, Lucretius's margins were also a place for humanists to explore Greek. A few of the capitula that provide topical subject headings for different subsections of the text are in Greek (appearing transliterated often, but in Greek letters in 30 percent of the copies). 47 In sum 34 percent of manuscripts include some Greek, and most of these contain Greek marginalia in addition to Greek capitula.⁴⁸ These are most often one-word notes, supplying the Greek original when Lucretius uses a Latin equivalent for a specific Greek term. Some are philosophical terms, but others less so, as in Book IV where five annotators provide the original Greek equivalents for Lucretius's list of transliterated pet names amorous youths use to dote on their girlfriends (Figure 2).49 Several copies also comment on Greek forms that influenced Lucretius's more unusual Latin forms.⁵⁰ Roughly a quarter of Lucretius's manuscript annotators, then, came to the text with an acute awareness of its status as a Latin substitute for lost Greek sources. Lucretius's comment in Book I on the poverty of Latin in contrast with Greek's superior grammar and philosophical vocabulary was famous enough in antiquity to be cited by Pliny the Younger.⁵¹ Marked by readers in nine copies,⁵² this criticism of Latin by a major Latin author—which directly contradicts Cicero's claims about the superiority of Latin—was rich ammunition in an era when humanists battled fiercely over the relative merits of Greek and Latin. It was also potentially damaging to the common conception of Latin as an artificial language constructed expressly for philosophical and literary discourse.⁵³

Poetic Notes

Interest in the poetry of the *De rerum natura* manifests in two types of notes. The most direct is the common practice of marking lines with unusual or defective scansion.⁵⁴ Also frequently marked are lines similar to, or imitated by, other major classical authors. Frequently the label "Virg" or "Ovid" appears in the margin next to a line imitated by one of these authors.⁵⁵ These same passages are also frequently marked with brackets, *manicula*, asterisks, or other symbols. Popular passages include

a description of a cow looking for her lost calf, imitated by Ovid and similar to passages in Virgil and others, ⁵⁶ a description of dawn, ⁵⁷ and a pastoral description of the wild music of satyrs, reminiscent of Virgil, Horace, and others. ⁵⁸ Another favorite is an image of the dead in Acheron. Originating in Homer, this image was imitated by Ennius, then by Lucretius, who was in turn imitated by Virgil and Ovid. ⁵⁹ Such a passage was naturally conspicuous to humanist readers who knew their Virgil and Ovid inside and out, and the fact that such passages are noted so consistently demonstrates that readers had substantial interest in Lucretius's relationship to other Latin poets. Twenty-seven out of fifty-two copies (52 percent) have poetic notes, on either scansion, literary devices, or images or phrasings connecting Lucretius to other poets. Of these, 17 percent mention Virgil, whose name appears far more often in paper copies than in vellum.

Notabilia

Very commonly marked are notabilia, points at which Lucretius mentions famous historical, literary, or mythological figures, places, or things. Readers mark proper names such as Memmius (I 26), Iphianassa (I 85), Ennius (I 117), Homer (I 124), Charybdis (I 722), Mount Etna (I 722), and the Phoeban Pythia (I 739), frequently by simply duplicating these names in the margin, allowing the eye of a later reader or rereader to find them easily. Twenty-six manuscripts (50 percent) demonstrate this practice. Most popular, marked in sixteen copies, is the description of the underworld late in Book III (Figures 3-4), in which Lucretius gives a Who's Who of the afterlife, listing famous sinners such as Tantalus, Tityus, Sisyphus, and the Danaids, and great men who have died in the past: Xerxes, Scipio, Homer, Democritus, and Epicurus himself.⁶⁰ Also frequently marked in incunables, these names are annotated so consistently that some annotations are certainly scribal duplications, but their variety in form and their presence in copies from different branches of the Lucretius stemma indicate that many are independent. For example, Bartolomeo Fonzio's annotations of Laurenziana 35.28 add allegorical moral interpretations to the names in the margin, equating Sisyphus with ambitio, the Danaids with cupiditas, and so on. 61 Those readers who drew brackets or manicula also frequently mark historical figures,

as well as more general cultural references, such as the description of the rites of Cybele outlined in Book II.⁶² These readers are using Lucretius as a general source of information about the ancient world, mining the poem, just we do today, for tidbits about peoples and practices that help us understand the ancient world. Some Renaissance readers gloss these references by adding a sentence or two of information about the figure or place mentioned. Such glosses are the most common type of extended note found in Lucretius manuscripts, and they are most common on the initial folios, when annotators were still willing to spend a long time on every page. In some cases, notabilia are also philosophical, marking ancient thinkers such as Heraclitus, Anaxagoras, Democritus, and, of course, Epicurus; such notes are discussed below.

General Interests of Humanist Readers

The four categories of annotation addressed so far could appear in any manuscript of a classic, not just Lucretius. Virgil, Cicero, and Livy all provide historical and cultural information about the ancient world, vocabulary, syntax, and poetic references. The relative frequency of each type thus provides a good map of the most common interests shared by typical Renaissance readers when approaching any text. Here again the small sample size makes statistical variation problematic. Breaking down the manuscripts further by secondary attributes such as material or size can help overcome this statistical issue, because when numbers remain consistent across different slices of the manuscript sample, this indicates a higher degree of reliability (see Table 2.3).

$Table\ 2.3$	Frequency of the types of nonphilosophical annotation in Lucretius
	manuscripts

Type of annotation	All	Vellum	Paper	4°	8° and 16°
No. of manuscripts ^a	52	26	26	21	31
Corrections	47 (90%)	21 (81%)	26 (100%)	17 (81%)	30 (97%)
Latin vocabulary	23 (44%)	7 (27%)	16 (62%)	6 (29%)	17 (55%)
Greek	16 (31%)	8 (31%)	8 (31%)	5 (24%)	11 (35%)
Poetry	27 (52%)	14 (54%)	13 (50%)	8 (38%)	19 (61%)
Notabilia	26 (50%)	13 (50%)	13 (50%)	7 (33%)	19 (61%)

a. This includes only manuscripts for which I have complete information about marginalia.

Interest in poetry and notabilia remains consistently around 50 percent across distributions. The degree of interest in vocabulary is more variable, substantially higher in the more affordable paper copies. The portion of scholars interested in Greek is consistently just over half the portion interested in Latin. Philological corrections, always by far the most common type, become universal in scholars' less-expensive copies.

These, then, are the most common interests an average Renaissance reader brought to a classical text in the fifteenth and early sixteenth centuries. The act of repairing the text is the dominant pursuit, followed by identification of general information about the classical world and the improvement of the reader's knowledge of classical languages. Reconstruction is the unifying goal here: reconstruction of the author, of the ancient world through the rediscovery of its practices and history, and of the more perfect Latin and Greek written and spoken by the ancients. Because all these data come from manuscripts of a single author, these statistics may differ from what would be discovered in a broader survey. Nonetheless, I believe these numbers do reflect universal patterns, for two reasons. First, my own casual examination of a few sample manuscripts of other texts, such as Virgil, Ovid, Terence, Plautus, and Vitruvius, has confirmed that all these types of notes are indeed present and common in other authors. Second, all these categories of annotation are so independent of the poem's subject that they are clearly interests readers maintain despite, not because of, the topic and author at hand. A humanist who, while reading Lucretius on Epicureanism, takes the time to mark references to Cybele or an archaic verb form, is equally likely to do so when reading Vitruvius on architecture or Ovid on flirtation. The largest idiosyncrasy of Lucretius's readers likely to be reflected here is the high frequency of Greek annotation, because Lucretius was known as a sourcebook of Greek thought and thus particularly appealing to students of the Greeks.

These categories are not mutually exclusive. Most readers who manifest one manifest many. An excellent example is the heavily annotated opening folios of Vatican Ottobonianus Latinus 2834 (Figure 20). This copy is firmly associated with Pomponio Leto's Roman circle, though it is uncertain whether or not it is Leto's hand.⁶³ The annotator makes frequent philological corrections, changing *externum* to *aethernum* and *dulcis* to

dictis in line 28, and further philological interest is demonstrated in a note on line 23 discussing the Greek derivation of the irregular Latin form dias. ⁶⁴ Vocabulary annotation appears as the annotator elaborates on the term secla, ⁶⁵ and in his paraphrase of Lucretius's poetic description of Venus and dawn in line 9. ⁶⁶ Notes on poetry and language are represented by a comparison of Lucretius's and Horace's use of the panegyric style, ⁶⁷ and by a note comparing Lucretius's and Cicero's use of neque. ⁶⁸ Notabilia include a biographical note about the poem's dedicatee, Gaius Memmius, ⁶⁹ and a note about titles and attributes ascribed to Venus by different classical cultures. ⁷⁰ Finally, a philosophical note in the top margin discusses the apparent contradiction between Lucretius's initial invocation of Venus and his Epicurean doctrine of denying the efficacy of prayer or the power of the gods to affect the world. ⁷¹ The last note is specific to Lucretius; the rest reflects the more universal agenda that governed the humanist reading process.

Scientific and Philosophical Notes

The apparent paradox of an Epicurean invoking Venus while arguing that the gods do not heed prayer is but the first of hundreds of puzzles that faced those first readers who strove to tease out Epicurus's system from Lucretius's sweet but meandering verses. Today a reader comes to the poem armed with paratexts and secondary sources that explain in advance the Epicurean principles the reader should expect to find. Not so the Renaissance reader, who might have had some skeletal background from Lactantius, Cicero, and Diogenes Laertius but still had to wrestle unfamiliar and unexpected ideas out of Lucretius's archaic and time-scarred Latin.⁷²

The first category of philosophical annotation, notes on descriptions of particular natural phenomena, is not necessarily strongly connected to the proto-atheist elements of Epicurean natural philosophy, and is thus no more dangerous than the scientific discussions in Pliny the Elder or the tamer books of Aristotle. For example, four notes on discussions of storms in the Cambridge manuscript demonstrate an idiosyncratic interest in weather, especially because the same reader did not mark any other discussions of atoms.⁷³ Other readers mark the sections on magnets,⁷⁴ the functioning of wind and water,⁷⁵ or the formation of simulacra,⁷⁶ but not the sections on general atomic theory. A hybrid between

notabilia and scientific annotation appears when readers mark Lucretius's discussions of earlier philosophers. This is common throughout the text, but is most common in Book I, where even the capitula label the sections Contra Heraclitum (I 635–715), Contra Empedoclem (I 716–829), Contra Anaxagoram (I 830–950), and Contra Democritum de animo & anima (III 370–378). One extraordinary incunable, a copy of the Venice 1500 edition preserved at Oxford, whose notes are contemporaneous with those in later manuscripts, includes typical vocabulary notes, notes referencing Virgil, Plautus, and Ovid, but also numerous references to philosophical and scientific figures, including Cicero, Ennius, Democritus, Aristotle, Leucippus, Pliny, Cassius Dio, Macrobius, Nonius Marcellus, Aulus Gellius, Lactantius, Seneca, and Theophrastus, and summary notes on physical questions, particularly points at which Democritus and Epicurus differ on atoms. 78

Atoms are certainly involved in some of these discussions, particularly those of magnets, but annotation of such topical questions still does not indicate that a reader had any interest in evaluating atomism as a system. It only indicates that the reader was interested in this new opinion on a specific natural phenomenon. A doctor, astronomer, or general student of natural philosophy might have examined Lucretius's theories on a specific subfield without giving any more serious consideration to atomism than he gives to paganism when reading about the rites of Cybele. In sum, thirty-one manuscripts (60 percent) contain notes on non-atomistic natural philosophy, focusing on small, technical scientific questions or on Lucretius's summaries of earlier philosophers.

Medical issues are among the most commonly marked. The medical centerpiece of the poem is Lucretius's description of the Athenian plague in Book VI, which outlines the sequence and duration of symptoms with great specificity. Interest in this account of the plague extends well into the print period. In fact, with thirty editions by 1600, Lucretius is the single most frequently reprinted plague text in the sixteenth century, with more editions than even the most popular German plague pamphlets. A medical miscellany manuscript in Latin and Greek belonging to Galileo's mentor Gian Vincenzo Pinelli includes a complete transcription of the plague section from Lucretius Book VI, along with extracts from Thucydides and other essential sources on the disease

and its history. So This excerpt is perfect proof, not only of the text's medical relevance, but of the fact that at least one significant scholar was happy to excerpt the medical section without the associated discussions of theoretical atomism. Other medical passages in the text are also commonly marked, such as a discussion of the effects of alcohol on the soul, a discussion of epilepsy, 2 and the discussions of how death and disease seem to gradually erode the soul. Lucretius includes this last discussion as evidence for the materiality and destructibility of the soul, and the parts of the discussion that specifically address disease and aging are marked twice as often as the following argument that the soul is mortal. In sum, nineteen manuscripts out of fifty-two (37 percent) have annotation of medical topics.

Primitivism has been highlighted by many scholars, most recently Alison Brown, as a particularly influential Lucretian doctrine. 83 The relevant passage, in late Book V, covers two elements of progress. First Lucretius describes the infancy of the Earth: how in the past she produced many new species but does not do so now in her old age. Second he describes the development of humans from primitivism to civilization.84 Lucretius's portrait of human progress begins with hardy, wild people gathering what nature provides without knowledge of farming, fire, shelter, law, or marriage. Early humans then gradually developed huts, friendship, language, cooking, property, government, religion, and eventually gold. These technological advancements led to vanity, corruption, regicide, and all manner of other bad things. To modern eyes, both these sections leap from the page, the former smacking of Darwin's natural selection, and the latter of Hobbes, whose account of how humans formed governments and societies without divine participation helped guarantee his primacy on seventeenth-century lists of dangerous atheists. Brown and others have observed similarities between these Lucretian passages and themes of primitivism in the works of several important early modern figures.

Looking to the marginalia for evidence of readers' attitudes toward this account of primitivism reveals that the first section, on the infancy of the Earth, has substantial annotation in six manuscripts out of fifty-two (just under 12 percent), each with a scattering of smaller notes in different subsections. ⁸⁵ This is not a particularly high rate of annotation,

given the length of the passage. More notes appear in the discussion of humanity. One copy marks the entire discussion with long brackets, ⁸⁶ while four mark the discussions of the creation of language, ⁸⁷ and significant notes including *manicula* appear in seven copies around V 1105–1140, which describes the cruel fate Fortune has in store for those who pursue the vanities of power, wealth, and rank, and reasserts Epicurus's fundamental doctrine that true happiness comes only from tranquility. ⁸⁸ It seems the whole discussion of primitivism was of some interest, both to readers like Leto who marked almost every page and to several readers who found only a scattering of passages noteworthy. Yet accounts of animals, men, and natural selection sparked comments from only six (12 percent) of readers, while eleven (19 percent) marked the origin of language and of politics, and the final moral lessons about Fortune, ambition, and tranquility.

Scientific Illustrations: The Piacenza Manuscript

Exceptional evidence of scientific interest survives in a beautiful vellum volume preserved at the Passerini-Landi Library in Piacenza. ⁸⁹ Written in 1507 by Bernardinus Cippellarius Buxetanus, this copy was based on the 1486 print edition but contains many original corrections. ⁹⁰ Uniquely among the vellum copies, it contains no decoration and was clearly never intended to, but Cippellarius thought enough of Lucretius's scientific value to insert ten illustrated pages to accompany Lucretius's discussions of geometric, geographic, and astronomical matters (Figures 5–14).

The two simplest illustrations accompany discussions of atoms. In Book II Lucretius argues that apparently uniform visible colors are composed of diverse atoms, as the pieces of a geometric puzzle fit together to form a square. Lucretius is probably describing the *ostomachion* of Archimedes, ⁹¹ but the Piacenza illustrator supplies his own (much more regular and symmetrical) drawing of a square composed of diverse shapes. ⁹² In Book IV Lucretius discusses flavor, how the rough and round shapes of atoms generate sweet and bitter tastes. Here the margins are filled with possible atomic shapes, including triangles, circles, and other regular polygons, as well as a three-dimensional circular prism. ⁹³ These fit Lucretius's claim that atoms may be triangular, square,

or round, or have many angles, 94 but do not reflect the subsequent, more technical discussion of the hooked and smooth forms that generate sweetness and bitterness.

Much more time and effort is spent illustrating astronomical discussions in Book V. Proving that the motions of planets and comets can be explained through atoms alone is central to Lucretius's argument against divine participation in Nature. In one section, Lucretius discusses why nights and days vary in length.95 In typical Epicurean antidogmatic style, our poet supplies, not one "correct" atomistic explanation, but three possible answers. No matter which (if any) is true, having any materialist explanation frees the Epicurean from the necessity of believing in divine participation. Lucretius's first suggestion is that the sun might have a constant, circular orbit whose center drifts up and down relative to the Earth over the course of the year, making larger and smaller portions of the circular arc occur above and below the Earth, so that day and night are equal only on the equinoxes when the zodiac aligns and the orbit is centered perfectly around the Earth. Second, it could be that the sun lands each night rather than orbiting, but that in winter the air is thicker, making it take longer for the sun to push through it as it rises. Third, it could be that the sun does not orbit at all, and is newly created each day, but that at cold times of year the fires that must gather each morning to form a new sun move more slowly. Not only do these proposals differ in their details, they differ in their fundamental understanding of what the sun is: a constant orbiting body, a body that lands each night, or a new sun each day. Lucretius expresses no preference or discomfort at these contradictions, because all three models enable one to stop believing in a Helios who could scorch the Earth any time he chooses to lend his chariot to another Phaethon.

What does our Renaissance illustrator Cippellarius make of these contradictory explanations? Of four full-page illustrations he provides for the passage, the first two illustrate the first explanation, showing the zodiac and the center of the sun's circular orbit drifting higher and lower relative to the center of the Earth. ⁹⁶ The second of these two images follows Lucretius to the letter, but in the first the zodiac is shown around an Earth that is itself surrounded by the traditional concentric layers of

water, air, and fire, a four-substance physics in direct conflict with the lengthy rejections of Greek elemental theories Lucretius outlined in Book I. In constructing his diagram, Cippellarius thinks only of the passage at hand and does not consider the larger atomist physics that Lucretius is attempting to illustrate.

A third illustration, "Demonstration of by how much the moon is closer to the Earth" (Demonstratio quanto luna vicinior sit terrae), shows the relative concentric spheres of the sun and moon, an odd accompaniment to Lucretius's discussion of the possibility that thicker air may impede the sun's rising. 97 The diagram is likely intended as a refutation of the argument, because by reinforcing the sun's superlunary position it denies the possibility of irregular atmosphere impeding the sun's path. 98 Unlike Lucretius, Cippellarius is unwilling to accept multiple competing theories and attempts instead to resolve the ambiguity by substituting one correct suggestion.

The fourth and fifth illustrations ought to accompany the third hypothesis, that the sun's fire may gather more slowly at different times of year. They show the winds, first the more common Greek twelve-winds model descended from Aristotle, then the eight-winds model described by Aulus Gellius, Pliny, and Vitruvius, which Cippellarius attributes to Phavorinus Gelianus.99 Lucretius does not mention the twelve or eight winds here, or indeed wind at all. Cippellarius's decision to include these strange wind diagrams probably derives less from Lucretius's subject matter than from the fact that the dominant medieval authorities on the twelve winds were also called *De rerum natura*. These were the various descendants of the lost De natura rerum of Suetonius (itself based on lost Varro texts), and Isidore of Seville's De rerum natura. 100 Cippellarius's diagram matches Isidore's forty-seventh chapter, "De nominibus ventorum," precisely. Isidore manuscripts, with diagrams illustrating the twelve winds, survive from as early as the seventh century, and the specific features of these maps, including the concentric circles, central Earth, and the characteristic wind masks, are all common in the Isidore illustration tradition. Isidore, of course, cited in his De rerum natura Lucretius's own description of wind in Book VI: "Ventus enim fit, ubi est agitando percitus aer." Apparently the strong association of Lucretius

with his imitator Isidore was enough for this discussion of thickness and thinness of atmosphere to prompt Cippellarius to include the traditional Isidoran wind charts.

Two more illustrations accompany Lucretius's discussion of the phases of the moon, and a final two show lunar and solar eclipses, more topics on which Lucretius gives a variety of possible explanations without deciding on a definitive answer.¹⁰² Again Cippellarius does choose one true answer, drawing a standard model of how the sun casts a shadow on the dark side of the moon that lessens as the moon moves away, and how sun, Earth, and moon cross paths in eclipses. No accompaniment is provided for any of Lucretius's alternative explanations, only for the Christian-Aristotelian model. The fact that so many illustrations are clustered in this section clearly demonstrates the copyist's (or patron's) particular interest in cosmology rather than atomism. The inclusion of non-Epicurean images of the four elements as well as the winds, sun, and moon personified with faces, and the strong resemblance between these diagrams and illustrations in Isidore, Aristotle, and other more mainstream scientific sources, prove that Lucretius's value for Cippellarius lay in his information on ancient cosmological theory, not any core doctrine of Epicureanism.

Annotation in Cippellarius's copy is scarce but characteristic. The manuscript includes some notes on vocabulary and scansion, a note on the Book III discussion of epilepsy, and notes on the section on primitivism that treats the development of ambition, though not the rest of it. In Book VI, annotation highlights treatments of thunder, falling objects, earthquakes, and the properties of metals and magnets. The emphases again are on poetics and technical science, neither connected to Epicurean atomism or theology. The closest thing to a note on Epicurean doctrine comes in Book III, in which Lucretius attacks the immortality of the soul on the grounds that we cannot remember the time before we were born. Cippellarius labels this argument Contra Pythagoran apud Ovidium, bringing attention to it as anti-Pythagorean, rather than antitheist or anti-Christian. As with those who marked Lucretius's discussions of Heraclitus and Anaxagoras, Lucretius here is treated more as a source on others than a thinker in his own right. Cippellarius turns

this philosophical discussion into one more chance to reference famous names.

While reading Lucretius, Cippellarius is interested in explicating the established astronomical and geometrical models of his day, not in understanding a distinct Epicurean system. He mines the *De rerum natura* for ideas that he believes true or that might be true, but is not interested in understanding anything he considers false—that is, atomism. The fact that he illustrates Lucretian arguments with Christian-Aristotelian diagrams proves that he is not even attempting to think within an atomist framework. There is perhaps a touch of syncretism here, the assumption that all wise ancient writings contain shards of truth waiting to be correctly extracted and combined, and that the pieces of Lucretius that mesh with Aristotle and Isidore are the most valuable. The idea that there might be value in the rejected doctrines—atomism, vacuum—is wholly absent.

Physics, Metaphysics, and Soul Theory

The essential elements of Epicurean atomism are very rarely commented on at all. Counting the Piacenza manuscript with its drawings of atoms, fifteen manuscripts, only 29 percent of the total, have one or more notes on atomism or related fundamentals. Of these fifteen, only six contain even five notes on the topic, and four of these six exceptions derive from a single source, Leto's notes in the Neapolitanus. 104 Only five (10 percent) mark the arguments against the immortality of the soul,105 and three (6 percent) the technical sections of Book II where the essentials of atomic physics, including the swerve, are introduced.¹⁰⁶ These six exceptions I will treat individually below, but the other eight are all substantially annotated copies, containing dozens or hundreds of notes, among which only one or two touch on the six proto-atheist theses. One comments on the idea of vacuum, another on Heraclitus's claim that all things are made of fire, a third on the proposed imperishability of atoms.¹⁰⁷ A few choose more radical lines. One dangerous Epicurean doctrine is Epicurus's claim, like Aristotle's, that the universe and atoms existed from eternity, opposing the Christian doctrine of creation in time. Lucretius's

discussion of creation existing from eternity is marked in one Laurentianus, in the Neapolitanus, and in the Ambrosianus that belonged to Pius II. Another primary danger is Epicurus's deflationary treatment of the role of the gods in the universe. His denial of creation, divine governance, and prayer is marked by only three annotators, one-third as many as those who marked the discussions of primitivism, and one-fifth of the number who marked the names of famous men in Tartarus. As for the Epicurean denial of the afterlife, the definition of Epicureanism for critics from Dante to Luther, only Leto's Neapolitanus and those taken from it mark the *opinio non christiana*.

We must ask, of course, whether these were the only readers to be struck by these arguments, or whether they were simply the only ones who dared mark unchristian passages in ink that would be seen by others. Again, quantitative analysis supplies the answer. In contrast to other sections, particularly Books I and IV and parts of V and VI, the portions of Books II, III, V, and VI in which Lucretius explains atomistic physics in detail are conspicuously devoid of notes in almost every manuscript. The few extant notes are almost always corrections, vocabulary, or occasional notabilia. The Munich manuscript, for example, has a distinct paucity of notes, just occasional corrections and vocabulary, through the majority of Book II, but heavy marks all over the description of the rites of Cybele, the only part of Book II that deviates at length from the atomistic subject.¹¹⁰ It is natural for later books to have fewer notes than the first, because more readers begin texts than finish them, but on average Books V and VI have many more notes, particularly more vocabulary and notabilia, than one finds in Books II and III. Absence of evidence is not necessarily evidence of absence, and even a manuscript with no annotation of any kind may certainly have been read, but the greater concentration of notes in other sections certainly indicates a greater concentration of reader energy there. Readers did not simply avoid marking the unchristian sections, but, in comparison with the efforts they devote to other sections, many skipped or skimmed Books II and III in order to move on to less atom-studded pastures.

Patterns in precisely which proto-atheist arguments these eight annotators marked show us more of how standard humanist readers understood the text. For several, the notes on atomism are clearly connected

primarily to questions of the structure of matter. Laurenziana 35.25, amid numerous corrections and notes on Greek, comments on Lucretius's refutation of Heraclitus, marks the argument that air, being more porous than flesh, cannot possibly contain the soul, and makes a marginal reference to Cicero beside Lucretius's claim that the workings of weather can be easily understood. 111 Ambrosiana I 29 sup. marks pastoral scenes, invocations of the Muses, and the comparison of the poem's verses to honey masking the bitterness of wormwood, and also marks two scientific points, Lucretius's attacks on Empedocles and the Greek four-elements theory, and the argument in his discussion of first principles that anything can be more quickly broken than remade, which is relevant to the question of creation in time. 112 The Cambridge manuscript's annotator, amid dozens of notes on notabilia and Virgilian and Ovidian images, and hundreds on vocabulary, marks two sections on vacuum, one epistemological discussion of how to derive truth from sense perception despite its imperfections, four on weather, one on greed, one on how philosophy saves us from fear, the wormwood simile, and the argument that all bodies have set locations and functions and therefore, just as there cannot be dirt in the sky or fire in the water, there cannot be thought outside flesh.113 In all three of these manuscripts, the annotator has picked out only one out of dozens of similar discussions of Lucretius's proto-atheist positions on mortality of the soul or creation from chaos. In all three cases, the argument chosen is directly related to questions of motion and the hierarchy of elements, ideas relevant and applicable to the more standard Christian-Aristotelian system. As with Cippellarius's illustrations, the annotators' interest focuses on those physical questions that are relevant in a non-atomist world.

Patetta 312 contains two annotations on epistemological questions critical to the Epicurean argument that the senses are the source of certainty. One of them, however, is just a vocabulary note, with a marginal comparison of Lucretius's and Cicero's use of the word *hilum*.¹¹⁴ The other is a mark beside the summaries of Empedocles, Anaxagoras, and Democritus, with a large bracket around the argument that the soul grows and dies with the body (a point also highlighted by Pomponio Leto). An equally conspicuous mark is drawn by the passage, again relevant to Aristotelian as well as atomistic models, that all matter has

weight and that nothing, not even fire, can move upward unless propelled by some force.¹¹⁵ Interest in non-Epicurean science is at least coequal to, if not more important than, atomism, and vocabulary is more worth marking than either.

The Modena manuscript also concentrates the vast majority of annotation on philology and vocabulary, with some on Virgilian connections. It does, however, contain a conspicuous patch of detailed corrections in the oft-neglected Book II, and marks two contradictory passages relevant to Lucretius's apparent rejection of divine participation in nature: his argument that the gods dwell apart in eternal peace ignoring the Earth and its affairs, and his claim that Heaven is our father and Earth our mother, implying a greater portion of divine participation. 116 Much as when Pomponio Leto commented on the apparent paradox of an Epicurean invoking Venus, these notes indicate a reader who has spotted an inconsistency and is attempting to determine whether or not Lucretius denies divine participation. Such ambiguity makes it possible for a humanist to construct either a pious or an impious portrait of our Epicurean. This same fascinating ambiguity will be discussed at length in Pomponio Leto's vita of Lucretius, and exploited by later biographers and editors to make the case that Lucretius himself was an orthodox theist, while denial of prayer and of divine governance of Nature were positions Epicurus held that the Roman poet faithfully repeated but personally rejected.

The annotator of Pius II's Ambrosiana E 125 sup. corrects the text extensively. He marks all the usual vocabulary and similarities to Virgil and Horace, cites Priscian, Donatus, and Servius in discussions of grammar and scansion, and corrects the language of many key philosophical lines without commenting on their content. Philosophical comments are limited to three moments. First, one note draws attention to Lucretius's discussion of how difficult it is to differentiate true and false sense perception. Second, the label "ridiculum caput" criticizes Lucretius's discussion of Democritus's and Epicurus's atomist models of how the soul comes to exist within the body. Third, in Book III, the annotator mistakenly identifies Pythagoras rather than Epicurus as the Man of Greece whom Lucretius praises as a quasi-divine philosophical savior. This misidentification clearly indicates a reader who is not thinking of

the *De rerum natura* primarily as a handbook of Epicureanism. Rather, as with the numerous readers who marked Lucretius's discussions of pre-Socratics, this reader sees Lucretius as a source on ancient thought independent of sect. The central position given to Pythagoras in Renaissance syncretic narratives of the history of ancient philosophy make it perfectly reasonable for a humanist to assume that if a wise Roman were to single out a particular Greek as the father of theology and savior of humankind, he would choose the great sage Pythagoras, not the peripheral figure Epicurus.

An excellent final example is Harleianus 2694, which contains fourteen distinct nonphilological notes. The annotator highlights two popular Virgilian pastoral images, the discussion of epilepsy, and two elegant comments on the excellence of philosophers, one comparing them to bloodhounds in their eager pursuit of truth, the other boasting that the marvelous volcano of Etna is nothing against the achievements of Epicurus. 121 The most conspicuous note by far is undeniably concerned with Lucretius's most radical face: a substantial bracket on a section in Book V that argues that the existence of many creatures and objects unrelated to human welfare proves that the world was not created for humanity. 122 Arguments of precisely this type, which directly attack Providence, divine governance, and intelligent design, would become critical to the proliferation of atheism, particularly in the eighteenth century, and the question of humanity's central position in the universe was vital to many Renaissance controversies, particularly that surrounding Giordano Bruno. Two small, unclear notes, which may in fact be philological, mark a discussion of how different animal species naturally rise and dwindle, replacing one another over time, and the claim that the union of mortal and immortal is impossible, thus that an immortal soul cannot dwell in a mortal body. 123 Yet, even though the annotator has drawn attention to three of Epicurus's most dangerous ideas, these notes are far outnumbered by six on questions of moral philosophy: how much evil is caused by superstition, how undignified and ungrateful it is for the elderly to lament their coming deaths, and four passages in the Book IV discussion of pleasure, Venus, and the sufferings of those in love.¹²⁴ The proto-atheist theses are a concern for this annotator, but Epicurean moral philosophy is considerably more central.

Moral Philosophy

The moral focus of this Harleianus is very much the norm. Questions of Epicurean moral philosophy are annotated in twenty-nine copies (56 percent), more than mark vocabulary, poetry, or notabilia, and more than twice as many as contain even a single note on atomism. The most frequently marked passage in the whole text is the section often labeled De Rebus Veneriis, a lengthy description of love and how to avoid its snares, which occupies the last 300 lines of Book IV. This is marked in sixteen copies, 33 percent of the total. 125 Notes here tend to be conspicuous, with labels in block capitals, long brackets marking entire pages, brackets on both sides of the text, or large manicula for added emphasis. So frequently is this the most heavily (or only) annotated section, that it is clear that some readers had more interest in Rebus Veneriis than in *Rerum Natura*. The stated goal of Epicureanism is to help people seek pleasure and escape pain, and this passage explains one of the system's key tools: the rejection of romantic love. Lucretius describes the sufferings and absurdities men go through because of love, and encourages more temperate, reasoned relations between lovers. There are many elements to draw readers to this passage, including eloquent language, rare Greek vocabulary, a sex scene—as popular a topic in the Renaissance as it is now—and recommendations of sexual positions and motions that are more or less conducive to fertility. Elsewhere in the text, similar moral passages, particularly about avoiding love, are bracketed or annotated twice as often as passages of natural philosophy or atomism. Recall that in the discussions of primitivism the moral philosophy section at the end, outlining the origins of vice and ambition and Epicurus's tranquil cure, was marked far more often than the notions of survival of the fittest or language formation. If Petrarch and his followers argued that the classics should be read as moral guides, Lucretius's readers are doing precisely that.

Another central Lucretius passage is the wormwood simile, Book I, lines 936–950, marked in ten manuscripts. It is here that Lucretius compares his decision to honey-coat bitter philosophy with the lure of poetry to the action of a doctor whose patient is "deceived but not betrayed" by the trick. Here again poetic and literary elements account for

some of the interest, because the same image appears in Plato, Horace, and Ausonius, but it was still marked by more readers than any other single poetic image.¹²⁷ One reader, possibly Hieronymus Avancius, editor of the 1500 edition, even transcribed it onto the title page of his personal copy.¹²⁸

This passage gave Lucretius a critical position in the history of censorship, specifically in the Renaissance debate over whether the beautiful language of the pagan classics could spread errors and heresy. Petrarch claimed that classical rhetoric, the "words that sting and bite" in Plato, Cicero, and others, drove men toward virtue.¹²⁹ His successors believed that a classical education would make men better Christians as well as better citizens. As Victoria Kahn has pointed out, Petrarch's claim is founded on the argument, from Aristotle and Cicero, that eloquence is inherently tied to virtue, because only truth and virtue can make words persuasive. 130 If rhetoric is only powerful when combined with truth, then a Christian scholar can safely circulate Lucretius without fear of weakening Christianity, because the heretical parts will be inherently unconvincing. Petrarch would expect the reader to take away from Lucretius only true ideas and beautiful language, useful for promoting Christian values. Lucretius himself disagrees, and if the honey of poetry can indeed trick a student into swallowing such heresies as denial of the afterlife, then the Florentine Council in 1517 might have had good reason to ban the *De rerum natura*. Lucretius's is hardly the only classical claim that rhetoric can strengthen otherwise-unconvincing arguments— Cicero and the sophists treat the question often—but discussions of the moral character of a true orator in Cicero and Quintilian made it easy to place unscrupulous orators-for-hire in a separate category. Ficino did this when he argued that Plato uses rhetorical ornament only to lure men toward Truth (that is, doctrines compatible with Christianity). The wormwood simile, on the other hand, implies that not just sophists but philosophers and poets employed deceptive rhetoric. Worse, it implies that Lucretius's imitator Virgil, whose central position in the humanist curriculum required that he remain unimpeachable, might be similarly manipulative.

Lucretius clearly believes that language can affect the persuasiveness of an argument, independent of its truth, and this claim will remain

problematic for Lucretius's defenders, and defenders of the classics in general, well into in the print period.¹³¹ In view of the manuscript marginalia, however, Lucretius seems to be only half right. Beautiful language has, indeed, succeeded in drawing readers to him, as 52 percent of annotators have marked poetic sections and 44 percent vocabulary. His utility as a source on the ancient world has appealed to 50 percent of those who put pen to page, and 90 percent labored to correct and restore a member of the Latin canon. These elements have not, however, succeeded in making most readers pay much attention to Books II and III, where the serious atomism is located. This pattern holds, even for many of the more famous known annotators. The notes in Niccolò's copy¹³² are exclusively philological, and those in Poliziano's133 are almost exclusively so, though the latter marks some notabilia and vocabulary, particularly on the initial folios. The Vatican copy with notes by Antonio Panormita likewise contains mainly philological corrections with some vocabulary and notabilia, but again no comments on the philosophical content.134

Wealth and class also reveal themselves in the distribution of annotation. Paper copies, and smaller copies, more likely to have been owned by scholars, contain more annotation in general, but certain types of annotation are more common in the expensive vellum copies. On average, paper copies have substantially more philological corrections and notes on vocabulary, and mention Virgil by name more often. The distribution of notabilia and notes on moral philosophy is equal between the two, and the wormwood simile is marked equally often in both paper and vellum volumes, though more often in smaller copies. On the other hand, vellum copies have, on average, somewhat more topical annotation, with more notes on natural philosophy, atomism, primitivism, and the snares of Venus, and slightly more annotation of scansion and poetic issues. The sample sizes here are small, so it is dangerous to read too much into these statistics, but there is a suggestive split, indicating that small copies and paper copies were more often used for philological activities, whereas the vellum copies were read more for content.135

Poliziano and Panormita are interesting examples; they are known to have seriously examined Epicureanism, and Epicurean and Lucretian themes are detectible in their writings, yet they both left almost exclusively philological annotation, and none philosophical.¹³⁶ Clearly other anonymous annotators who marked only philological questions might also have been interested in the poem's philosophical content. Yet the vast majority of the effort these scholars put into the actual reading process still concentrated on the poem's language, and the process of correction. Thus, even for these thinkers, for whom philosophy was a real interest, it was a substantially smaller part of the process of reading than philological concerns. Philology and philosophy go hand in hand here, but philology is by far the dominant partner. The works of Panormita showcase this nicely—Lucretian poetic images are the most common trace detectible in his work, and the philosophical questions he treats are primarily concerned with moral philosophy. For Poliziano too, voluptas, rather than atomi, is the philosophical concern. For these scholars, like the 56 percent of our readers whose notes demonstrated serious interest in Lucretius's moral guidelines for how to live a life of safe pleasure, moral philosophy is a question worth examining in the course of correcting the text. Yet forty-six manuscripts have between them fewer than a dozen notes on atomism and religion (Table 2.4).

I say forty-six here because there remain the six exceptions: Pomponio Leto's Neapolitanus and its derivatives at Oxford, Basel, and Berlin; one Laurentianus with notes associated with Marcello Adriani; and a delicate little paper volume preserved at the Vatican that contains the entire *De rerum natura* transcribed by Machiavelli. A seventh manuscript, in Munich, which once belonged to Piero Vettori, contains one remarkable note that will in turn lead us to the incunables that circulated alongside later manuscripts.

Pomponio Leto: The Neapolitanus and Its Descendants

Pomponio Leto left his mark all over the Lucretius tradition.¹³⁷ We have already examined the Ottobonianus, in which notes by Leto or one of his students on the initial folio treat the full range of typical topics, from Greek linguistics, to Cicero's pronoun usage, to Memmius's biography, to the philosophical question of why an Epicurean denier of prayer would invoke Venus.¹³⁸ Another set of Leto's notes survives in a copy of the 1486 print edition, which also preserves his 1,000-word vita of Lucretius, the

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Paper

Vellum

All

Total manuscripts for which I have data Frequency of different types of notes

	26 (100%)					
26 (100%	21 (81%)	7 (27%	3 (11%)	5 (19%)	8 (31%)	
	47 (90%)					
Total manuscripts for which I have data	Philological corrections	Notes on vocabulary	Vocabulary note on cluere	Vocabulary note on parvissima	Notes on Greek	

(-:)	14 (54%)	2 (8%)
(-:)	27 (52%)	6 (17%)
	Notes on poetic issues (scansion, Virgilian lines)	Mention Virgil by name in annotations

Notes on poetic issues (scansion, Virgilian lines)	27 (52%)	14 (54%)	13 (50%)
Mention Virgil by name in annotations	9 (17%)	2 (8%)	7 (26%)
Poverty of Latin compared to Greek (I 136-139)	9 (17%)	3 (16%)	6 (23%)
Notabilia	(%00%)	13 (50%)	13 (50%)

Total manuscripts for which I have data	52 (100%)	26 (100%)	26 (100%)	21(100%)
Philological corrections	47 (90%)	21 (81%)	26 (100%)	17 (81%)
Notes on vocabulary	23 (44%)	7 (27%)	16 (61%)	6 (29%)
Vocabulary note on cluere	14 (26%)	3 (11%)	11 (40%)	2 (10%)
Vocabulary note on parvissima	10 (19%)	5 (19%)	5 (18%)	3 (14%)
Notes on Greek	16 (34%)	8 (31%)	8 (37%)	5 (24%)
Notes on poetic issues (scansion, Virgilian lines)	27 (52%)	14 (54%)	13 (50%)	8 (38%)
Mention Virgil by name in annotations	9 (17%)	2 (8%)	7 (26%)	2 (10%)
Poverty of Latin compared to Greek (I 136-139)	9 (17%)	3 (16%)	6 (23%)	1 (5%)
Notabilia	26 (50%)	13 (50%)	13 (50%)	7 (33%)
Famous men in Acheron (III 1024–1075)	16 (31%)	8 (31%)	8 (33%)	5 (24%)

Poverty of Latin compared to Greek (I 136–139)	6 (17%)	3 (16%)	6(23%)	1(5%)
Notabilia	26 (50%)	13 (50%)	13 (50%)	7 (33%
Famous men in Acheron (III 1024–1075)	16 (31%)	8 (31%)	8 (33%)	5 (24%

Total manuscripts for which I have data	52 (100%)	26 (100%)	26 (100%)	21 (100%)	31 (100%)
Philological corrections	47 (90%)	21 (81%)	26 (100%)	17 (81%)	30 (97%)
Notes on vocabulary	23 (44%)	7 (27%)	16 (61%)	6 (29%)	17 (55%)
Vocabulary note on cluere	14 (26%)	3 (11%)	11(40%)	2 (10%)	12 (39%)
Vocabulary note on parvissima	10 (19%)	5 (19%)	5 (18%)	3 (14%)	7 (23%)
Notes on Greek	16 (34%)	8 (31%)	8 (37%)	5 (24%)	11 (35%)
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Famous men in Acheron (III 1024–1075)	16 (31%)	8 (31%)	8 (33%)	5 (24%)	11 (35%)
Notes on natural philosophy	30 (60%)	17 (65%)	13 (54%)	12 (57%)	18 (58%)

Notabilia	26 (50%)	13 (50%)	13 (50%)	7 (33%)	
Famous men in Acheron (III 1024–1075)	16 (31%)	8 (31%)	8 (33%)	5 (24%)	
Notes on natural philosophy	30 (60%)	17 (65%)	13 (54%)	12 (57%)	
Notes on atomism or the soul	15 (28%)	9 (35%)	6 (22%)	4 (19%)	

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Notes on atomism or the soul	15 (28%)	9 (35%)	6 (22%)	4 (19%)	
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Notes on natural philosophy	30 (60%)	17 (65%)	13 (54%)	12 (57%)	18 (58%)
Notes on atomism or the soul	15(28%)	9 (35%)	6 (22%)	4 (19%)	11(35%)
Proofs of the mortality of the soul (III 445–579)	5(10%)	3 (8%)	2 (8%)	1(5%)	4 (13%)
Book II technical details of atomistic science	3 (6%)	1(3%)	2 (8%)	(%0)0	3 (10%)
Notes on moral philosophy	(%94) 06	15 (56%)	14 (56%)	19 (57%)	17 (55%)

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Notes on moral philosophy	29 (56%)	15 (56%)	14 (56%)	12 (57%)	17 (
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Proofs of the mortality of the soul (III 445–579)	5 (10%)	3 (8%)	2 (8%)	1 (5%)	4 (13%)
Book II technical details of atomistic science	3 (6%)	1 (3%)	2 (8%)	(%0)0	3 (10%)
Notes on moral philosophy	29 (56%)	15 (56%)	14 (56%)	12 (57%)	17 (55%)
Wormwood simile $(1921-950)$	10 (19%)	5 (19%)	5 (19%)	2 (10%)	8 (26%)
Primitivism, primitive man (V 772–924)	6 (12%)	4 (15%)	2 (8%)	(%0) 0	(19%)
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Notes on moral philosophy	29 (56%)	15(56%)	14 (56%)	12(57%)	17 (55%
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Primitivism, primitive man (V 772-924)	6 (12%)	4 (15%)	2 (8%)	(%0) 0	(%61) 9
Primitivism, source of vice (V 925-1104)	11 (19%)	8 (31%)	2 (8%)	5 (24%)	5(16)
Snares of Venus (IV 1030–1287)	16 (33%)	9 (35%)	7 (31%)	7 (33%)	9 (29%)

oldest surviving biography of the poet,139 and Leto is also referenced in the annotations in a copy of the 1495 edition preserved in Paris. 140 Most outstanding, however, is the Neapolitanus, heavily annotated in Leto's hand on every page, with not only corrections but extensive vocabulary notes, comparisons to other authors, bracketing, and labeling of subsections and key ideas. This is a fairly early Lucretius manuscript, dated 1458, so the fact that Leto was able to obtain a copy was still exceptional.141 So famous was Leto's work on Lucretius that the Basel manuscript, which also partly duplicates the annotation of the Neapolitanus, boasts that it contains Leto's notes on the front folios and even on the tooled leather cover.¹⁴² Considering Leto's position as the student and successor of Lorenzo Valla, we may expect an interest in Epicureanism to have drawn him to Lucretius. Valla, of course, had not been able to make use of Lucretian detail when he scripted the Epicurean interlocutor in his De Voluptate. 143 In 1458, then, as Leto at last explored the complete Epicureanism of the *De rerum natura*, he must have been acutely conscious of the interests of his master, who had died the year before.

It is in the Neapolitanus that Leto first wrote the phrase opinio non christiana, duplicated by the manuscript that is now at Oxford. Leto goes on to comment (not duplicated by the Oxford annotator) that Lucretius's arguments against the soul there seem to be directed specifically against Plato's claims that the soul remembers knowledge from before its birth.¹⁴⁴ In the following discussion of the mortality of the soul, Leto numbers Lucretius's key arguments: primum argumentum, that the intelligence grows and weakens with the aging of the body; secundum argumentum, that the mind is vulnerable to grief as the body is to pain; third, that the soul is affected by wine, an undeniably material influence; fourth, that epilepsy afflicts the soul by shaking the body; fifth, that death by illness often appears to happen gradually, with the soul retreating from the limbs and faculties one at a time; sixth, that the mind has a fixed place in the body like the hand or eye, which do not function when separated from the rest of the flesh; and seventh, that without the container of the body to hold it together, the soul must diffuse in the open air. 145 These passages are not often marked in copies outside Leto's circle. The first argument is labeled "on old age" (de senectute) in the Sant'Onofrio manuscript, 146 and the later discussions of wine and epilepsy

are marked by some readers who also annotated other medical questions, but otherwise the Neapolitanus and its descendants are the only ones to annotate these critical ideas.

Leto clearly worked on the Neapolitanus over an extended period, and his notes appear in a variety of inks. Notabilia are frequently marked, as are Virgilian passages, parallels to Ennius or Homer, and poetic images, particularly pastoral imagery and images of myths and gods. Philosophical notes are a small minority of Leto's many hundreds of notes, but they are still conspicuously plentiful in comparison with those of any other surviving manuscript. Notes on Lucretius's proto-atheist arguments are most common in Books II and III, precisely where we find few notes in other copies. Leto marks moments at which Lucretius specifically attacks the Platonic and Pythagorean models of the immortal soul.¹⁴⁷ He marks the argument that motes derive motion from atoms, and the subsequent discussions of first motion. Leto writes "error" beside Lucretius's argument that the world was not made for humanity. He also marks the moral discussion of the pernicious effects of fear of death, and Lucretius's beautiful articulation of the claim that only the light of philosophy can keep us from being like children shivering in the dark. 148 This last vivid description is marked in four other manuscripts, and although it is central to Epicurean eudaimonism, it is again not uniquely Epicurean, but compatible with the more syncretic conception of Greek philosophy so common among humanists. 149

While more extensive and philosophical than most annotators' notes, Leto's still display all the typical interests, highlighting popular passages, including the torments of Acheron and the snares of Venus. ¹⁵⁰ What is atypical is the fact that he gave as much attention to Books II and III as to the others, and that he paid so much attention to the arguments against the immortality of the soul, though he voiced his disapproval, labeling them errors and unchristian. To address the question of innocent dissimulation for a moment, I do not believe that, amid so many hundreds of notes, Leto would have bothered to call these errors just to make himself seem pious to later users of the manuscript. Nor do I believe that, if that had been his goal, he would have marked just these few and not the dozens of other points where Lucretius contradicts orthodox

doctrine. Rather, I believe Leto, like Ficino, was interested in refuting these attacks on central theist tenets.

Leto's focus on the moral and religious aspects of Epicurean doctrine, rather than its physics, matches not only other manuscript annotation but the concerns of Valla's *De Voluptate*, whose Epicurean spokesman competes with his Stoic rival almost exclusively over moral philosophy with minimal scientific discussion. Valla likely had no access to Lucretius's descriptions of the details of Epicurean physics, but the fact that the moral focus continues even in the works of Leto, who clearly did, suggests that a lack of sources was not the primary cause of Leto's, or Valla's, choice to focus on Epicureanism as a moral, rather than a scientific or systematic, program.

Of the several descendants of Leto's Neapolitanus, three reproduce not only the master's philological work but some of his notes on the text's six proto-atheist arguments. 151 The scribe of the Bodleianus reproduced Leto's marginal notes in red ink similar to that used in the Neapolitanus itself, but was highly selective, choosing fewer than twenty nonphilological notes out of Leto's hundreds. 152 The choices concentrate on Book III's attacks on the immortality of the soul, labeling the opinio non christiana, reproducing Leto's comments on what he saw as Lucretian attacks on Pythagoras and Plato, and marking the primum argumentum and secundum argumentum against the immortality of the soul, though he does not label the others.¹⁵³ Having carefully differentiated these questions on the soul, the Bodleianus's annotator finishes up Book III by reproducing from Leto the usual names of famous dead in Tartarus. 154 The same annotator leaves Books IV-VI untouched save for a single correction, in Book I notes only the name Ennius and the wormwood simile with its pastoral introduction, and in Book II reproduces a single marginal heading, "Nature does nothing without the gods," directly contradicting Lucretius's argument that his natural theory liberates nature from the necessity of being governed by the gods.¹⁵⁵ This copyist, working in the third quarter of the fifteenth century, chose not to duplicate Leto's comments on the plague and the famous sex scene, but was certainly interested in the immortality of the soul. Another interest is blame. When Lucretius describes the gradual sickening of the soul, Leto, and

this copyist, write that the blame for this opinion goes not to Lucretius but to "Pyndarici," imitators of the lyric poet Pindar. 156 The reference to Pindar is peculiar; no other commentaries or treatments, ancient or modern, connect Pindar with any unusual positions on the soul. A probable lacuna in the text here makes the lines difficult to parse, and Leto may be reading them as a treatment of the question of immortality through eternal fame, often invoked in Pindar's odes for Olympic victors. Another possible source is the final section of Pindar's Pythian 8, suggestive of denying the immortality of the soul in its description of the brevity of life, calling humans "creatures of a day" or "a dream of a shadow," given fleeting existence by fame granted by the gods.¹⁵⁷ Whatever the connection to Pindar, here again Epicurus is not the Lucretian source that comes first to these readers' minds. Rather, Leto reads the *De rerum natura* more as a general reflection of classical beliefs from many authors. The question of blame, and specifically of displacing blame for unorthodox opinions from Lucretius to his Greek predecessors, will resurface as an apologetic technique favored by print editors. 158

The manuscript now in Basel belonged to the prominent Swiss jurist and humanist Bonifacius Amerbach. He taught Roman law at Basel University, and Erasmus loved him dearly and made him his heir. A flyleaf in the manuscript bears Amerbach's signature, dated 1513, but the manuscript was likely copied circa 1470. 159 As with the Bodleianus, this manuscript incorporates Leto's corrections into its text, but the scribe also reproduced a few selected notes on vocabulary, notabilia, and some touching on proto-atheist arguments, in addition to adding new, original annotations. The copyist marks cluere and parvissimum, praises the wormwood simile as an excellent comparison (egregia comparatio), and marks the customary famous men in Acheron, though writing fewer names than the Neapolitanus has in the same place.¹⁶⁰ At the end of this passage, Lucretius mocks those who fear death while spending their lives wandering in half-dead sloth and ignorance, and the Neapolitanus draws attention to the line simply as a "question" (percontatio), while the Basel manuscript hails it as a "divine pronouncement against the slothful" (divina sententia contra ignavos). 161 Even in the midst of arguments against the immortality of the soul, this note picks out a moral sentiment applicable to standard values of his day. In Book III, the Basel copy duplicates Leto's labels for the seven arguments against the immortality of the soul. 162 Yet the opinio non christiana is instead labeled "animus & anima idem" in the Basel copy, summarizing Lucretius's argument that the soul, anima, is identical with the animus, the material breath of life. 163 A few lines later the annotator summarizes the comment that the body is the physical container for this breath of life (corpus anime vas). 164 Further notes comment on how the physical spirit dissolves, but these focus more on medical questions than atomic, giving the epilepsy argument the medical label "de morbo comitiali." The scribe who created and annotated the Basel manuscript was interested in Leto's dissection of Lucretius's attack on the immortality of the soul and reproduced Leto's notes here more precisely than in most other sections of the text, but the personal alterations indicate a greater level of analysis than mere reproduction. This scholar seriously examined the most radical core of Lucretius. Still, the usual moral and medical questions commingled prominently with considerations of the soul.

A third copy of Leto's Neapolitanus, the Berlin manuscript, demonstrates the return of standard interests even in a manuscript with such an important origin. The rubricator of this manuscript reproduced not only the capitula but Leto's rubricated comments on the *opinio non christiana* and the following arguments against the immortality of the soul. ¹⁶⁶ A few other original rubricated notes, also drawn from Leto, mark discussions of the function of emotion, true and false perception, and of the creation of the world from chaos without the gods. ¹⁶⁷ The vast majority of Leto's notes, however, are not reproduced. Later annotators of the same manuscript demonstrate more standard interests. One, working in a distinctively tiny hand, left nothing but corrections, more frequent in early books than late. Another hand appears in the end of Book III, marking the popular names of famous men in Acheron. ¹⁶⁸

Marcello Adriani

In seeking fifteenth-century interest in Epicurean science, one possible atomist proposed by recent scholars has been Marcello Adriani. Laurenziana 35.32 does not contain Adriani's actual notes, but several notes propose alternate textual readings and attribute them to "Marcellus." 169

Citing frequent Lucretian passages in Adriani's surviving lectures, Alison Brown has established that he not only used atomistic theory in his works, but also used Lucretius in his lectures on poetry and rhetoric in Florence between 1494 and 1515. 170 Brown argues that Laurenziana 35.32 may have been used by a student in conjunction with Adriani's lectures, a thesis supported not only by the references to "Marcellus" but by the presence of a couple of conspicuous philosophical notes. These include a treatment of the question of whether nothing can arise from nothing, several notes centered around Lucretius's discussions of salt and evaporation, and notes elaborating Lucretius's argument that all compound things must be perishable.¹⁷¹ The presence of even fewer than a dozen philosophical notes remains extraordinary when so many manuscripts have none or one. The manuscript also contains many typical philological and vocabulary notes, and notes in Greek. The annotation is conspicuously dense in Book I and nearly absent thereafter, suggestive of a student who did not make it past the first book. The fact that the notes in Laurenziana 35,32 are so atypical, demonstrating an interest in technical aspects of atomistic Epicurean science absent even in Leto, powerfully reinforces Brown's conclusions about the exceptionality of Adriani's use of Lucretius. Adriani's tenure in the university came immediately before the 1517 ban, suggesting a connection between his work and the growing Florentine fear of Epicurean unorthodoxy.

The dominant Lucretian themes that Brown has identified in Adriani's writings are not questions of physics or atomism. In fact, they fall more under the purview of moral philosophy, but they are still not the same aspects of Epicurean moral philosophy preferred by the majority of manuscript annotators. A reader who skips or skims the atomistic discussion in Books II and III is most likely to focus on the snares of Venus in Book IV and Lucretius's discussions of the lofty value of philosophy, compatible with the more familiar Stoics and Platonists. In contrast, Adriani demonstrates an uncommon interest in several ethical ideas that are exclusively Epicurean and not similar to the Stoics or other more popular sects. Adriani uses Lucretian arguments about the utility and pleasure of poetry in his defenses of value of rhetoric. 172 He does not simply ape Lucretius's claim that poetry's honey can sweeten bitter philosophy, nor do his comments directly mimic Cicero's, Quintilian's, and Petrarch's

claims about the utility of rhetoric in stimulating virtue. Instead Adriani praises the pleasure of poetry, its *voluptas*, the core of Epicurean morality and the point at which it differs most radically from both mainstream Christianity and what many Renaissance readers saw as mainstream classical thought.

Adriani's use of Lucretian attacks on superstition are also strongly grounded in the Epicurean system.¹⁷³ It is easy to simply use Lucretius's negative depictions of pagan superstition and ritual sacrifice to paint non-Christian religions as wicked heathenism, but this is not Adriani's technique. Rather, in his attacks on Savonarola's campaigns to spread pious fear of a vengeful God, Adriani invokes the Epicurean goal of freedom from fear as the core of happiness. While dominant strains within Catholicism stigmatized pleasure and made frequent use of fear, voluptas and freedom from fear are two aspects of Epicurean moral philosophy that, as manuscript annotation confirms, were least likely to appeal to readers. They are less likely to be dismissed outright when examined in the fuller context of the Epicurean system, which justifies them physically and metaphysically, and discusses their expected civic consequences, establishing how they will not lead to the wanton chaos associated with atheism. Adriani's willingness to study atomism, and the use he made of these core Epicurean moral principles, are thus both evidence of his rare desire to understand the Epicurean philosophical system as a whole. He did not, as was the norm for manuscript readers, use Lucretius as a handbook of general information; he read it to learn about this specific classical sect.

Machiavelli

The notes of Adriani's colleague and possible pupil Machiavelli are, like many aspects of his work, conspicuously exceptional. Machiavelli's manuscript, which is entirely in his own hand, was likely completed before 1500 and certainly before 1512. It is based largely on the 1495 print edition, incorporating some readings from an unknown source and some of the famous corrections made by the Greek émigré Michele Marullo Tarcaniota.¹⁷⁴ Marullo's corrections circulated in several different versions in the Renaissance and were widely used by scholars and

publishers, exerting a huge influence on the early form of the text.¹⁷⁵ The manuscript has very few poetic annotations, no notabilia, and very few marginal corrections, because he integrated the corrections as he copied. Machiavelli omits the inauthentic late classical capitula, common in manuscripts and early editions.¹⁷⁶ Then, in Book II, he adds roughly twenty brief summary notes of his own, some based on the old capitula and some original.¹⁷⁷ These notes focus on the passages that explain how an atomistic universe would function, including the atomic swerve and questions of free will, as well as the creation of the world and the motions of atoms in void.¹⁷⁸ This is precisely the section of the text that received the least attention from the other annotators.

MACHIAVELLI'S MARGINAL ANNOTATION IN BOOK II

- fol. 20° (II 10) "recti" (of what is right)179
- fol. 21^v (II 62) "De motu principiorum" (on the motion of fundamental elements)
- fol. 22^v (II 112) "simulacrum principiorum" (a visible demonstration of fundamental elements)¹⁸⁰
- fol. 23^r (II 142) "de celeritate motus" (on the speed of motion)181
- fol. 23^r (II 144) "a[. . .]"182
- fol. 23^v (lacuna before II 165) "nil fieri consilio" (nothing comes about by intention)¹⁸³
- fol. 24^r (II 184) "nil sursum ferri propria natura" (nothing is carried upward by its nature)¹⁸⁴
- fol. 24 $^{\rm v}$ (II 218) "[quoniam] declinare principia" (because fundamental elements swerve) $^{\rm 185}$
- fol. 25^r (II 252) "motum varium esse et ex eo nos liberam habere mentem" (that motion is variable, and from this we have free will) (see Figures 15–16)
- fol. 25° (II 285) "in seminibus esse pondus plagas et clinamen" (in the seeds there are weight, thrust, and swerve)
- fol. 26^r (II 294) "nil esse suo densius aut rarius principio" (nothing is denser or thinner by its fundamental nature)
- fol. 26° (II 333) "de figura atomorum" (on the shapes of atoms) 186
- fol. 26° (II 341) "variam esse figuram principiorum" (the shapes of fundamental elements are variable)

- fol. 28^r (II 426) "semina quae titillare sensu" (seeds that tickle as they are sensed)
- fol. 29^r (II 472) "mare exquibus consistet principius" (of what fundamental elements the sea is composed)
- fol. 29^r (II 480) "in uno principio non posse esse plures formas [id est] infinitas" (one fundamental element cannot have multiple shapes, that is infinite shapes)
- fol. 30^r (II 516) "in eodem principio frigus tepor & calor esse possunt" (cold, warmth, and heat can exist in the same element)¹⁸⁷
- fol. 30° (II 522) "principia cuiuslibet formae esse infinita" (the fundamental elements are infinite, whatever their forms)
- fol. 31^r (II 586) "unum quoque ex varie principiorum genere constare" (that each thing consists of multiple types of fundamental elements)
- fol. 31^v (II 600) "de genitrice deorum" (on the progenitrix of the gods)¹⁸⁸
- fol. 32^r (II 647) "deos non curare mortalia" (that the gods do not care about mortal things)
- fol. 32^v (II 657) "vocamen" (term)189

These notes indicate that, unique among our annotators, Machiavelli had the technical details of Epicurean physics as a special interest when approaching the text. The attributes and variety of atoms, heat and cold, the swerve and free will, these are the stars of the text for him, instead of Virgil's imitations or the names of famous men. His mastery of the classics still shows through. For example, his choice to use the unusual term mortalia for the "mortal things" to which gods are indifferent invokes Aeneas's famous description of mortal tears and cares that touch the mind in the Aeneid: lacrimae rerum et mentem mortalia tangent, elegantly contrasting the active, strife-wracked gods and heroes of Homer and Virgil with Lucretian gods whose minds cannot be touched. 190 The fact that he chooses to invoke a line with such a powerful tactile sense shows that he is thinking about Lucretius's arguments for the tactile nature of thought, emotion, and sensation, so his mind has linked classic to classic because they share, not vocabulary or phrases, but ideas. Other annotators who marked this passage labeled it "divinia" or "de divinis,"

noting its topic, the gods; Machiavelli has homed in directly on its radical tactile model of sensation and its proto-atheist denial of divine participation in the earthly world.¹⁹¹

Another interesting word choice is Machiavelli's comment at (II 522): "principia cuiuslibet formae esse infinita" (the fundamental elements are infinite, whatever their forms). Cuiuslibet, not present in the text, could simply be intended to say that each type of atom, whatever its shape, is in infinite supply, as the text states. But the powerful vagueness of Machiavelli's cuiuslibet suggests something broader, that this logical proof stands whether these principia are spheres or spiky rods, atoms or something else entirely. This is materialist logic applicable beyond atomism. It also smacks of provisional belief. Machiavelli is willing to posit atoms as true for the purpose of this logical exercise, even though their existence is unproved, in order to come to a useful conclusion. It is hard to imagine Aquinas and his scholastics, or Ficino for that matter, being willing to build upon a foundation that is mere hypothesis, not proved by logic, Revelation, or authority. Epicurus, Lucretius, and, perhaps here, Machiavelli are willing to build on something that does not claim to be Truth or even truth; a century later, so will Frances Bacon.

Machiavelli left few marks in any other part of the book, except for a note on his own unusual word choice in his reading of a line in Book VI on magnets, and a large mark beside the wormwood simile.¹⁹² His note here, "Com[paratio]," draws attention to this line as an interesting literary comparison, and the same type of mark used to draw attention to this and other powerful poetic similes in many copies, manuscript and print. It is even possible that Machiavelli duplicated the note from Marullo's notes as he transcribed, but the fact that he chose to include this note alone, where numerous comments on poetic language are the norm in manuscripts and print annotation, still demonstrates that this drew his attention uniquely among the poetic passages. The wormwood comparison is particularly Machiavellian in its assertion that one can do good through careful administration of constructive harm, and in the subtle moral distinction it draws in saying that the child is deceived but not betrayed. It is striking too that the only poetic passage Machiavelli chose to mark was this, whose statement that rhetoric can be used to trick people into accepting unorthodoxy was so problematic for those

defenders of the classics who liked to claim that the ancients could never threaten Christianity.

Machiavelli's exceptional interest in the atomism in Book II is in direct opposition to the patterns in every other manuscript, even Leto's, with the sole exception of the Laurentianus possibly used by another of Adriani's students. Yet even the Laurentianus contains all the typical categories of notes with only a few atomist ones, whereas Machiavelli's focus heavily, almost exclusively, on atomism. The fact that Machiavelli was exceptional for his day should surprise no one, but it is still striking that he had such a distinctive interest in the cosmological details of Epicurean mechanical science, one of the elements of Epicureanism most closely tied to its proto-atheist theses and deeply connected to the advent of modern scientific thought and secularization. Machiavelli does not annotate the text's other proto-atheist arguments, such as the Book III arguments against the immortality of the soul that so caught Leto's attention. He also does not annotate Lucretius's many discussions of specific natural phenomena, such as weather or evaporation, concentrated in Books V and VI. His interests lie, not in the practical details of physics, but in the most basic fundamentals of mechanistic science, Lucretius's description of a world whose day-to-day functions do not depend upon divine participation.

This is not to suggest that we should relabel Machiavelli a natural philosopher. Machiavelli is primarily known today, very rightly, for his radical contributions to moral philosophy. It may seem surprising, then, that Machavelli does not annotate the sections of the *De rerum natura* that focus on Epicurean moral philosophy, which 59 percent of readers marked. This indicates that Machiavelli was not particularly interested in the Epicurean views on love, virtue, and vice, which were, though radical by Christian standards of his day, considerably less radical than the consequentialist ethics Machiavelli was himself in the process of developing. Rather, Machiavelli the Radical Moral Philosopher is present in his exceptional interest in Epicurean cosmology, whose materialism and functionless gods enable one to divorce moral philosophy from divine concerns. He demonstrated particular interest in the arguments against deterministic providence, and in the swerve, centering on the question of how to make room for human free will in a materialistic universe.¹⁹³

Machiavelli's rare willingness, paralleling Adriani's, to systematically examine and understand atomistic mechanical science let him consider aspects of Epicurean moral philosophy that those peers who were unwilling to consider atomism did not access. While other readers absorbed Lucretius's criticisms of ambition or indulgent grief, which could as easily have come from a Stoic, Machiavelli instead dissected his mechanistic physics, which enables a secularized ethics. He then employed such a divorce of material from divine concerns in his pioneering utilitarian ethics, which evaluates actions based on their material consequences rather than their adherence to the laws of Nature's God. Adriani was willing to take the Epicurean system seriously enough to make use of its praise of poetry's pleasure and its attacks on superstitious *religio*, but these aspects of Lucretius are much less directly connected to the secularizing mechanistic cosmology than are the aspects used by Machiavelli.¹⁹⁴

We have no direct evidence that Machiavelli was an atomist,195 nor do I intend this as a contribution to the tired debate over whether or not Machiavelli was a secret atheist. The important fact is simply that Machiavelli was uniquely interested in giving serious consideration to a physical system that removes divine governance from the world. He alone among these annotators had language as a secondary interest, as he concentrated instead on evaluating Epicurean models of creation and free will (much as he would later go on to evaluate political choices) as self-contained questions independent of Providence. When he annotated his Lucretius in the 1490s or early 1500s, he was thus already unusually open to this model that reduced the participation of God in worldly affairs and enabled a more human-centered universe. This new, mechanistic universe is as much deist as atheist, because it does not attack God's existence in any way, but simply removes divine participation from earthly affairs. It is, however, proto-atheist in precisely the same way that Machiavelli's utilitarian ethics could be termed proto-atheist: it is a system equally applicable to a world with or without God.

Machiavelli may have been an atomist, but he does not have to have been one for Lucretius to have been a key enabler of his revolutionary ethics. The skeptical elements of Epicurean argumentation come into play here. Lucretius offers three potential models for why the lengths of day and night may change, saying that he cannot prove which, if any, is correct, but that having a theory, even an unproven one, still means the reader does not have to believe in Helios. 196 Lucretius offers a potential model for how nature might function without divine governance; whether or not Machiavelli believed that this model was correct, simply possessing the theory could, in good Lucretian style, liberate him from the necessity of believing in Providence. A world without Providence required wholly new models of physics and of politics, so new sciences, natural and political, could be born to explore it.

Epicureanism was feared in the Renaissance because of concern that a model of Nature without Providence might undermine God's centrality in the universe and thereby His necessity, opening the doors to atheism. That dangerous potential is proved by the fact that Epicurean atomism was so unusually interesting to Machiavelli, whose revolutionary thisworldly, human-centered, consequentialist ethics would earn him titles like "Arch-Heretic" and "Destroyer of Italy" on later lists of famous atheists. The fact that Machiavelli's reaction to Lucretius was so different from that of the average Renaissance reader proves how radical were both Lucretius's pseudo-godless Nature and the one reader interested enough to make it his primary focus in reading. The first systematic proto-atheist scientific model Europe had seen in centuries resonated uniquely with the author of the first systematic proto-atheist moral philosophy that Europe had seen at all.

I do not intend this fresh evidence for Machaivelli's unique mindset to feed arguments that we should not consider him a humanist. His passionate love for the classics is well documented.¹⁹⁷ He would not have spent the many hours he did painstakingly copying and correcting Lucretius if he had not shared the passion for classical language and literature that united Poggio, Valla, and Leto. Nor would he have given this same attention to the copy of Terence's *Eunuchus* he transcribed after Lucretius into the same little volume.¹⁹⁸ The *Eunuchus* is a remarkable companion for Lucretius, because it represents an even greater challenge than Lucretius to Petrarch's concept of a virtuous antiquity. The play is distinguished from the rest of Roman comedy by the unique feature of a violent rape occurring during the events of the play, a crime that the perpetrator boasts of at distressing length, and is fiercely criticized for, but profits from, securing a profitable marriage.¹⁹⁹ Machiavelli shared Petrarch's

sense that Florence and Italy were in crisis, and that the solution to the danger was to be found in the study of the classics. He differed in how he used them. A century of attempting to heal Italy by surrounding its princes and patriarchs with Plato and Cicero, hoping they would absorb classical virtue by osmosis, had produced instead the cowardly flight of Piero de Medici and the bloodshed that surrounded the Borgia papacy. Machiavelli still looked to the classics, but he did not look to them for moral maxims and excerptable acts of heroism. He looked instead at systems, outcomes, consequences. The system of practical morality that led the families in the *Eunuchus* to use a crime to reach an advantageous outcome echoes in *The Mandrake*; the system of materialist physics that led Lucretius to divorce the gods from ethics echoes in *The Prince*.

"Absurditas in sententia"

While Pomponio Leto's reaction to Lucretius's unchristian denial of the soul gives us one clear snapshot of first contact, another striking judgment survives in the comment "absurditas in sententia" (absurd in my opinion) written beside the description of the atomic swerve at II 244 in the manuscript now at Munich (Figure 22), which once belonged to Piero Vettori. 200 Alison Brown has pointed out the similarity between this comment and later dismissals of the swerve in Lambin's commentary and Montaigne's annotations.²⁰¹ This note's curt dismissal of a keystone of Epicurean physics was, like Leto's *opinio non christiana*, shared enough to be reproduced verbatim by a second reader, since it also appears in an exceptional copy of the 1495 edition, now in Paris, which contains annotation in at least three hands. Though this one comment in the Munich manuscript, and two bringing attention to the capitulum that traditionally labels the discussion of vacuum ("corpus et inane") and a note on the fact that Lucretius argues there is nothing else ("tertium naturam non esse"), cannot be said to constitute extensive attention to atomic issues, for the period they still represent an extraordinary amount of interest. 202

These two copies have been examined primarily in the context of efforts to trace the circulation of Marullo's corrections. ²⁰³ They share readings associated with Marullo, and Masson suggested that one of the three hands in the Paris incunable might be Marullo himself, ²⁰⁴ but both copies

also have considerable independent annotation, and their annotations are not in the same hand. Vettori's manuscript in Munich appears to have been corrected by the same person who annotated Laur. 35.25, ²⁰⁵ a volume filled with corrections, notabilia, vocabulary notes, and occasional notes in Greek. The three copies share many readings and some substantive notes—for example, one at II 828 discussing Catullus's use of *pupulla*. ²⁰⁶ They also share several corrections and other notes with Ambros. P. 19 Sup. ²⁰⁷ The relationship between these manuscripts and the incunable is an important puzzle that merits further investigation. The presence of the judgment "absurditas in sententia" in both Paris and Munich certainly justifies an examination of the content of these annotations in the light of the patterns in other manuscripts.

The manuscript in Munich contains much that is familiar: *cluere, parvissima*, Ennius, Empedocles, Virgil, famous men in Acheron, Greek (including the pet names for girlfriends), and general philological corrections, notabilia, and vocabulary.²⁰⁸ Annotation on the purposes for different steps in the rites of Cybele is extensive,²⁰⁹ and it shares notes on Heraclitus (referencing Diogenes Laertius) and on the unusual scansion of "tenuis" at II 232 with its close relatives.²¹⁰ The frequency of annotation is largely steady throughout the text, including Books II and III, with more notabilia and bold headings in Books I and V than in the rest of the text. As with Leto's Neapolitanus, literary questions continue to dominate. References to scansion and Virgil outnumber notes on technical content, and in Book VI the discussion of magnets merits the bold heading "MAGNES," but so does the Muse "CALLIOPE," whose name is also surrounded by notes on the elegant vocabulary used to describe her.²¹¹

The fascinating Paris incunable contains at least three hands, of which two mark the pages heavily throughout, correcting the text minutely, suggesting hundreds of philological changes, discussing scansion, and making comparisons to Virgil, Homer, Ovid, Horace, and Catullus.²¹² Multiple hands mark notabilia, add notes in Greek, including the pet names for girlfriends,²¹³ and insert missing lines. An earlier, tighter hand makes specific references to readings by Pomponio Leto (writing "Pomp."),²¹⁴ while a later, larger hand, which sometimes corrects the first, introduces other readings (sometimes labeled "Marul."). "Absurditas in sententia" appears to be in the earlier, which used Leto's

corrections. Both hands, but mainly the second, also copy vocabulary terms into the margins throughout the text. The terms selected are diverse, and many are clearly marked because they are either rare or, in the text, corrupt and thus seemingly new, but they do concentrate somewhat on vocabulary that might be useful for describing questions of natural philosophy. Verbs and adjectives usable for technical descriptions are often chosen: variantia (variety), 215 puncto tempore (a moment in time), 216 generascunt (come into being), 217 minutatim (by small degrees), 218 inanitus (emptiness);²¹⁹ as well as biological terms, such as vulturii (vultures)²²⁰ and pennipotens (strong-winged);221 and also more general terms, such as rusa vela (colorful awnings), 222 and, from the wormwood passage, ludificetur (deceived). 223 Brackets (hard to connect with certainty to any specific hand) draw attention to several popular passages, including the vivid description of children shivering in the dark, 224 the rites of Cybele, 225 the cow seeking her calf who has been sacrificed, 226 and Lucretius's invocation of the Muses. 227 A large manuculum draws attention to a discussion of how hounds track by scent, near the discussion of corpus and inane, which is itself specially highlighted by the earlier annotator, who writes not the simple capitulum "corpus et inane" but with "in principia" in the margin and two lines extending down from it pointing to "corpus" and "inane," a true and thoughtful demonstration of Lucretius's model of substance.²²⁸ The second annotator too shows some distinct interest in physical questions, commenting on Lucretius's description of how wind beats on things gradually, 229 and how at a distance separate mountains seem to be one.230 Brackets also mark a few technical discussions, 231 such as the arguments that atoms have no color, 232 that there must be an indivible smallest unit of matter or the process of breaking would break everything into infinitely small pieces, 233 and the story, marked by eight manuscript annotators, including Machiavelli, that lions fear the sight of a cock because they can see some painful thing humans cannot, which Lucretius uses as part of his arguments for weak empircism to establish that the senses are far from direct tools for understanding nature.234 But they equally often mark Virgilian passages and strong similes.

Much like Leto's "opinio non christiana," this "absurditas in sententia" note demonstrates that at least two annotators did read the details of the atomic physics closely enough to specifically consider this part, and to reject it. The theory of matter and vacuum, meanwhile, was also seriously considered, and perhaps not rejected. These readers are not Epicureans—they cannot be without the swerve—but they were interested enough in atoms to dismiss them in an informed way. It remains true, however, that hundreds of notes were devoted to philology and, in the case of the second annotator, dozens to vocabulary, while less than ten address these systematic questions. It is also true that users of the other manuscripts associated with these, and later scholars who used the Marullo readings transmitted by these two copies, did not duplicate the analytic notes when they studied the philological ones.

Incunables

As the Paris volume shows, patterns of manuscript annotation hold broadly true for the printed copies produced in the same period. Among thirty sample copies of the first four editions, the same general interests in vocabulary, notabilia, and natural philosophy hold true, while atomistic annotation remains scarce. Annotation in Books II and III remains less common than elsewhere, and philological correction still constitutes the vast majority of annotation. Exceptions are few, but worthy of discussion.

One of the three surviving copies of the 1471–1473 editio princeps contains only one note, a large marginal cross marking III 544–547, where Lucretius argues that the soul must be mortal because it grows dull slowly. One 1495 copy, in Milan, containing hundreds of brackets on many typical passages, marks the arguments that the gods dwell apart and that creation was random, but among the proofs of the mortality of the soul in Book III it concentrates again on epilepsy and moral questions. Another 1495 copy, in Venice, marks vocabulary, notabilia, and numerous references to Virgil and Aulus Gellius; in three short notes on physics the annotator mentions Epicurus, but he spends more ink discussing Pliny, Democritus, Heraclitus, and again questions of morality and emotion. The Epicurean arguments on which this annotator concentrates are attacks on pagan religious beliefs. Discussions of the soul in Book III are labeled "contra superstitiosos," against the superstitious,

not against religion or Christianity, and the annotations concentrate on the description of Acheron.²³⁸ One copy of the 1486 edition at the British Library stands out, with bracketing in Books II and III focused on first principles and discussions of sensation, but these notes still concentrate on summaries of Heraclitus and Anaxagoras, discussions of pleasure, grief, and pagan rituals, and mark the portion of the discussion of primitivism that deals with the source of moral disorder, rather than natural selection or the secular origins of civilization.²³⁹

Finally, in one copy of the much-improved 1500 Aldine edition preserved at Oxford, a pair of lengthy notes on atoms and vacuum summarize genuine details of atomic theory, though concentrating on Democritus and Aristotle rather than Epicurus.²⁴⁰ A note at the beginning of the same volume cites Cicero's characterizations of Epicurus's attacks on religion in the De natura deorum. 241 Records of the volume's provenance suggest that it once belonged to one of Machiavelli's associates, the Florentine scholar and republican political theorist Donato Giannotti.²⁴² The hand that annotated it cannot confirmed to be Giannotti's, because it does not resemble surviving samples of Giannotti's writing very closely, though it bears more similarities to his hand as preserved in letters dating to before 1540.243 The presence of these extraordinary notes in a copy of Lucretius potentially connected with another prominent Florentine, and an associate of Machiavelli, lends further evidence to the presence of a genuine center of Lucretian studies in Florence, in this case in the early sixteenth century. Yet the focus on Democritus and Aristotle shows again that a student of Lucretius is not necessarily a student primarily of Epicureanism. Whoever authored them, the notes in this incunable cannot have been made before the manuscript period was approaching its end. For annotation that can be dated with certainty to the manuscript period, the moral and philological focus remains standard.

Conclusion: A Manuscript Reader's Agenda

Manuscript annotation reveals the characteristic agenda that governed how most humanists read recovered classics in the late fifteenth and early sixteenth centuries. The majority of readers did not come to the *De rerum natura* primarily in order to evaluate Lucretius's atomism as a

scientific theory, nor to examine Epicureanism systematically. The absence of evidence does not by itself prove anything, but the presence of extensive annotation in sections of the book devoted to moral philosophy and cultural information about the ancient world does prove that far more of the average reader's energy went into these concerns than into atomism. Florence, with Machiavelli and Adriani, was a center for a few rare readers genuinely interested in atomism, and Pomponio Leto's circle was a second. Yet even among the Florentine and Roman copies, for most readers the process of reading Lucretius did not center on grappling with the challenges he posed to Christianity. Figures like Poliziano and Panormita, who used Lucretian images and examined Epicurean moral questions in their own writings yet left only philological annotation in their copies of the text itself, are perfect demonstrations of how philological concerns dominated the energy directed toward Lucretius even by serious scholars. 244 For every one scholar who did, like Machiavelli and Adriani, leave evidence of deep engagement with Lucretius's radical ideas, more than twenty others read the same text for substantially different reasons. In other words, Lucretius had radical readers in the Renaissance, but he also had a substantially larger community of nonradical readers, and their more orthodox interest in the poem played an enormous part in its preservation and circulation.

If we are not Leto or Machiavelli, but an average fifteenth-century reader hearing that the *De rerum natura* praised by Ovid and Cicero has returned after so many centuries, we open the book above all in order to help restore this mangled member of the Latin canon. The language itself, and the inherent value of a work from antiquity, is far more important to us than the poem's messages. Secondary benefits of reading include improving our mastery of Latin and Greek and expanding our knowledge of the ancient world. The most valuable aspect of the poem is that it preserves early Latin and dates from a period particularly romanticized by lovers of Cicero. Parallels to Virgil, Ovid, and other authors are of interest, as are questions of natural philosophy, particularly medicine, but in scientific matters Lucretius is read less as a representative of the Epicurean school than as a reflection of a variety of equally important early thinkers: Pythagoras, Heraclitus, Democritus, and Epicurus, who is one among many. Epicurus's atoms commixing and swerving in

the void are probably not worth marking even with a simple bracket, nor are his radical accounts of the mortal soul and the limited role of the gods. The center of the text is Lucretius's advice on how to live a happy, virtuous life by avoiding the snares of fear, ignorance, and love. Moral philosophy is the valuable part of the poem's message, especially those elements that are not wedded to the Epicurean system but are compatible with the broader, syncretic idea of classical wisdom that so dominated many humanists' idealized image of the ancient world.

I do not believe that those readers who did not annotate the poem's proto-atheist arguments were excited by this content but left the passages blank deliberately out of fear of being accused of atheism if their notes were found. Rather, I believe that the preexisting priorities that brought readers to Lucretius made it easy for the eye and mind to skim over sections unrelated to their primary reading motives. In other words, readers' preexisting interests in language and culture made it possible, and indeed common—though certainly not universal—for a humanist to read the De rerum natura from cover to cover without directing any substantial scholarly energy toward its more radical content. Every modern scholar has had the experience of reading a text with an agenda in mind, our eyes skimming through in search of particular names, themes, or topics. After such reading, we come away from a text with a very distinct memory of the relevant sections, while the rest blurs. Marking favorite sections further aids and focuses, and thus distorts, memory. The numerous readers who marked moral philosophy and notabilia in Lucretius wanted to remember them; the conspicuous few who marked the atoms and the unchristian opinions wanted to remember something different, and wanted it before they ever opened Lucretius's covers. These few are not the norm.

The moral focus that characterizes the majority of readers is not exclusive to Lucretius, nor are these larger categories such as philological notes and notabilia. Craig Kallendorf in his work on classroom notes in early editions of Virgil was struck by the frequency of notes on moral questions, which he too saw as conspicuously different from other common notes that focused, as they do in Lucretius, on vocabulary, grammar, mythology, and general subjects of textual criticism.²⁴⁵ The majority of Renaissance readers read Virgil much as they read Lucretius,

primarily for moral philosophy and historical information, and above all to improve their skill with Latin.²⁴⁶

Of course, someone who is looking for them can find Epicurean hints in Virgil as well. Every editor who wrote an introduction for an edition of Lucretius stressed the connection with Virgil, and readers noticed the lines Virgil copied from Lucretius. Yet even *Georgics* 490, "Felix qui potuit rerum cognoscere causas," in which Virgil echoes the central Epicurean eudaimonist tenet that knowledge of the nature of things will lead to happiness, does not connect directly to materialism or the six protoatheist elements of Epicureanism. Plato, Aristotle, and Thomas Aquinas would all heartily agree that knowledge of causes—especially the First Cause—leads to happiness. The idea by itself is not revolutionary, and in Virgil, as in those isolated subsections of Lucretius that annotators favored, it could easily be read as orthodox.

In one sense this reading agenda values form over content, because it focuses on improving the reader's skill with Latin. Yet in Renaissance eyes form and content were not separable. Good, Virtue, Truth, and Beauty were fundamentally the same, as Plato, Aristotle, Cicero, Aquinas, and Petrarch all agreed. The scholars who labored to restore these classics hoped to use them to found a new educational system that would produce virtuous men, who would imbibe from ancient authors the loyalty, nobility, courage, and patriotism that had made ancient Rome strong, and without which the modern world was wracked by corruption, ambition, and cowardly self-interest. This humanism did not value learning for learning's sake alone but had a very practical and political agenda, to save and repair Europe through the education of its elite. The beautiful language of the classics was the font of moral improvement. The great industry with which scholars corrected Lucretius's verses and marked his valuable vocabulary proves the direct application of the humanist claim that the purpose of studying the ancients was to arm authors and orators to inspire virtue in others.

There were Lucretian radicals in the fifteenth century, yet important as these figures were to Lucretius's reception, his more orthodox audience still outnumbered radical readers by more than twenty to one. For the numerous scholars who chose to read primarily because of the language, this reading agenda acted as a filter that made it possible for Lucretius's

atomism to have little to no persuasive effect even as they read it. This explains why the broad proliferation of Lucretian language and imagery in late fifteenth-century poetry, art, and moral conversations was not accompanied by any correspondingly broad entry of atomism into scientific conversations. For ancient authors recovered in the fifteenth century, moral philosophy was a far more penetrable arena than science.²⁴⁷ Yet the substantial community of less radical fifteenth-century readers played an enormous part in the revival of Lucretius and his radical ideas, because their interest and industry led them to exert enormous efforts reading, repairing, and circulating the poem. Humanists' love of Latin drove numerous orthodox scholars to defend this capsule of radical heterodoxy in a period when genuine radicals were very rare. It was thanks primarily to this larger orthodox readership that the De rerum natura was copied more than fifty times in the manuscript period and printed so early, positioning it in numerous libraries before the sixteenth century began. If by the seventeenth century Lucretian atomism and mechanical models of nature penetrated more seriously into scientific discourse, this increased interest in heterodox science was enabled by a radical transformation of the common reading agenda, which can be traced over the course of the sixteenth century.

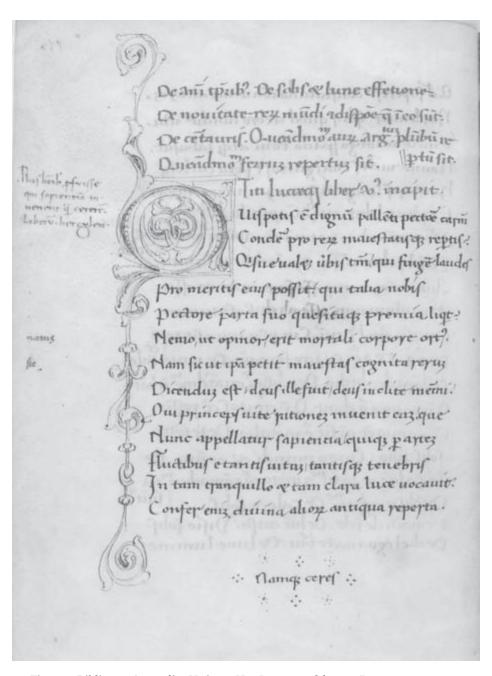


Figure 1. Biblioteca Apostolica Vaticana Vat. Lat. 3276, fol. 132°. *De rerum natura* V, showing rubricated capitula and inexpensive ink decoration. © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

A+ flaorans oduofa loquanula lampadui fir I foliat rome mondium fit num unce mount overment karidine uo - iam moria triffi padim STANFOR Samula fylerad ac jarova - labroja phylena Cetera de genere hor longit + id dicere conex S ed tamen ejeo um quanto un oris honore Cu upmeres membre flux ommibus exposition Homor duet funt nampe has fine werm and Hempe Andem fant & famul face onthe tions & minum tery fe juffer odorebuf wid of famula longe fuguant firma rathment At lachrimas exclusies amator limina fire Floribul & feetis operat poftisa superbox Unget amaranna of forebuf myer deula fion Quem fram miffum wemetern offender anna Vina modo causas abrundi querat honestas El medurata diu radit alre fumpia querela Sculering ibs fedameset ecibiliffe good illi plus under a morale convedere por Necesenerel notmal hor fallet quo mayes mile Ommed furnopere horause post cened redant Quos vermere wolunt africtoff effen amove (ne complexe une copie en copore inner

Figure 2. Biblioteca Apostolica Vaticana Ott. Lat. 1954, fol. 98^r. *De rerum natura* IV 1165–1187, with anonymous Greek annotation providing the equivalents of the transliterated nicknames for lovers. © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

Lumme adempto atas morebado copore fugit. Suprader belli fulmen cartaging horpor Offa dedit torre pinde ac funt ifin et! Nede repertore doctrinay atque lepoy Adde helicomadus comitefique un homes? Sceptin potituf oades aly Copit gete oft. Denies democretus posto nativa vetustas admonint memoref motuf Laguefce intif. Spote fina leto caput obming obtulit upe. Ipperprairuf obijt deaufo lumine uite Quegenuf humanus igenio fraut toil Reprenent Stella exortugut acreuffol Tu no duburaby sindignabere obire; - Nortua au mita epperar umo atquindeti! Qui fonno partes maiores congerifeui! Wuglanf fterufinet forma cerne ceffaf? Solicitazes gerif caffa formidine metes of er peperire potef ubiga fit fepe maticus

Figure 3. Biblioteca Apostolica Vaticana Vat. Lat. 3276, fol. 94°. *De rerum natura* III 1033–1050, with marginal annotation marking the names of famous men in the underworld. © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

De anima. Ignoratením quæ sit natura animai. Nata lit:an contra nascentibus infinuetur. Et simul intereat nobiscum morte dirempra An tenebras orci uilat uaftalog lacunas. An pecudes alias diuinitus infinuet fe. Ennius ut noster cecinit: qui primus Amæno Detulit exlicone perenni fronde coronam: Per gentis Italas hominu quæ clara clueret. Et si præterea tamen esse Acherusia templa. Ennius aternis exponit uerlibus adens Q uo neque permanent anima neque corpora nostra, grantente pentrent Sed quædam simulachra modis pallentia miris. Homerus Vnde sibi exortam semper florentis Homeri Commemorar spetiem.lachrimas effundere salsas Copifle rerum naturam expandere dictis. Q ua propter bene cum superis de rebus habenda Nobis est ratio solis lunæq meatus Q ua fiant ratione: & qua ui queque gerantur In terris: tum cum primus ratione fagaci. Vnde anima arque animi constet natura uidend Et quæres nobis uigilantibus obuia mentes Terrificet morbo affectis fomnog fepultis Cernere ut uideamur eos audireg; coram Morte obita: quorum tellus ampectitur offa. Nec me animio fallit graiorum obscura reperta Difficile inlustrare latinis uerlibus effe. Multa nouis uerbis prefertim qum lit agendum Propter egestatem lingux: & rerum nouitatem: Sed tua me uirtus tamen & sperata uoluptas

Figure 4. British Library I. A. 23564 (1495), fol. aiiii^r. *De rerum natura* III 112–140, with Girolamo Borgia's transcription of Pontano's notes, marking the names of famous men in the underworld. © The British Library Board. All rights reserved.

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Figure 5. Piacenza Landi Cod. 33, fol. 51^r. Illustration depicting the *ostomachion* of Archimedes. © 2013 Biblioteca Comunale Passerini-Landi.

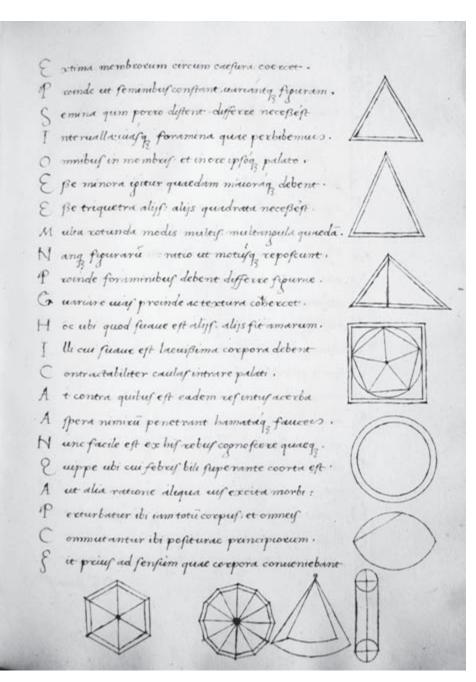


Figure 6. Piacenza Landi Cod. 33, fol. 100^r. Illustration depicting possible shapes of atoms, accompanying *De rerum natura* IV 647–672. © 2013 Biblioteca Comunale Passerini-Landi.

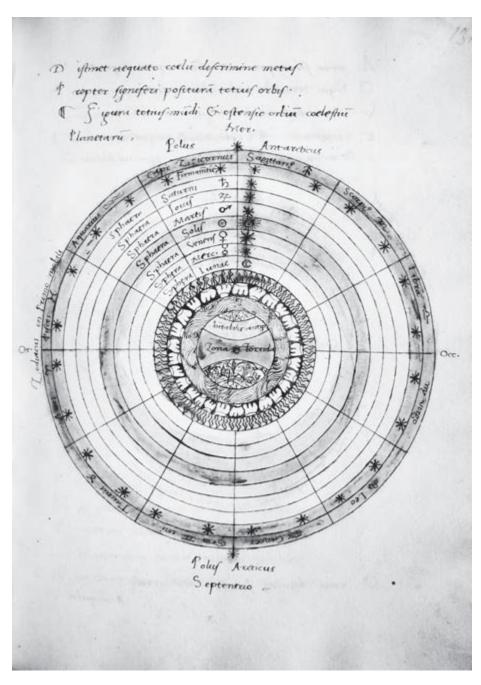


Figure 7. Piacenza Landi Cod. 33, fol. 131^r. The zodiac in alignment, illustrating *De rerum natura* V 691–704, labeled "Figura totius mundi et ostensio orbito coelestium planetarum." © 2013 Biblioteca Comunale Passerini-Landi.

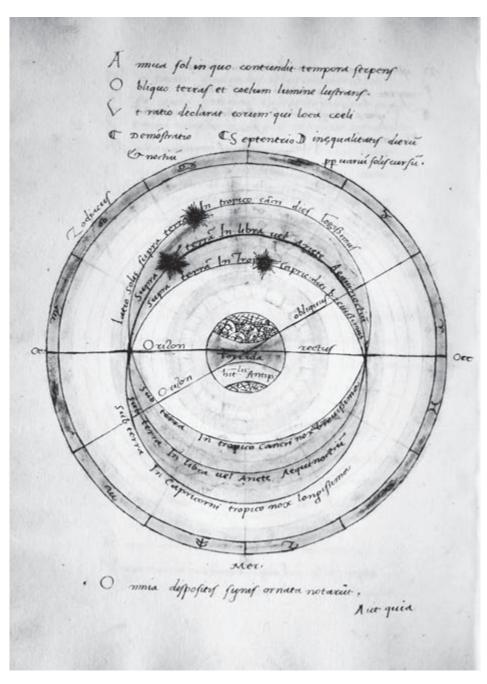


Figure 8. Piacenza Landi Cod. 33, fol. 131°. Illustration depicting the sun's orbit with variable center, illustrating *De rerum natura* V 691–704, labeled "Demonstratio inequalitatis dierum et noctium propter varium solis cursum." © 2013 Biblioteca Comunale Passerini-Landi.

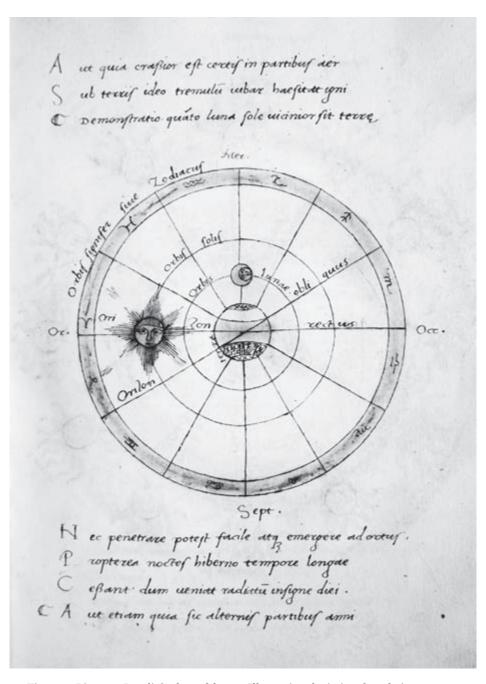


Figure 9. Piacenza Landi Cod. 33, fol. 132^r. Illustration depicting the relative positions of sun, moon, and Earth, illustrating *De rerum natura* V 691–704, labeled "Demonstratio quanto luna vicinior sit terrae." © 2013 Biblioteca Comunale Passerini-Landi.

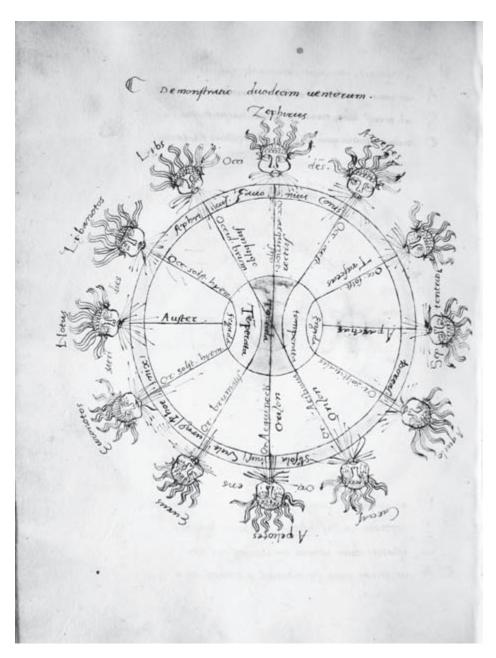


Figure 10. Piacenza Landi Cod. 33, fol. 132 $^{\rm v}$. The twelve winds, illustrating *De rerum natura* V 691–704, labeled "Demonstratio duodecim ventorum." © 2013 Biblioteca Comunale Passerini-Landi.

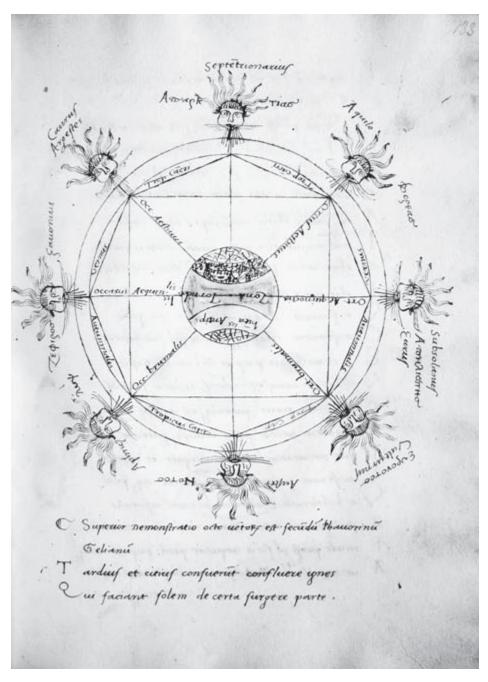


Figure 11. Piacenza Landi Cod. 33, fol. 133^r. Illustration depicting the eight wind theory, labeled "Superior demonstratio octo ventorum est secundum Phavorinum Gelianum." © 2013 Biblioteca Comunale Passerini-Landi.

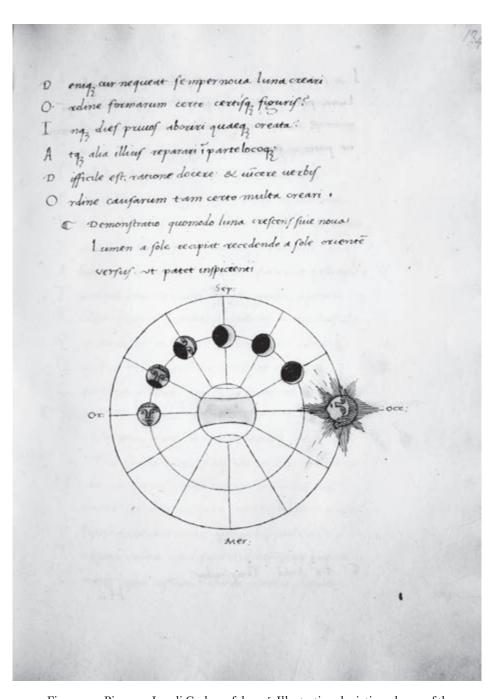


Figure 12. Piacenza Landi Cod. 33, fol. 134^r. Illustration depicting phases of the moon, labeled "Demonstratio quomodo luna crescens sive nova lumen a sole recipiat recedendo a sole orientem versus. ut patet inspicienti." © 2013 Biblioteca Comunale Passerini-Landi.

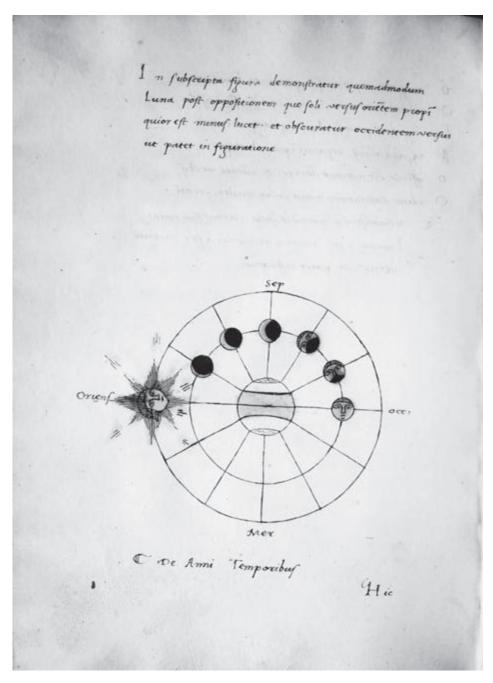


Figure 13. Piacenza Landi Cod. 33, fol. 134°. Illustration depicting phases of the moon, labeled "De Anni Temporibus." © 2013 Biblioteca Comunale Passerini-Landi.

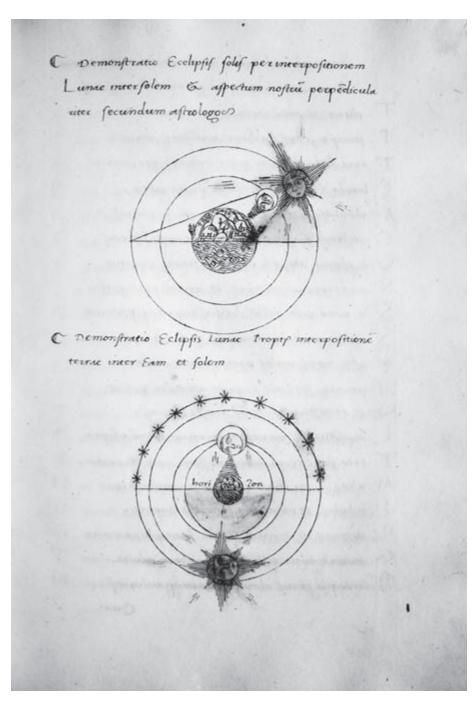


Figure 14. Piacenza Landi Cod. 33, fol. 136°. Illustration depicting eclipses, illustrating $De\ rerum\ natura\ V$ 771. © 2013 Biblioteca Comunale Passerini-Landi.

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Figure 15. Biblioteca Apostolica Vaticana Ross. Lat. 884, fol. 25^r. Text of *De rerum natura* in the hand of Niccolo Machiavelli, with his marginal note marking the description of the atomic swerve "motum varium esse et ex eo nos liberam habere mentem" (that motion is variable, and from this we have free will). © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

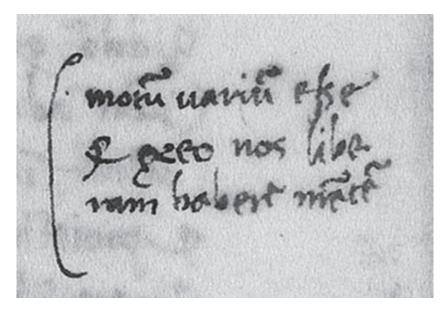


Figure 16. Detail of Machiavelli's note on Biblioteca Apostolica Vaticana Ross. Lat. 884, fol. 25^r. © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

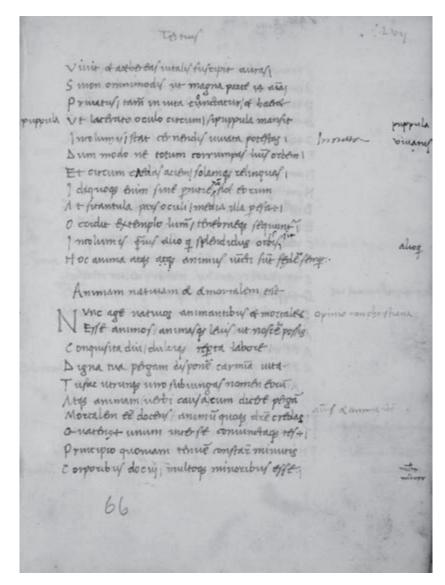


Figure 17. Naples Naz. IV E 51, fol. 66°. *De rerum natura* III 405–426, with notes of Pomponio Leto, including the capitulum "Animam nativam & mortalem esse" and note "opinio non christiana" at 417. Reproduced with permission from the Ministero per I Beni e le Attività Culturali-Italia. © Biblioteca Nazionale di Napoli.

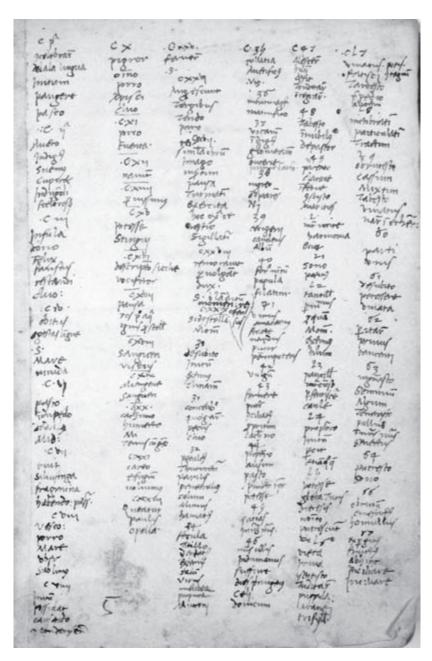


Figure 18. Naples, Naz. IV E 51, front of inner flyleaf. Pomponio Leto's index of the vocabulary that he noted in the margins of the manuscript, listed by page number. Reproduced with permission from the Ministero per I Beni e le Attività Culturali-Italia. © Biblioteca Nazionale di Napoli.

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Figure 19. Naples Naz. IV E 51, fol. 71°. *De rerum natura* III 661–685, with notes of Pomponio Leto, including the marginal labels "Contra pythagorani . . ." and "Contra platonem . . ." Reproduced with permission from the Ministero per I Beni e le Attività Culturali-Italia. © Biblioteca Nazionale di Napoli.

Grandes non of not god not wa Car mustas as wenter que tree fula turds of he no obe his guerne an dees moure practile morning ante Torte fo copyfor as so is a babor robis cotors marche nome our legist color property principal letter eritere & mentione for bic legiment it some for ut fariafus Si wadowns werest et cam Granomes rationabilius & bildiche from the bre & infrateriding accupate - place conditit & the pole we show more HOOMH KAT TO HOOC FOR Eneadumgenitrix boin duning woluptal Alma tientif celi fubrer laberitta figna Que mare nauigerum que terral frugiterent Concelebrat per te qui genul omne animantu respitar unlitos exortum lumina folis T'e deate fuguint veriti-te nubila celiduentumq tum tibi fuatul dedala tellus. how - 4 Submittit floref tibi rident equora ponti-Lacatum nite deffulo lumme celum! N am fimul ac speciel patefacta est uerna diei . & relevata ungo gennrabilif aura fauoniene primum uolucref te dina tuumque S ignificant initum perculfa corda tua ui I nde fere preudel perfultant pabula leta Generatio et materia Generandi apidef tranant amnef ita capta lepore e lequitur cupide quocungs inducere pergil emque per maria ae montel fluttole rapacil f rondiferalq domof autum compola urentil O morbuf incuttent blandum per pectora amo E frat ut apide generation fecla propagent Que quomam rerum naturam fola oubernas granding dear Stoc about Vec fine te quica diaf in huminef oraf dixer any in Dies did dimm postores E rontur neque fit letum neg: amabile queq. Te locam fludeo fembendis nerfibul effe Net mo Quolego de rerum natura pungere conor dix at Geo copura her they love dig and aling M emmade nother quem tu dea tempore in omin O mmbuf ornatum woluth excellere rebut mb public Pangera of orders pales fine has pagere four qualins furnilas int vallas 1 nevotus Scriber ad Monmin L. Monny from inde merhapsonies component was in Casus familia recommus guidam print ultra in ordinem rate fore decin pantors columnas extendit 72 years upon amphor effectives april sonatri Ego time pormate panto doming in huxurianis wrote informa fuly fasca Dempto N ut paso per go no paraton ence but forme addition remains dur addice xy table prominerately un est perfecta popisi abillo figori

Figure 20. Biblioteca Apostolica Vaticana Ott. Lat. 2834, fol. 1^r. *De rerum natura* I 1–27, white vine decoration and notes of Pomponio Leto or his circle. © 2013 Biblioteca Apostolica Vaticana, all rights reserved.

Ignoratur enim quæsit patura animai. Nata fician contra nascentibus infinuetur. Er famol interest nobifeum morte dirempta. An tenebras orci uifat uaflaiq lacunas. An pecudes alias divinitus infinuet fe-Ennius ut poster accivittqui primus Amaeno Detulit ex licone perenni fronde coronam: Per gentis Italas quie clara clueret. Semmum Clyo 1201 Et si præterea tamen esse A cherusia templa Ennius aternis exponit uerlibus adens Quo nequermanent animæ nequerorpora nostra. Sed quedam fimulachra modis pallentia miris. Vide fibi exortam semper florentis Homeri Commemorat spetiem.lacrimas effundere salsas Copiflet rerum naturam expandere dictis. Qua ppter bene cum superis de rebus habenda Nobis est ratio solis lunace meatus Qua fiant ratione: & qua ui queque gerantut In terris: tum cumprimis ratione fagaci. Vnde anima atq; animi conflet natura uidendum. Alfanis francisi Et quæ res nobis uigilantibus obuia mentes Terrificet morbo affectis fomnog fepultis. Cernere ut uideamur eos audirequeoronam Morte obita: quorum tellus ampectitur offa. Nec me animus fallit graiorum obscura reperta Difficile inlustrare latinis uersibus esse. Multa nous uerbis presertim qum sit agendum Propter egestatem lingua: & rerum nouitatem. Sed tua me uirtus tamen & sperata uoluptas Suzuis amicitia: quem uis efferre laborem. Suader & inducit noctes uigilare ferenas/ Quarrentem dictis quibus & quo carmine demum Clara tuæ polim prepandere lumina menti. Res quibus occultas penitus connifere pollist Hunc igitur temerem animi tenebralen necesse est. terrorem a moore Non radii folis neq; lucida tela dici Discutiant: sed natural speties ratioqs Principium euius hine nobis exordia fumet. Nihil de nihilo gigni.

Figure 21. Utrecht, University Library. X fol. 82 (Rariora), fol. aiii^r. A copy of the 1486 Verona edition, showing I 112–149, with "Clyo" printed by I 119, the capitulum "Nihil de nihilo gigni," and handwritten notes of Pomponio Leto.

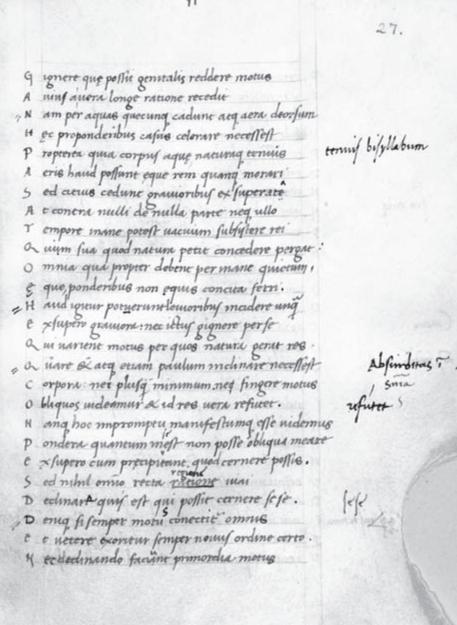


Figure 22. Bayerische Staatsbibliothek München Cod. lat. mon. 816a, fol. 27^r. A manuscript that belonged to Piero Vettori, showing the notes "tenuis bissilabum" (tenuis scanned as two syllables) at De rerum natura II 232, and "Absurditas in sententia" (absurd in my opinion) beside the discussion of the atomic swerve at II 244.

Thane bet circum se solidum, quia no potest nite à solido cobitesi Ideo nemo pot a: bare inane esse, nisi solidum circundanet; nec solidua posset inane coshbere, nisi 15 copia material et vis interneni: Tet, of sepines. corpus, ea uacuum nequaquam confrat inane. Sunt igitur folida ac fine inani corpora prima. rienest Præterealquoniam genitis in rebus inane quia est inace, ideo debet esse materiem circum folidam constare necessest. solidum; Cinaho hit ois ex con: nec res ulla potestuera ratione probari travis . Her pot probati aliquid corpore inane suo cælare, atque intus habere, fi non quod cohibet folidum conftare relinquas. See Inanc, nisi Mudqual co: id porro'nihil effe potest, nisi materiai bibet Inane dices ofe solidie. al seram concilium quod inane queat tectum cohibere. Materies igitur, folido quæ corpore constat, esse æterna potest cum cætera dissoluantur. Tumporro si nil esset quod inane uacaret mont est omne soret solidum nisicontra corpora caca al certa effent, quæ loca complerent quæcunque tenerent, omne, quod eft fpatium, uacuum constaret inane." Alternis igitur nimirum corpus inani distinctum quoniam nec plenum nauiter extat, nec porro uacuum. Sunt ergo corpora caca, af cerea qua spatium pleno possint distinguere inane Hac neque dissolui plagis extrinsecus icta Nauifer . omnino. Герека poffunt, nec porro penitus penetrata retexi, Labare nec ratione queunt alia tentata labare. id, quod iam supera tibi paulo ostendimus ante. Nam neque conlidifine inani posse uidetur quicquam,nec frangi,nec scindi in bina secando, nec capere humorem, necitem manabile frigus, Manabile frigus nec penetralem ignem , quibus omnia conficiuntur, Penemalis Ignis et quo quæque magis cohibet res intus inane, tun tam magis his rebus penitus tentata labafcit. Labascie Ergo fi folida, ac fine inani corpora prima funt ita uti docui, fint hæc æterna neceffeft. Prætereanifi materiesæterna fuiffet, antehac ad nilum penitus res quaeque rediffent. al'ag nara de nihilo quæsita forent, quæcunque uidemus. At quoniam supra docui nil posse creari de nihilo, neque quod genitust ad nil reuocari, esse immortali primordia corpore debent, Aristoteles in p Physis bac. Leun pous & Domneritus Elementa plenum et Inano dicune esse, Illud quidem Ins, boc uero non ens; sem plenum et solidum ens est; propter quod et nibil magis ens non ente dicunt esse, quia neg Inane cope. Differre autem dicunt Ens figura Ordine et positione.

Figure 23. The Bodleian Libraries, the University of Oxford, Auct. 2 R 4.50 (1500), p. 15. The 1500 print edition, showing *De rerum natura* I 509–545, a copy formerly owned by Donato Giannotti, with marginalia discussing Aristotle.

Mentio T. Lucrety m scriptis betery II Epistolar M.T. Ciceromis ad Q. Fratre stola 9 m extremo: Lucrety poemata ut cribis non the funt multis luminib. milidia moto perum non Di Cornelig Nepos m Vita mortem multo elepathisimi Ally auteon Carminib. qui studiose delectas Widom foum gabere præfense. Idem plures post no smam memoria nascentos rexp natura desputare: de arte pero rhe torica com Cicerone Oriding hb. 2 Trip. Explicat ut Caussas rapidi Lucretia igmis Carmina sublimis tunc sum pitura Lucrent Exitio terras cu dabit Una dies.

Figure 24. The Bodleian Libraries, the University of Oxford, Byw. P 6.13 (1565–1566), handwritten end flyleaf 1. A copy of the 1565–1566 edition of Lucretius, showing manuscript quotations from Cicero, Cornelius Nepos, Vitruvius, and Ovid.

April Phyluos quing for adwata Magnitudo acto infinita. potentia to pt to talis. Wacuum. Uni corps code tempore ee in plumb. locis Pentratio dinifioni Accidentio subsistetia extra subsecto Eon derlarations ride in Gypomnomans buch nimi ad Dialectica Philippi de utilitantimola Fab. Ouintelsams hb. 10 Cap.1 Ham Macer & Lucretig legendi quide, sed non ut phrasmindest corps eloquemice faciant: elegans mi sua quicy materia, sed alter homilis, alter difficilis. Hac Quintiliam waice daman no à recen trovib. foto rudicio Valenib in boc genere doefring sod eha veterib. Papinius . m Genethiaco Lucam. Cedet Musa rudis ferocis Ennl Et doch furor ardug Lucret1 Et qui per freta dixit Argonautas. Irrita comivey steriles si munera lanquent, tui Nex Jobolis Jos eft multos sam Vand pannos Femineo fiat Vitio nec ne (lebo. Hoc poterit mapin quarty mostrare Lucrett

Figure 25. The Bodleian Libraries, the University of Oxford, Byw. P 6.13 (1565–1566), handwritten end flyleaf 2. Manuscript quotations from Quintilian, Statius, and Serenus.

Corcurs from of housenin Air Suis ? Postnata (ur frais) for furt multis Luminity Ingenis mula Quines at la traffin wither dig as politier vor virto quero ching went popular list a for spinens pe min little direction in voralififigent I'm in view offentio Trusto, que mer fugial port nom : m. H LVCRETIVS one & in omake punger in oning punger with the Digna love of in Dignay: 5 120

Figure 26. Title page of Inc. 5271, Houghton Library, Harvard University. A copy of the 1495 edition, possibly used by Avancius in preparing the 1500, with quotations from Eusebius-Jerome, Cicero, Varro, Macrobius, and the Wormwood passage, *De rerum natura* I 936.

x 3 *∞*

Between Fits of Madness

"PER INTERVALLA INSANIAE"

Ancient References and Proto-Biographies

UCRETIUS'S ASSOCIATION with atheism and sodomy was not the L only reason for his Renaissance readers to expect him to be an author of lascivious and impious works. Petrarch, many of his humanist followers, and even their scholastic adversaries agreed that Good, Truth, Beauty, Knowledge, and Virtue are each identical with God and with each other, leading them to associate moral good with artistic quality. Just as the pre-Machiavellian "handbook of princes" genre preached that a moral prince will be a more successful ruler, authorities from Cicero to Thomas Aquinas insisted that a moral author would produce better works, containing more perfect logic, more beautiful verses, and more persuasive prose. The question "Is the book any good?" was closely bound to the question "Was the author virtuous?" Therefore any reader, not just a censor or church official, wanted proof that an author was a virtuous person before they chose to read. Petrarch wanted people to read the works of moral ancients in order to make themselves more moral people, but even a less idealistic reader still wanted to read moral authors because they wrote better books. It was thus vital to the popularization of the classics (and, later on, vital to book sales) that classical authors be virtuous by Renaissance standards, which is to say by Christian scholastic standards, with perhaps

a dash of Neoplatonism and Neostoicism allowable among the Aristotelian residue.

This fed the desire to preface copies of a new ancient with as much detailed biographical information as possible. Even in the manuscript period, it was rarely the first line of *De rerum natura* that greeted a reader's eye upon opening the book. It was often a reference to Lucretius excerpted from another ancient, jotted on the flyleaf by the scribe or an earlier reader. Thus, readers began forming a judgment about the author before they ever read the book. This process of judgment was shaped by the few surviving antique references that mention Lucretius, and the ways that scribes, earlier readers, and editors chose to present them. Later on, editors would preface new editions with brief printed biographies. Edition by edition, changes in the apologetic techniques used by biographers demonstrate the evolution of societal concerns about both Epicureanism and pagan philosophy in general. Yet before these formal biographies, references on flyleaves served as proto-biographies, supplying the first answers to Renaissance readers' primary question: not "Who was Lucretius?" but "Was Lucretius virtuous?"

We know little more about Lucretius's life today than was known in the sixteenth century, except that a large portion of what was believed then was wrong. Lucretius was born between 99 and 93 B.C., probably to an aristocratic Roman family, though this is conjecture. He was friends with the dictator Sulla's son-in-law Gaius Memmius, wrote an Epicurean epic poem, and probably died before February of 54 B.C. He may or may not have been friends with Catullus,2 gone mad from drinking a love potion, and killed himself on Virgil's seventeenth birthday; his works might or might not have been posthumously edited by Cicero.3 We deduce that he was well known in antiquity from a dozen or so instances of his name in corners of the classical canon. We know nothing more. Despite this scarcity of information, humanists produced eight biographies of Lucretius between the 1490s and 1570. These expanded decade by decade, from Petrus Crinitus's 500-word summary to Lambin's 5,000word treatment, which drowned the same attested facts in a sea of pseudofacts, tangential references, rhetorical padding, and raw speculation.4 Six of the eight biographies were produced for print, and 60 percent of the editions printed before 1600 contained one or another of them.⁵ Biographies were the only introductions included in the ten inexpensive quarto and octavo editions printed from 1531 to 1567, making them the primary scholarly guide available to students and poorer scholars as they approached the text. These ever-ballooning vitae let authors demonstrate their scholarly prowess by out-researching their predecessors.

In some sense, the fact that we know so little about Lucretius was useful to his biographers, because it gave them considerable leeway in constructing him as an historical character. Successive biographies expose the evolving techniques humanists used to evaluate sources, and as the challenges faced by the humanist project evolved over the sixteenth century, so did their vision of the idealized ancient, onto whose skeleton Lucretius was continually regrafted. Lucretius's vitae became a battle-ground for defending the more objectionable margins of the classical canon. We are still a century shy of the day Pierre Bayle will shock the world with the claim that Spinoza is that once-oxymoronic beast the "good atheist," but this argument for the good Epicurean is surely the ancestor of Bayle's claim, suggesting that Machiavelli, Valla, and, indeed, the gentle reader are good people despite studying Lucretius, and therefore that Florence might have been hasty in banning him.

This obsession with authors' moral character was not new in the Renaissance. Plato, Cicero, and Quintilian discussed the importance of virtue for authors, and it had been a focus of the medieval *accessus*, a kind of plain biographical introduction that provided just enough information about the author to pitch a work's moral intent without ornamentation or overt interpretation. Unlike the biographical traditions of Ovid or Virgil, who saw considerable medieval circulation, Lucretius's biographical tradition did not begin until the Renaissance was already well advanced, and scholars had replaced the *accessus* with the more elaborate and analytic humanist vita. Yet formal biographies were not the first step in the Renaissance reconstruction of Lucretius's life. If printed vitae reshaped the poet's image in the public eye, a simpler but equally manipulative spin was put on his life by the quotations that so often prefaced his text.

Proto-biographical lists of references to Lucretius's life and work, taken from authors ranging from Cicero to Macrobius, were transcribed by hand onto the flyleaves of manuscripts and print editions to 1600 and beyond (see Figures 6 and 24–25). Small variations prove that many are

approximations written in from memory. Premodern scholars' memorization skills were, by modern standards, herculean, and everyone who read Lucretius had memorized huge swaths of Virgil and many others. When Poggio found the *De rerum natura*, he could probably already recite the lines in Ovid and Cicero that mention it. Thus, even in manuscripts that had no quotations on the flyleaves, most readers already had one or two references in mind when deciding whether or not to lift this book from the library table.

The ancient sources we have on Lucretius typify the muddle of sparse classical splinters and overabundant late antique and medieval pseudo-sources that a Renaissance scholar had to comb through in attempting to sort out any fact about the ancient world. Of the nearly thirty sources that survive from before 500 A.D., half simply contain fragments of the *De rerum natura*, quoted without any discussion of the author, and the rest each contain only a single sentence on the poet. Our goal in examining these sources is to produce an evolving reconstruction of the resources each generation of readers had at its disposal.⁸

To address the pre-Renaissance transmission of these sources briefly: although no Lucretius manuscripts survive from the period between the ninth century and Poggio's discovery in 1417, a scattering of medieval references in Italian, French, Spanish, German, English, and other traditions indicate a tenacious, if spotty, knowledge of the poet and some knowledge of the poem. Treatments of Epicureanism itself, and of the philosophical content of the poem, appear principally in the attacks on Epicureanism written by the fourth-century Christian apologists Arnobius and Lactantius, though Jerome and Ambrose discuss Lucretius briefly, as did, later and at greater length, Isidore of Seville. Before the fifteenth century, a scholar who knew the name Lucretius was most likely to have seen it in Ovid or in one of the many grammarians who mined the De rerum natura for examples of rare or archaic forms. Such fragments survive in Probus, Fronto, Aulus Gellius, Festus, Nonius Marcellus, Aelius Donatus, Servius, Diomedes Grammaticus, Macrobius, and Priscian. The classical works referring to Lucretius saw irregular medieval circulation. Ovid circulated widely, but Cornelius Nepos, Vitruvius, and Quintilian were effectively unknown, as were the particular works of Cicero and Statius that mention the poet.9 Virgil was ubiquitous, but although Virgil imitates Lucretius, he does not mention him by name, and scholars could not recognize similarities while the *De rerum natura* was absent. The Lucretian language that filtered into Petrarch and Boccaccio suggests that most, if not all, of their exposure to the poet came through the fragments preserved in Macrobius. These glimpses must, like Pliny's description of the lost Laocoön, have inspired mournful frustration during the poem's long absence, and a correspondingly eager audience at its return. During the poem's long absence, and a correspondingly eager audience at its return.

As we review the quotations available to scholars, the experience is more authentic if we organize the sources, not chronologically, but in the order of the authority and importance they had in early modern eyes. Modern scholars have strict rubrics for weighing the credibility of sources and deciding what to trust and what to doubt. Renaissance scholars did too, but theirs were based much more on the character of witnesses. The relative importance of each source can be quantified by examining how many manuscripts and biographies include it. Thus, before we examine the quotations that survive, it will be useful to briefly acquaint ourselves with the eight surviving Renaissance Latin biographies of Lucretius, in order to understand the significance when a quotation appears in one vita or in another. Analysis of the biographies themselves will follow in Chapter 4.

The Eight Renaissance Vitae

Lucretius's biographical tradition begins with the only fifteenth-century vita, written by our friend Pomponio Leto. Approximately 1,000 words in length, it survives in manuscript on the flyleaves of a copy of the 1486 Verona edition of Lucretius, preserved in Utrecht. ¹³ Giuseppe Solaro has argued that Leto's vita may have served as an introduction to a course of lectures. ¹⁴ We have no further information about its early circulation, but it contains several references and claims absent from all later biographies, so its reach was definitely limited.

A second manuscript biography, the *Vita Borgiana*, also just over 1,000 words, was written by Pontano's student Girolamo Borgia and survives in a copy of the 1495 Venice edition of Lucretius at the British Library. This volume also contains Borgia's transcription, completed in

1502, of notes on Lucretius made by Pontano.¹⁵ The *Vita Borgiana* also presents several otherwise unattested facts, and its discovery in 1894 caused a stir when it was suggested that these might derive from an otherwise unknown fragment of Suetonius, sparking a debate that divides Lucretius scholars to this day.¹⁶ Like Leto's vita, Borgia's is full of information absent from all other versions, so its circulation must have been extremely limited.

The most ubiquitous biography of Lucretius in the Renaissance was that of the Florentine Pietro del Riccio Baldi, better known as Petrus Crinitus. This 500-word vita was one of eighty-six Crinitus wrote for his *De Poetis Latinis*, a collection of brief lives of ancient poets, first printed in 1505, that saw ten reprints by 1600. After the author's death in 1507, editors used excerpts from the *De Poetis Latinis* as introductions in editions of Catullus, Tibullus, Propertius, Horace, and, beginning in 1531, Lucretius. Eleven Lucretius editions, one-third of those printed before 1600, include Crinitus, making him Lucretius's most constant companion, particularly in the cheaper octavos and pocket versions.

Though Crinitus's was the first vita printed, the first one to appear in an actual Lucretius edition was a 1,000-word biography by Johannes Baptista Pius, written for his annotated folio edition of 1511 and printed again in 1514. The 1511 was the first annotated edition and long an important force in Lucretius scholarship, so this vita was known to all serious Lucretius scholars for a century or more.

The golden age of printing was also the golden age of plagiarism, and in 1512, only five years after Petrus Crinitus's death and before the authentic Crinitus appeared in any Lucretius edition, Petrus Candidus, the noted Greek scholar and friend of Marullo, 18 published his excellent octavo edition of Lucretius containing "his" biography, which was actually the Crinitus with barely enough words replaced by synonyms to evade a charge of outright theft. 19 While this vita contained practically no new content, Candidus did abbreviate it, and appended a quotation list to the end, adding more references that Crinitus had not known. This vita was printed only once, but it was in the first octavo edition, and the Aldine octavo that followed the next year had no vita. For the two decades until the original Crinitus was reprinted in 1531, Candi-

dus's clone of Crinitus was the biography most likely to reach students, poorer scholars, and others unwilling or unable to pay for the luxurious Pius folio.

After 1531, as frequent reprints of Crinitus made his vita increasingly standard, editors were obliged to entice readers with something new. Obertus Gifanius wrote a biography of over 2,500 words, five times the length of Crinitus's, for his annotated octavo of 1565–1566. A separate list of quotations accompanied the vita.

The Gifanius edition had been created to compete with (and unashamedly copied the improvements made by) the massive annotated quarto of 1563 edited by the eminent Parisian philologist Denys Lambin.²⁰ Lambin's 1563 edition contained 300,000 words of commentary but no vita, though Lambin added a modified Crinitus to his lightly annotated pocket edition of 1565. A few years later, not to be outdone by the lengthy vita printed by the hated "thief" Gifanius, Lambin wrote a 5,000-word vita, with an accompanying treatment of the *Gens Memmii*, for his second massive quarto edition of 1570. This elaborate web of obscure references and erudite speculation represents the full flower of that overflowing attention to detail that prompted the French to coin in Lambin's honor the verb *lambiner*, meaning to dawdle or linger on a task unnecessarily.

Independent of the Lambin-Gifanius rivalry, a 500-word biography by Lilio Gregorio Giraldi had appeared in his *Historiae Poetarum tam Graecorum quam Latinorum Dialogi Decem* in 1545. These dialogues reviewed many ancient poets. Although the format was more didactic than encyclopedic, the treatment of Lucretius, when excerpted, was brief and packed with quotations, much like Crinitus's, though with a greater focus on the Greeks. The economical pocket Lucretius edition of 1576, produced by Turnebus based on the work of the recently deceased Lambin, includes a half-length abridgment of this excerpt. The Giraldi vita was printed several more times in the seventeenth century, making it a late but direct rival to the still-ubiquitous Crinitus vita, whose length and content it resembled more closely than it did any of the others. (See Table 3.1.)

Of course, proto-biographical quotation lists predated and often accompanied these vitae. In a very real sense, then, the first printed biography of Lucretius is the collection of quotations included by Hieronymus

Table 3.1 Renaissance Lucretius biographies

Author	Date (first 16th-c. printing)	No. of 16th-c. printings					
Pomponio Leto	before 1495						
Avancius quotation list	1500 (DRN 4°, Venice)	1					
Girolamo Borgia	1502	none					
Petrus Crinitus (Pietro del Riccio Baldi)	1505 (De Poetis Latinis, Florence; later with DRN 1531 8°, Basel)	11 with <i>DRN</i> ; at least 11 more with Crinitus's <i>Opera</i>					
Johannes Baptista Pius	1511 (<i>DRN</i> 8°, Bologna)	2					
Petrus Candidus (virtually duplicates Crinitus's vita)	1512 (DRN 8°, Florence)	1					
Lilio Gregorio Giraldi	1545 (Historiae poetarum tam Graecorum quam Latino- rum dialogi decem; later with DRN 1576 16°, Lyons)	1 abridged version with <i>DRN</i> ; 2 complete printings in collections of Giraldi's works					
Obertus Gifanius (Hubert van Giffen)	1565–1566 (<i>DRN</i> 8°, Antwerp)	2					
Denys Lambin	$1570~(DR\mathcal{N}4^{\circ}, ext{Paris})$	2					

Avancius at the beginning of his edition of 1500, printed in Venice by Aldus Manutius.²² This list is more extensive than the rougher flyleaf notes that prefaced Lucretius manuscripts, but it contains the same content and was produced and read at the same time that the manuscripts were being produced, improved, and circulated. This, then, is a perfect snapshot of how the surviving references to Lucretius painted his character for readers working at the end of the fifteenth century.

Avancius's Catalogue of Discoveries

The 1500 octavo was the fourth printed edition and an enormous step forward. Avancius painstakingly corrected the poem, not by comparing multiple manuscripts, but through judicious application of his knowledge of Latin.²³ At the front of the volume, the list of quotations follows three dedicatory letters and the lists of capitula, which are standard as far back as the ninth-century manuscripts.²⁴ Later editions with formal vitae usually place them in the same position, after introductory letters and just before or after the capitula, making the biography the last part of the interpretative frame that precedes the text.

Lucretius, ut ex eius prologo coniicio, Romanus fuit, de quo Eusebius

Olympiade 171 Titus Lucretius poeta nascitur, qui postea amatorio poculo in furorem versus, cum aliquot libros per intervalla insaniae conscripsisset, quos postea emendavit Cicero, propria se manu interfecit, anno aetatis quadragesimo tertio.²⁵

Donatus

Virgil. 17. Annum agens sumpsit virilem togam, quo die Lucretius decessit. Cn. Pompeio magno, Marco Licinio Crasso consulibus.²⁶

Ovidius

Carmina divini tunc sunt peritura Lucretii.

Exitio terras cum dabit una dies.27

Quintilianus

Nam Macer & Lucretius legendi, sed non ut phrasin idest ut corpus eloquentiae faciant, Elegantes, in sua quisque materia, sed Alter humilis, Alter difficilis.²⁸

Item

Nec philosophiae ignara potest esse grammatice, cum propter plurimos in omnibus fere carminibus locos ex intima quaestionum naturalium subtilitate repetitos, tum vel propter Empedoclem in graecis, Varronem, ac Lucretium in latinis, qui praecepta sapientiae versibus tradiderunt.²⁹

Papinius [Statius]

Et docti furor arduus Lucretii.30

Lucretius, as I infer from his prologue, was a Roman, about whom

Eusebius

In the second year of the 171st Olympiad Titus Lucretius the poet was born, who was later driven mad by a love potion, and having written some books in the intervals of his insanity which Cicero later corrected, killed himself in his forty-fourth year.

Donatus

Virgil turned 17 and assumed the *toga virilis* on the day on which Lucretius died. Cn. Pompey the Great and Marcus Licinius Crassus were consuls.

Ovid

The poems of the divine Lucretius will perish only, When one day gives the world over to destruction.

Quintilian

For instance, Macer and Lucretius should be read, but not for forming phrasing which is the body of eloquence; each is elegant in his own subject, but the former is shallow and the latter difficult.

Also

Nor can the grammarian be ignorant of philosophy, when in almost every poem so many passages delve into the subtlest of natural questions, and in particular we have Empedocles among the Greeks and Varro and Lucretius among the Latins, who translated the precepts of philosophy into verse.

Papinius [Statius]

And the lofty madness of wise Lucretius.

Examining these quotations one by one, the most important by far, and the one that appears most frequently in manuscripts, is the first, an entry in St. Jerome's Latin translation of Eusebius's lost *Chronicon*. Avancius, like many Renaissance editors, attributes the passage to Eusebius rather than Jerome:³¹

Eusebius

Olympiade 171 Titus Lucretius poeta nascitur, qui postea amatorio poculo in furorem versus, cum aliquot libros per intervalla insaniae conscripsisset, quos postea emendavit Cicero, propria se manu interfecit, anno aetatis quadragesimo tertio

In the second year of the 171st Olympiad Titus Lucretius the poet was born, who was later driven mad by a love potion, and having written some books in the intervals of his insanity which Cicero later corrected, killed himself in his forty-fourth year.

Every biography, including the manuscript ones, uses this quotation, and it appears on the flyleaves of numerous manuscripts and print editions, making it Lucretius's most persistent companion.³² It supplies the

two best-known pseudofacts about Lucretius: that he committed suicide, and that his works were corrected by Cicero after his death. It also gives the clearest information about his birth and death, which it places in 94 B.C. and 51–50 B.C., respectively.³³ Renaissance biographers reject these dates as early as 1505, saying that they favor the data given by Latin sources (Donatus) over the unreliability of a translation from a lost Greek original.³⁴ It is tempting, however, to believe Jerome, given the absence of any other information.

Jerome's statement that Lucretius killed himself after being driven mad by a love potion complicated attempts to paint him as a virtuous ancient. 35 The suicide story is regarded with skepticism today because, the potency of ancient love potions aside, it is too bizarre to think that only Eusebius and Jerome, among all of Lucretius's ancient and medieval admirers and enemies, would have mentioned such a memorable story. If absence of evidence is ever evidence of absence, it is when such a delicious piece of gossip passes unmentioned for several centuries. Given Roman culture, a suicide is not implausible, but the addition of the love potion makes the story too convenient for enemies of Epicureanism. 36 Lucretius preaches that we must avoid the snares of Venus and free ourselves from the pain caused by lust and love. 37 He also claims that by denying the afterlife he will bring joy and worldly peace. 38 These claims, and the threat they pose to Christianity, lose all credibility if they failed to save even their own spokesman from driving himself mad for love.

The texts that follow the suicide story in Avancius's list mitigate its negative effects. The first step comes in Eusebius-Jerome's other claim: that Cicero polished the *De rerum natura* after Lucretius's death. ³⁹ In classical Latin, *emendare* in reference to a deceased author's work specifically referred to the preparation of a posthumous publication. Cicero may indeed have done this, or, if not, it is something another now-lost ancient might have thought Cicero did after reading his letter praising the poem. In humanist technical language, however, *emendare* lost this special association with posthumous publication and came to mean simply making a text *emendatus*, making it be in good condition, no matter whether this meant polishing for publication, restoring a garbled manuscript through philological correction, or even an author producing a revised and smoothed version of his own text. ⁴⁰ The fact that an author might

"emend" his own work let a humanist read this passage as implying that Cicero was an effective coauthor. This was a guarantee of excellence (and an ideal selling point), because Cicero's prose was the golden ideal by which all others' inadequacies were tallied. A sane coauthor was also an antidote to Lucretius's alleged madness. Sicco Polenton, for example, when treating Cicero in his survey of works by great Latin authors, lists, among the orator's literary achievements, his having edited Lucretius's books, because, as he says, those composed while Lucretius was in a mad fit *(cum insaniret)* were confused and less organized than the rest. ⁴¹ Cicero balances out our mad Epicurean.

The second quotation in the list comes from Jerome's tutor, Aelius Donatus, whose *Vita Virgilii*, written in the late fourth century, was based on a lost original by Suetonius:⁴²

Donatus

Virgil. 17. Annum agens sumpsit virilem togam, quo die Lucretius decessit. Cn. Pompeio magno, Marco Licinio Crasso consulibus

Virgil turned 17 and assumed the *toga virilis* on the day on which Lucretius died. Cn. Pompey the Great and Marcus Licinius Crassus were consuls.

The Donatus passage is not referred to by either of the manuscript biographies, appearing for the first time with Lucretius here in print in 1500, but it is used by all biographers thereafter. Avancius's version is condensed, but faithfully reproduces the information from *Vita Virgilii* 6, which places Lucretius's death on the day Virgil assumed the *toga virilis* in 55 B.C.⁴³ The improbability of one great poet dying on another's birthday makes this passage somewhat incredible, but it is a more plausible date than Jerome's 51–50. The fact that Lucretius was worthy of mention as a landmark in a life of Virgil is itself legitimatizing, because it places the poets in the same sphere. This confirmation that Lucretius was a generation older than Virgil would have reminded humanists who spotted similarities to Virgil as they read Lucretius that it was the Prince of Poets who found Lucretius worthy of imitation, and not vice versa.

The Ovid quotation, third in Avancius's list, comes from the end of Book I of the *Amores*, where Ovid criticizes Roman society for valuing brief works of martial valor above immortal poetry:⁴⁴

Ovid

The poems of the divine Lucretius will perish only, When one day gives the world over to destruction.

These two lines praising the "divine Lucretius" read much like modern back-cover author endorsements. Unlike free-floating modern endorsements, however, all Renaissance readers could be expected to know their Ovid well enough to recognize this passage and remember its original context. In the Amores Ovid mentions Lucretius along with Hesiod, Ennius, Sophocles, Varro Atacinus, Tibullus, and others on a list of those whose works he believes will last until the end of time, a claim scholars must have read with some bitterness in the years when the De rerum natura seemed lost forever. Those who could now read the newly returned Lucretius discovered that Ovid's couplet is itself a clever paraphrase of Lucretius V 95, a further proof of Ovid's respect. Ovid circulated widely in manuscripts throughout the Middle Ages. Most Renaissance readers would remember the Ovid passage well enough to recall the names of many others mentioned in the surrounding lines, and would begin to think of Lucretius as worthy of such company. In Avancius's corrected edition, the introductory letter celebrating Lucretius's rediscovery validates Ovid's claim that the poem will be eternal, and reminds the humanist reader of the ongoing efforts to restore the reading lists of ancient Rome. Renaissance readers would also have recognized conspicuous Lucretian and Epicurean themes in the Amores, including Ovid's citation of the idea of the happy quiet of death, and the idea that the better part of the poet survives death in the form of his verses, an appropriate sentiment for Epicureans who deny any other afterlife. 45 Neither Avancius nor any other Renaissance biographer includes these Epicurean passages from Ovid, though they do use similar passages from Virgil. What matters to Avancius is that Ovid equated Lucretius with Homer and Virgil as one whose works we should be struggling to preserve. Girolamo Borgia's biography is the only one to omit this choice endorsement. 46

The next quotation in Avancius's list is the first of the two Quintilian passages,⁴⁷ which actually comes second in Quintilian's text. It comes from *Institutio oratoria* X, which reviews the authors a young orator must read. Only a careful selection of the best authors are to be read,⁴⁸ and Quintilian is wary of poetry, recommending it as a source for sublimity of language but warning against the poetic habits of contraction, paraphrase, unusual vocabulary, and word order, which, he says, are not fit weapons for the prose of court and politics:⁴⁹

Quintilian

For instance, Macer and Lucretius should be read, but not for forming phrasing that is the body of eloquence; each is elegant in his own subject, but the former is shallow and the latter difficult.

This reminder of the difficulty of the poem might seem to be a disincentive. However, just as the implications of Jerome's emendare had morphed over the Middle Ages, Quintilian's criticism of Lucretius as difficilis, a fault that Lucretius himself acknowledges, 50 had become a kind of recommendation in the Renaissance, when most humanists considered difficulty in a Latin author a mark of erudition. This passage comes from Quintilian's review of Roman poets in Book X, which begins with a long accolade of Virgil and a lament that all other Latin poets fall far behind him.51 The first of Virgil's inferiors worth mentioning are Aemilius Macer and Lucretius. Quintilian follows these with Varro Atacinus, Ennius, Ovid, Cornelius Severus, Serranus, Valerius Flaccus, Gaius Rabirius, Albinovanus Pedo, and Lucan, though damning all with faint praise, and reserving his exuberance only for Virgil-and for the emperor Domitian, who was still in power when Quintilian wrote and so received mandatory flattery.⁵² Quintilian's pessimism about the state of Latin writing stems mainly from his preference for the Greeks, and this index of Hellenic superiority would have resonated strongly with those Renaissance Italians engaged in debates over the relative value of the Greeks and Latins.53

As with Ovid's *Amores*, the very presence of Lucretius in Quintilian's list, in this case almost at its head, elevated Lucretius in Renaissance eyes. Later editors generally follow Avancius in including only Quintil-

ian's reference to Lucretius, not the full list of authors, but their introductory epistles almost universally include comparable long lists of ancients to whom they compare Lucretius. ⁵⁴ Lists of names of ancients are also common in biographies, particularly later ones, where biographers provide lists of poets who read Lucretius, or grammarians who quoted him, as arguments for his canonical status. ⁵⁵ Although Quintilian was less ubiquitous than Ovid, anyone taking on such an obscure text as the *De rerum natura* could be assumed to know Quintilian and would likely recognize this quotation and know its context. For those who did not, the sentence still confirms that the leading ancient educational authority prescribes Lucretius.

The second Quintilian passage comes from Book I of the *Institutio oratoria*, this time treating the qualities necessary in the young orator's literary tutor. In addition to the basics of grammar, an effective tutor must be versed in the subjects poets discuss, such as music, astronomy, and philosophy:⁵⁶

Also [Quintilian]

Nor can the grammarian be ignorant of philosophy, when in almost every poem so many passages repeat the subtlest of natural questions, and in particular we have Empedocles among the Greeks and Varro and Lucretius among the Latins, who translated the precepts of philosophy into verse.

This quotation is certainly part of what led so many Renaissance commentators to stress Empedocles as a precursor to Lucretius, a comparison made by all but one of our biographers.⁵⁷ After Epicurus, Empedocles is the influence on Lucretius most commonly cited by editors. This is probably more because Empedocles wrote in verse than because of philosophical similarities, though Lucretius's use of Venus and Ares does somewhat resemble Empedocles's focus on Love (φιλία) and Strife (νεῖκος) as physical forces governing the commixing of the four elements.⁵⁸ Quintilian's reference to natural questions (quaestionum naturalium) reinforces Lucretius as a source on natural philosophy and the classical world, much as manuscript marginalia had done. Quintilian is not arguing here that one must study poetry in order to understand this

valuable philosophy, but the opposite, that one must study philosophy in order to understand this beautiful poetry. Good literary influences are his goal in recommending Lucretius, while the philosophical content is a tool at best and an impediment at worst. Many of Lucretius's editors will go on to take the same formalist attitude to the text, or at least will claim so in their introductions. Though a form-over-substance approach may seem superficial, the fact that Quintilian articulated this attitude may well have assuaged the consciences of editors who wanted to make the same claims.

Quintilian was well known in fragmentary form in the early Renaissance, but he received fresh attention when a complete copy of the *Insti*tutio oratoria was discovered by Poggio at St. Gall in 1416 on the same trip that gave us Lucretius. 59 This discovery was deservedly famous, but fully half of the *Institutio oratoria* had circulated before this point, including both of the sections that mention Lucretius. 60 The fact that the quotation from Book X appears before that from Book I in the Avancius list (and most lists) may well reflect the fact that Book X circulated independently throughout the Middle Ages.⁶¹ This made Quintilian's text simultaneously old and new when Avancius quoted him in 1500: old, because the passages cited had been available since the Middle Ages; new, because the complete text was as new as the De rerum natura itself. Both before and after its 1470 *editio princeps*, the rediscovered *In*stitutio oratoria circulated more widely than Lucretius, thanks to its utility, legibility, and uncontroversial subject matter. The fame of Poggio's discoveries of both authors linked Quintilian and Lucretius in the minds of humanists, a bond reinforced by the presence of the Quintilian quotations in Avancius's list, and one that resonates with Ovid's discussion of works that must endure to the end of time. In the biographies, Girolamo Borgia does not use Quintilian, whereas Pomponio Leto and Pius include both quotations, and Crinitus, Candidus, Giraldi, Gifanius, and Lambin include only the better-known passage from Book X.62

The final quotation in Avancius's list comes from another text recovered by Poggio: Statius's birthday ode in honor of Lucan. Here again Lucretius's name appears in a list, in this case authors of long hexametric works: Ennius, Lucretius, Varro Atacinus, 63 and Ovid: 64

Cedet Musa rudis ferocis Enni Et docti furor arduus Lucreti et qui per freta duxit Argonautas, et qui corpora prima transfigurat.⁶⁵

Then fierce Ennius's untrained Muse will vanish/ And the sublime madness of learned Lucretius/ and he who led the Argonauts through the seas/ and he who transforms bodies from their original shapes.

This virtually duplicates Ovid's list, which grouped Ennius, Accius, Varro, and Lucretius, but Statius has made Ovid himself the climax.⁶⁶ This is a fitting finale to Avancius's little catalogue of catalogues, reinforcing Lucretius's status as a peer of other already accepted ancients. Statius's description of Lucretius as burning with a *furor* recalls the intervals of madness mentioned by Eusebius-Jerome. Indeed, Crinitus, and many after him, have suggested that Statius may be the source of Jerome's idea that the poet was insane. 67 Certainly it was Statius or Jerome or both that Marcello Adriani had in mind when he called Lucretius "the not always completely sane Roman poet."68 Furor was, in the Renaissance, the standard Latin translation for the Greek μανία, the divinely inspired madness of a poet, philosopher, or prophet. Μανία was important for Democritus, and especially Plato, and Ficino's use of *furor* to render uavía in the discussion of the four madnesses in Plato's Phaedrus made it a translation any humanist would recognize. In Renaissance eyes, then, Statius's use of *furor* could easily be used to recast the madness described by Jerome as the divine inspiration of a poetphilosopher or vates. Ficino himself in the Platonic Theology calls Lucretius a vates on the basis of this divine furor. 69 Thus, while Statius's furor may have birthed the allegations of insanity repeated by Jerome, it also helped humanists turn them into something positive.

Crinitus, in his vita, places the Statius quotation directly after his paraphrase of Jerome, reinforcing the connection between the two passages. Pius in 1511 says outright that Statius is referring to the same madness as Jerome,⁷⁰ and several times calls Lucretius a *vates* in his introductory letters. Giraldi in 1545 says there is scholarly debate as to

whether Statius means insanity or simply poetic passion. To Conspicuously, Lambin, in his enormous vita of 1570, omitted both the $\mu\alpha\nui\alpha$ connection and the entire Statius quotation, making his and the two manuscript biographies the only ones to omit it. Lambin knew the earlier vitae, so the absence of Statius is certainly an active choice on his part. That Lambin, who stressed Greek precedents in his commentary, did not think the $\mu\alpha\nui\alpha$ or *vates* reading of *furor* was a good addition to his biography clearly indicates that the strategies for making Lucretius acceptable to readers had changed by 1570.

Statius's *Silvae* were discovered and copied by Poggio during his stay at the Council of Constance in 1416-1418.72 An additional German miscellany containing the birthday ode to Lucan was found by Poliziano.⁷³ Poliziano worked on Lucretius and was one of the major early correctors of the Silvae, his notes surviving in a copy of the 1472 editio princeps of Statius.74 The Lucretius manuscript used by Poliziano is the only one that includes the Statius quotation. ⁷⁵ The Silvae and De rerum natura, then, had a nearly identical start in the world of Renaissance scholarship, discovered by the same book-hunter and corrected by the same philologist. So, even more powerfully than the Quintilian excerpts, this passage was a reminder, for those readers who followed rediscovery processes closely enough to be aware of it, of Lucretius's position as part of a new wave of resurrected ancients. It is true that in 1500 not many readers would have been acutely aware of Poggio's trip almost a hundred years earlier, but Pius and Pomponio Leto certainly knew, as did Avancius. Because Niccolò Niccoli had not let the De rerum natura circulate until the 1440s, in 1500 Lucretius's status as a new ancient was probably more manifest than that of many of his peers.⁷⁶

There is a subtle chronology present in Avancius's list; the quotations appear roughly in order of how early they circulated among scholars, moving from Jerome and his tutor Donatus to Ovid, who circulated widely in the later Middle Ages after his acceptance into the corpus of the grammar schools, to Quintilian, half old but half new thanks to Poggio, and last Statius's *Silvae*, which were as new as Lucretius. The editor may simply have chosen to place the most informative passages first, but the order does communicate a sense of momentum and an excitement about a new stage of scholarship enabled by the returning ancients.

All together, this proto-biography leaves us with a Lucretius who was a generation older than Virgil, who burned with a wise and lofty madness, who wrote verse philosophy like Empedocles, Macer, and Varro, who killed himself after being driven mad by a love potion, and whose work, virtually coauthored by Cicero, Ovid thought would last until the end of days. The only independent fact Avancius adds—"Lucretius, as I gather from his prologue, was a Roman"77—reminds us that he was a citizen of the golden age that contemporary Italian readers were eager to revive. Though tainted by the charge of mental instability—perhaps the poetic transports of a *vates*, or the scholar's melancholy to which Ficino devoted so many pages—Lucretius is above all a solid part of the canon of Latin authors that Quintilian insisted all good Latinists should read.⁷⁸

A Private Quotation List: Houghton Inc. 5271

Another proto-biographical collection of quotations survives in a copy of the 1495 edition, preserved at Houghton Library (Figure 26).⁷⁹ This copy is packed with marginal corrections, which some have attributed to Avancius himself, arguing that he used it in the preparation of his edition of 1500, though this attribution is not universally accepted; notes in a second hand have been attributed, again uncertainly, to Pius in the preparation of his edition of 1511.80 Like many manuscript readers before him, this annotator, possibly Avancius, collected quotations on the title page, adding new entries gradually in different inks (Figure 26). Donatus and Eusebius appear, as do several authors absent from the 1500 edition's list, who bring different information to the table. If the marginal annotations are Avancius's, then they are datable to 1499, but quotations may have been added later. This title page gives us a second snapshot, showing the discoveries made by Renaissance readers who went beyond skimming favorite authors for the name Lucretius. Three principal techniques provided new material: mining familiar texts more carefully, mining obscure texts, and looking for more than just the name Lucretius. The last technique is both most fruitful and most dangerous, and we may thank it for introducing a huge swath of new information that would take scholars centuries to prove false.

The first new passage, which follows immediately after Eusebius and Donatus on the page, remains one of our most valuable references today: Cicero's letter to his brother Quintus of February 10 or 11, 54 B.C.:

Lucreti poemata (ut scribis) ita sunt, multis luminibus ingeni, multae tamen artis; sed, cum veneris, virum te putabo, si Sallustii Empedoclea legeris, hominem non putabo.⁸¹

Lucretius's poems are, as you wrote, containing many ingenious highlights, but much formal technique; but, when you return, I will think you a hero, if you have read Salustius's *Empedoclea*, though not human.

Here, at the end of a brief letter reviewing other matters, Marcus says he has found Lucretius's poetry as ingenious and technically excellent as Quintus had claimed it was, and Marcus promises that they will discuss the poem at greater length when Quintus next visits.82 Marcus goes on to encourage Quintus to read a recent translation of Empedocles,83 linking the two poets, who will be compared to each other by Avancius in his introduction and by almost every editor hereafter. In modern scholarship, this letter is particularly valuable because it helps us date Lucretius's death. The inference, not universally accepted, is that, because the De rerum natura seems to be unfinished, it presumably circulated only posthumously. It is therefore unlikely that the Cicero brothers would have had access to the poem until after Lucretius's death, which must then have occurred before February of 54 B.C. This supports Donatus's date against Jerome's. None of Lucretius's sixteenth-century biographers used this letter for dating, but the quotation does appear in all eight biographies.84 It was used as evidence for Jerome's claim that Cicero corrected the poem, and we now believe it may be the source of Jerome's comment. Editor or not, it verified that the greatest classical prose author recommended Lucretius, and reinforced Quintilian's characterization of it as difficult.

Cicero's letters to Quintus, along with those to Atticus, had effectively no medieval circulation, but they became available when Petrarch copied the Verona manuscript of the *Epistulae familiares* in 1345. A copy of Petrarch's manuscript was made for Coluccio Salutati, and corrected by

Salutati, Niccolò Niccoli, and Leonardo Bruni. 85 These letters were thus one of the first classics to be revived thanks to Petrarch's project, and Cicero's unrivaled popularity earned them wide manuscript circulation. It is hard to believe Avancius would have left this choice recommendation out of his printed quotation list, suggesting that, if these are Avancius's notes, this and all those below it on the title page came to his attention only after the edition went to press.

Below the Cicero letter, though clearly added at a different time, is a second Cicero passage taken from his *Orator*, which does not include Lucretius's name:

Quin etiam quod iam subrusticum videtur, olim autem politius, eorum verborum, quorum eadem erant postremae duae, quae sunt in optimus, postremam litteram detrahebant nisi vocalis insequebatur. Ita non erat offensio in versibus, quam nunc fugiunt poetae novi. Ita enim loquebantur: Qui est omnibu princeps. Non, omnibus princeps. Et. Vita illa dignu locoque. Non dignus. 86

Indeed, though now it seems rather rustic, it was once thought refined to drop the last letter of words with the same two final letters as *optimus* unless a vowel followed. Back then the technique was not considered a mark of inferior verse, which now the new poets flee. Thus it used to be said: *omnibu' princeps* not *omnibus princeps*, and *vita illa dignu' locoque*, not *dignus*.

Though neither of the quoted examples comes from the *De rerum natura*, Lucretius is an exemplary older poet and employs this technique of sigmatic ecthlipsis frequently, enough so that many manuscripts (and today's version) omit the final *s* on many lines.⁸⁷ This passage is not used by biographers, but clearly rose to this annotator's mind when he saw Lucretius use the archaic poetic practices that were much of why Quintilian and Cicero called the poem difficult. This shows the sort of tangentially related reference that often rose in Renaissance readers' memorization-savvy minds.

To the left of the *Orator* passage appears a third reference from Quintilian, who, at the beginning of what he warns will be a dry dissection of the different parts of oratory, cites Lucretius's wormwood simile,

saying he will similarly attempt to temper the density of his subject with honey:

Quintilian in principio iiii

ac veluti pueris absinthia taetra medentes cum dare conantur, prius oras pocula circum aspirant mellis dulci flavoque liquore.⁸⁸

Quintilian in the beginning of Book iiii
But as with children when physicians try to administer rank wormwood, they first infuse the rims of the cups with the sweet yellow
fluid of honey.

The manuscript faithfully reproduces the variant beginnings Quintilian supplies for lines I 936 and 938, which are still cited today as evidence that two different drafts of the poem might have circulated in antiquity. This annotator, who corrected the printed text of the poem in exacting detail, was clearly interested in the variant readings, but the Quintilian reference and its prominence on the title page bring acute attention to the issue of poetry's power to persuade independently of truth. Later biographers, and Avancius's printed list, omitted this reference, but many use one or both of the other Quintilian passages, preferring to remind the reader of Lucretius's position as a staple of Quintilian's educational program rather than bring up the fact that both believed in the manipulative power of beautiful Latin. Many more passages like this, in which an author quotes a line from the De rerum natura with little or no discussion of its author, will be gathered by our biographers as the century progresses. For now, the Cicero passages and this new Quintilian passage, contrasted with Avancius's printed quotation list, leave us with a firmer sense of Lucretius as an early, rustic, difficult author, conditionally recommended by the two central authorities of classical education.

The final two passages in this set of manuscript annotations introduce one of the great dead horses of Lucretius scholarship, then a lively foal: the twenty-one-books debate. Name confusion is the culprit, which dragged in two fresh witnesses: Lucretius's contemporary Marcus Terentius Varro and the early fifth-century Christian Neoplatonist Macrobius. We now believe that the passages quoted here refer to the Roman

author Lucilius, not to Lucretius, and in modern editions we print Lucilius, but in medieval and Renaissance script "Lucilius" is easily mistaken for "Lucretius."

M. T. Varro, De lingua Latina:

A qua bipertita divisione *Lucretius* suorum unius et viginti librorum initium fecit hoc: Aetheris et terrae genitabile quaerere tempus.⁸⁹

Lucretius made this beginning to his twenty-one books on the division of the Earth and sky: to seek time which birthed sky and Earth.

Macrobius, Saturnalia:

Lucretius in septimo decimo: Magna ossa lacertique/ Adparent homini. 90

Lucretius in book seventeen: Great bones and muscles/ appear in men.

The misidentification of Lucretius was easy, particularly in the Saturna-lia reference, which is followed a few lines later by an actual reference to Lucretius. Reading Lucilius as Lucretius in these two passages opens up the possibility that the surviving De rerum natura, already obviously incomplete, may be only six books out of the middle of a twenty-one-book work of which fifteen are lost. Though not cited by Avancius, Priscian's Institutiones grammaticae adds further evidence. Priscian, like other grammarians, quotes Lucretius many times, and a typo in the 1470 edition of Priscian listed one quotation from Book VI of the De rerum natura as coming from Book VII, 1 later cited as further evidence for the twenty-one-books theory. The possibility that the De rerum natura is only one-third of a longer original is exciting to the reader, and invites reevaluating the whole structure, intention, and argument of the poem.

In sum, the Lucretius on this title page is a much more enigmatic author than the Lucretius the print list. His work is learned, dense, and archaic. What we have is merely a fragment of his grand project. If we cannot know his intent even from reading the poem, we have little choice but to trust those authorities who did have the full text: Cicero, Ovid, Statius, and Quintilian, all of whom approved of it. As is always the case with manuscript quotation lists, this specific conjunction of quotations is unique and cannot have exerted a wide influence on his reception. Nonetheless it is a good sample of what late fifteenth-century readers had in their minds, if not before their eyes, as they opened the book for the first time.

New Traces Appear

In the sixteenth century, new references continued to percolate into the biographies, and these were used in new combinations, which continue to baffle modern expectations. For example, not a single biography makes use of a reference in the letters of Pliny the Younger, which circulated widely in manuscript and then in print from the 1490s on. Leto even cites Pliny in his notes, but not in his vita. 92 On the other hand, two biographers take seriously a reference to "Lucretius comicus" in Fulgentius's sixth-century *Expositio sermonum antiquorum*. 93 Many modern scholars consider this a joke on Fulgentius's part, 94 but Crinitus and Giraldi dutifully list "Lucretius comicus" as a famous relative of Lucretius, and evidence that he came from an important family. 95 In the later biographies of Pius, Gifanius, and Lambin, "Lucretius comicus" disappears, but other even more questionable references take its place. The paths of these new references map the expanding availability of texts, not just what circulated but what scholars actually used.

Virgil remained a centerpiece of Renaissance education, and the fact that he considered the *De rerum natura* worthy of imitation was, for humanists, the most authoritative endorsement a poem could receive. Virgil does not mention Lucretius, but we recall that fully half of our manuscript annotators marked lines in the *De rerum natura* that Virgil imitated. The *editio princeps*, though not very widely distributed, mentioned Virgil's debt to Lucretius in its colophon, ⁹⁶ and early printed commentaries consistently point out such lines. But biographers often strove to make an even stronger case for Lucretius's influence on Virgil, citing the famous discussion in Virgil's *Georgics* of knowledge conquering fear of death:

Felix qui potuit rerum cognoscere causas Atque metus omnis et inexorabile fatum Subiecit pedibus strepitumque Acherontis avari.⁹⁷

Happy is he who has been able to understand the causes of things And has crushed underfoot all fears and inexorable fate And the clamor of greedy Acheron.

Pius and Gifanius⁹⁸ quote this passage verbatim, asserting that Virgil himself was an Epicurean, while other biographers make weaker claims, but all eight boast of Virgil's debt. Crinitus's vita stresses the fact that Virgil lifts whole lines from Lucretius,⁹⁹ and he invokes vague "Grammatici veteres" as having discussed this fact before he did. He may be thinking of a passage in Aulus Gellius's *Noctes Atticae*, which was in print in this period.¹⁰⁰ If so, Crinitus prefers to leave the citation anonymous, as if the invocation of vague learned precedents holds more authority than the name Gellius. The discussion of Virgil's debt to Lucretius in Pomponio Leto's manuscript vita may also refer to this Gellius passage, or to Macrobius, who discusses the practice of ancients borrowing from earlier ancients, citing Virgil and Lucretius, and warning readers not to think less of older poets because of this or for their rough language.¹⁰¹

The first biography written specifically for a Lucretius print edition was Pius's for his annotated edition of 1511, and his industry uncovered six new references, which again contribute to the reformation of Lucretius's character. Some had been available to manuscript readers before 1511, such as a second reference to Lucretius in Ovid, this time from the *Tristia:*

Neve peregrinis tantum defendar ab armis,
et Romanus habet multa iocosa liber.
utque suo Martem cecinit gravis Ennius ore—
Ennius ingenio maximus, arte rudis—
explicat ut causas rapidi Lucretius ignis,
casurumque triplex vaticinatur opus,
sic sua lascivo cantata est saepe Catullo
femina, cui falsum Lesbia nomen erat¹⁰²

And I need not defend myself with foreign arms only, for Roman books also contain much that is frivolous. Though Ennius lent his lips to the serious strains of war—Ennius mighty in genius, rude in art—though Lucretius sets forth the causes of scorching flame and prophesies the destruction of three elements, yet wanton Catullus sang oft of her who was falsely called Lesbia. ¹⁰³

Here Ovid defends his romantic works by listing other great authors who have treated love. After reviewing Greek examples, he begins his Latin catalogue by contrasting the graver Latin poets, Ennius and Lucretius, with light poets like himself, Catullus, Tibullus, and Propertius. ¹⁰⁴ This passage is ideal for editors who wanted to pitch the *De rerum natura* as a scientific and philosophical work. The *Tristia* were widely available in the Middle Ages, so the absence of this passage from earlier collections is rather strange, but it appears in every biography after Pius's. ¹⁰⁵

Pius also added Vitruvius and Tacitus. In Book IX of *De architectura*, Vitruvius catalogues great authors whose names and works will surely last to eternity, a variation on the Ovid and Statius passages. Vitruvius lists, in order, Ennius, Accius, Lucretius, Cicero, and Varro. The absence of Virgil and Ovid from this list and the substitution of Cicero focuses it clearly on philosophers rather than poets, and further links Lucretius with Cicero. Petrarch possessed a manuscript of Vitruvius in the 1350s and Boccaccio a copy thereof, but the manuscript Poggio discovered at Montecassino remains more famous, and links Vitruvius with Lucretius, Quintilian, and Poggio's other discoveries. The *editio princeps* of Vitruvius appeared in 1490, and the famous first illustrated edition in Venice, May 22, 1511, weeks after the release of Pius's Lucretius in Bologna on May 1. Like the *Tristia* quotation, this reference remains in the Lucretian biographical tradition from Pius on. 108

Tacitus, meanwhile, in his treatment of oratory in the *Dialogus*, mocks archaizers, characterizing them as preferring Lucilius to Horace and Lucretius to Virgil. The negative tone this passage takes toward Lucretius and archaic Latin enhances the negative side of Quintilian's and Cicero's comments on the poem's difficulty. Tacitus's *Dialogus* was another late recovery, first reported by Poggio in 1425 but not easily ac-

quired; Niccolò had it in 1431, and the *editio princeps* appeared in 1470. ¹¹⁰ Of our eight biographers, only Candidus, Pius, and Lambin cite this passage, and these are careful to rebut or gloss over the criticism. ¹¹¹

Other authors used by Pius do not travel with Lucretius long. Pius alone of our biographers mentions Sidonius Apollinaris, 112 who, in the fifth century, included Lucretius with Lucilius, Terence, Catullus, and others in his ninth Carmen, a list of poets modeled on those of Ovid and Statius. 113 Likewise Pius alone mentions the Astronomica of Marcus Manilius another Poggio recovery—which imitates Lucretius, attempting to be a successor to the De rerum natura in the genre of didactic verse. Pius calls him "Manlius" and cites a passage where he warns the reader not to balk at foreign or untranslatable concepts necessitated by the philosophical subject matter,114 referring, as Pliny did, to Lucretius's discussions of the poverty of the Latin language. 115 Numerous manuscripts and six incunabular editions, including an Aldine, made Manilius easily available well before Scaliger's corrected edition of 1579. 116 Manilius's scarcity in the biographies is likely due in part to his implied criticism of Latin, but more directly to the fact that he does not mention Lucretius by name. Biographers and manuscript readers knew their Georgics well enough to easily spot similarities, but most had no such intimacy with the Astronomica.117

These new passages all focus on the difficulty and gravity of Lucretius's work, presenting it as more challenging than pleasurable, more edifying than fun. The lists from Vitruvius and Sidonius Apollinaris cement Lucretius's status as part of a classical mandatory reading list, a fact further reinforced by another source used for the first time by Pius, from St. Jerome's *Contra Rufinum*. Jerome, while discussing the duties of a commentator, includes a list of authors whose works have commentaries, which he guesses are likely to have been components of his opponent Rufinus's childhood education. He includes Virgil, Sallust, Cicero, Terence, Plautus, Lucretius, Persius, and Lucan. This shows that Lucretius, and a commentary on the poem, was appropriate reading, not just for pagan ancients but for theologians like Jerome and Rufinus. Pius begins his biography with this reference, stating that Jerome (not just Rufinus) read commentaries on Lucretius and Plautus. Pius published commentaries on both poets, and through Jerome he refashions his works into

reconstruction projects, literally replacing the lost textbooks of the Church Doctor's childhood.

Lactantius and Christian Disapproval

So far our new references have all treated Lucretius's literary status or language. Apart from Girolamo Borgia's manuscript vita, which quoted a section from Servius summarizing Epicurus's position on vacuum and states that Lucretius follows him completely (toto animo Lucretius sequitur), not a single source used by our biographers treats the poem's philosophical content. The first comes in 1511, when Pius uses Lactantius. 120 Lactantius, the so-called "Cicero Christianus," 121 was a favorite of humanists because of his elegant Latin style, and was widely available in the manuscript period. In Book III of his Divinae institutiones, he moves systematically through the Greek philosophers, demonstrating their errors and the supremacy of Christianity. He begins chapter 17 with Epicurus, who, he says, drew more followers than most Greek thinkers through the lure of pleasure. 122 According to Lactantius, Epicurus's system consisted of little more than a series of excuses the weak could use to justify vices they were already practicing. Lactantius clearly had a good knowledge of Lucretius, and every excuse for sin that Lactantius lists can be tied to a specific Epicurean doctrine, many to specific Lucretian verses. Lucretius does, as Lactantius alleges, praise celibacy, which might condone the feelings of an unhappy husband, 123 tell parents that they have no bond of nature with their children, which might condone the feelings of ungenerous parents,124 and say that gods have no contact with men, reassuring the irreligious.¹²⁵ Indeed, Lactantius's details about Epicurean moral philosophy are of a depth that cannot have derived from Lucretius alone. 126 His other sources probably include Cicero and Seneca, because his claim that Epicurus comforts skinflints in their vice by assuring them that life can be sustained on gruel and water matches Seneca's description of Epicurus's oft-forgotten prescription of a healthy diet of water and porridge.127

After attacking Epicurean moral philosophy, Lactantius summarizes Epicurean physics, including the theory that bodies form from an initial chaos of random atoms.¹²⁸ Epicurean denial of Providence receives the

bulk of Lactantius's attention.¹²⁹ He says that this opinion derives from Epicurus's observations that evils often befall pious men, while blessings fall seemingly randomly on the wicked. Lactantius quotes from the De rerum natura a passage in which Lucretius asks why, if lightning is the manifestation of Zeus's wrath, Zeus strikes his own temples, or smites good men while missing bad ones.¹³⁰ Lactantius agrees that Lucretius was on the right track in claiming that this proved Zeus did not fling thunderbolts, but Lactantius says that if lightning often struck the temple of Jupiter on the Capitoline, it was not because the gods ignore the Earth but because it was a temple to the wrong god.¹³¹ Lactantius is far from the only Christian to read Lucretius's attacks on ancient religion as close to the mark; indeed, Lambin often praises Lucretius's antireligious arguments as sound attacks on paganism and superstition, and then explains how said attacks do not apply to the True Faith. In Lactantius's case, however, rather than stopping with the general message that Epicurus and Lucretius were wrong because they did not have the light of Christianity to guide them, Lactantius raises specific scientific objections to the many questions Epicurus's atomism leaves unanswered, such as where the atoms came from, or how they can be both indivisible and of variable size.132

Lactantius never goes more than a few sentences without reiterating the scorn in which he holds Epicurus and his system. In fact, Lactantius says he can never read Lucretius without laughing.¹³³ This fiercely opinionated language makes Lactantius an awkward source for our biographers. Pius, in his biography, quotes a distinctly unflattering moment where Lactantius asks, "Who would think that [Lucretius] had a brain when he said these things?"; Pius takes this line just out of context enough to argue that it refers to the same furor referenced by Jerome and Statius: a lofty madness, not bad philosophy.¹³⁴ Pius also includes Lactantius's characterization of Lucretius as the most worthless of poets (poeta inanissimus)135 but places it right after Cicero's praise of the poem (multis luminibus ingenii, multae tamen artis), leaving it up to the reader to choose whether to believe Cicero Christianus or Cicero himself. Few biographers touch Lactantius, hardly surprising given the ferocity of his criticism, and even the long-winded Lambin does not include Lactantius's opinions at all, merely placing his name on the list of authors who

can verify that the poem had only six books. Still, Lactantius was a common text, much more so than Sidonius Apollinarus or Manilius, and more frequently colored readers' approaches to the poem.

Novelty, Scarcity, and Competition

Editors of the print era were fiercely competitive, so as the sixteenth century matured, rare texts, those unlikely to be known by manuscript readers, were that much more valuable to biographers, who strove to outdo their predecessors.

Gifanius is the first biographer to include a reference from another philosophical poem, the *De medicina praecepta* of Serenus Sammonicus, which cites Lucretius as an authority on treating the causes of female infertility, a subject Lucretius dwells on in the latter portions of Book IV.¹³⁶ When Lambin sought to beat the hated Gifanius with a longer vita using many more references, Sammonicus was intentionally omitted, even though we know Lambin had Gifanius in front of him as he worked.

Another point of rivalry for the two is a reference in Cornelius Nepos's life of Atticus in his *De viris illustribus*. Nepos praises Lucius Julius Calidus as the most elegant poet since the deaths of Lucretius and Catullus.137 Except for a note in Pomponio Leto's Naples manuscript, which mentions Nepos's Atticus but does not include the quotation, Gifanius is the first to cite this passage, and, just in case we were not sufficiently impressed, he cites it three times. 138 The editio princeps of Nepos came in 1471, and before that Nepos survived in a single manuscript, which in the sixteenth century belonged possibly to Pierre Daniel but more likely to Gifanius himself.¹³⁹ By reiterating the Nepos citation, Gifanius draws special attention to this ancient to whom he had special access. Lambin's Aemilii Probi et Cornelii Nepotis quae supersunt, printed in 1569, was the first critical edition of Nepos. It made significant improvements to the text and presented new arguments that the portions sometimes attributed to Aemilius Probus had to be the work of Nepos. Lambin includes the entire Cornelius Nepos quotation in his 1570 Lucretius biography, a not-so-subtle reminder of his own scholarly coup of the year before and a great way to steal Gifanius's thunder. 140

Lambin also adds a line from Velleius Paterculus's *Historiae Romanae*, compiled in 30 A.D., which lists great figures of the Augustan age grouped by period, including in the second batch Corvinus, Asinius Pollio, Sallust, Varro, Lucretius, and Catullus.¹⁴¹ The *Historiae Romanae* was not rediscovered until 1515 or printed until 1520,¹⁴² another opportunity for Lambin to demonstrate his mastery of more recently discovered authors.¹⁴³

Lucilius and the Imagined Size of Ancient Rome

This competitive zeal turned up false leads as well as true. The twentyone-books confusion is only one of several vexatious fights that arose over details grounded in little more than scribal errors. The name Lucilius remained a centerpiece. If, as happened with Macrobius and Varro, Lucilius can be mistaken for Lucretius, then any reference to a Lucilius might have been intended to say Lucretius. This idea had backing in the late grammarian Nonius Marcellus, whose De Compendiosa Doctrina, written in the fourth or fifth century and heavily dependent on Aulus Gellius, contains 107 examples from the *De rerum natura*, many of them attributed to "Lucilius." Medieval grammarians supply a variety of fragments, many otherwise unidentifiable, attributed to Lucilius; so reading Lucilius as Lucretius made it possible to argue that these passages were from other works by Lucretius, or from lost books of the De rerum natura. Biographers do not make any systematic attempt to attribute all the fragments of Lucilius to Lucretius, or to deny that an independent Lucilius existed; they simply argue that the two names were often confused. It was Avancius who first addressed this issue in print, in his letter to the learned reader in the 1500 edition, 145 while Gifanius and Lambin both argue at length that Lucilius is a variant on Lucretius, and both cite Nonius, among many grammarians, as evidence.¹⁴⁶ Even better (or worse), if Lucilius was Lucretius, then other variants, Lucullus, even Lucilia, might also be related. These leaps introduce dozens of new sources, and dozens of new opportunities to fill in biographical blanks.

One of the best (and worst) sources brought in by this name confusion is Pliny the Elder. Giraldi tells us that before Eusebius, Pliny also reported Lucretius's suicide. This refers to a denunciation of the use of potions in the *Historia naturalis*, in which Pliny mentions how the famous general Lucullus died from a love potion. ¹⁴⁷ Some modern scholars have argued that this Pliny passage may even have been the source of Jerome's suicide story, but, for Giraldi, Pliny's description of Lucullus's death is the long-sought second voice to support Eusebius-Jerome. ¹⁴⁸

These conflations are more than bad scholarship. They indicate how differently early modern classicists conceived of the classical world recorded in these sources from the way we understand it. They are quick to assume that any two things that feel similar must be the same: two names beginning with L, two references to potion and suicide together, and so forth. This haste communicates a strange faith that the golden age they were attempting to reconstruct was small, a tightly interconnected whole that could, through studious scholarship, be, if not completely recovered, at least completely mapped. If history was a puzzle, they believed they had a large portion of the pieces, in contrast with the modern expectation that we glimpse only a tiny sliver of a vast lost world. The small and interconnected literary community of Renaissance humanists imagined the ancient world to be the same. Renaissance scholars were accustomed to a life in which serious scholarship was clustered in a few lead cities, and where only a tiny minority even of the Latinreading elite was fluent enough to understand and attempt to reproduce classical Latin. The prevailing belief at the time was that in ancient Rome, as in Renaissance Rome, beggars and merchants on the street spoke the vernacular, while Latin was an artificial language created for philosophical and literary discourse and used and spoken only by the intellectual and political elite. 149 Even if the exaggerated numbers in Herodotus and other historians left them with an inflated sense of the size of the population of the ancient world, the golden age of Latin literature could not have had more than a few thousand participants, possibly only a few hundred. It was more rational to assume that Lucretius, Lucilius, Lucullus, and Lucretius Comicus were tangled descriptions of the same person than to propose four completely unrelated figures. Ockham's razor sides with the simpler hypothesis, that Lucilius is Lucretius, and even without that formal principle, inventing more people creates problems rather than solving them.

This tendency to imagine the ancient literary world as a small, tightly knit community will manifest again in many aspects of Lucretius's reception and is critical to our attempt to understand humanists' imagined golden age. Two points of contention, which plagued Lucretius's biographers from the manuscript period through the end of the sixteenth century, will show us the breadth of distinctly unmodern techniques used by these biographers, and at the same time expose the moral tensions that made these issues seem so important to Renaissance readers. These two questions are the twenty-one-books debate and the identity of Lucretius's lover.

The Twenty-One-Books Debate

Servius's great Aeneid commentary, familiar to all our biographers, begins with an outline that lays out the hierarchy of topics to be covered in a commentary: first the poet's life, then the title of the work, the quality of the poetry, the purpose of the writing, the number of books, and the order of books, and finally the content. ¹⁵⁰ This formula is quoted by Pius and closely followed by many vitae throughout the sixteenth century. It makes the debate over the number of books even more central. The twenty-one-books question is treated by every biographer except Crinitus, and changes in their arguments demonstrate a change in the focus of biographical inquiry from reliance on external witnesses to using the poem itself as evidence. Pomponio Leto, when describing how Lucretius compressed the thirty-seven books of Epicurus mentioned by Diogenes Laertius into six, duly notes that M. Varro claims there were twenty-one books, and gives the supposed incipit, though without stating whether or not he believes the story. 151 Girolamo Borgia, in his manuscript vita, does not name Varro but states that there are some who think (sunt qui putent) there were once twenty-one books, against which he gives several arguments.¹⁵² Crinitus does not mention the debate, but when Candidus printed his redaction of the Crinitus biography, he discussed the issue in an introductory letter and included the Varro, with "Lucretius" rather than "Lucilius" in his printed version of Varro's text. 153 Pius too comes down in the six-book camp, saying that the testimony of Nonius Marcellus, Lactantius, and Macrobius makes him fairly certain that the poem always had only six books, though he does acknowledge Priscian as possible counterevidence. ¹⁵⁴ Only Giraldi in his *Dialogi Decem* leans heavily toward the twenty-one-books camp, citing Varro, Priscian, and Macrobius, and saying that Philippo Beroaldo the Elder agreed with this view. ¹⁵⁵ Crinitus and Giraldi, the two biographers who do not come down fiercely on the six-books side, wrote poetic encyclopedias and were not working on Lucretius himself. ¹⁵⁶

This debate was important, not only because of questions about the poem itself, but because, by premodern reckoning, the size of an author's corpus casts light on his character. The fact that Epicurus wrote thirty-seven books is a testament to his industry and genius, both according to Diogenes Laertius's description and the Renaissance figures who cite him. Does Lucretius's achievement in writing the *De rerum natura* reflect half or twice the effort that generated the *Aeneid?* A Lucretius whose *magnum opus* has been cut to less than a third of its original length must also have given his ideas a great deal more philosophical development in the fifteen missing books, and covered an even more impressive range of natural phenomena, especially if his original topics included time and the division between Earth and sky.

The two most extensive treatments of the debate are those of rivals Gifanius and Lambin. Gifanius devotes fully one-third of his 2,500-word biography to arguing against the *error inveteratus et gravissimus* of suggesting that there were twenty-one books. He stresses the fact that all authors who support that view are just following Varro and that no classical author apart from Priscian agrees.¹⁵⁷ He states that Varro's text is corrupt, the first point at which a biographer makes such a claim. The possible identification of Lucretius with Lucilius too he rejects, citing many examples of errors made by grammarians. Here in the 1560s, sources are becoming more impeachable.

What Gifanius treats at length, we can trust Lambin to make even longer.¹⁵⁹ Lambin is the first to point out what a modern critic would mention first, that Book I calls itself the first book,¹⁶⁰ and that Book VI 936–937 refers to content "in primo iam carmine" when discussing matter treated in Book I.¹⁶¹ Though biographers as early as Borgia did try to defend the six-books camp with evidence from the poem itself, greater

weight, and particularly greater word count, was always given to the testimony of others, even by Gifanius. Lambin's approach, privileging text over external sources, is entirely new. Lambin's choice to grant greater authority to text than to external witnesses reflects the same desire to achieve a new, deeper understanding of ancient texts that led him to spend such energy dissecting the poem word by word in his commentary. Lambin also presents as further evidence an exhaustive list of ancients who, he points out, quote Books I-VI but no others. 162 The list includes many new names: Sextus Pompeius Festus, 163 Probus, 164 the late third-century Diomedes Grammaticus,165 the fourth-century grammarian Charisius, 166 Tertullian, 167 who quoted Lucretius in his attacks on the Epicurean theory of the soul, and the attacks on Epicureanism by Lactantius and his teacher Arnobius. 168 This adds nothing to our knowledge of Lucretius the man, but does enhance our impressions of the poem's fame, and of Lambin's own scholarly prowess. With the exception of Lactantius and Servius, Lambin's predecessors did not have access to most of these sources. Diomedes's Ars grammatica had been in print since 1476, but Charisius's Ars grammatica did not have an editio princeps until 1532, 169 Arnobius's Adversus nationes until 1543, 170 and, though the majority of Tertullian's dogmatic works appeared in a Basel edition of 1521, his De Anima, which features Lucretius most prominently, was not printed until a Parisian edition of 1545,171 the same year Giraldi published his Dialogi, and well after Pius and Crinitus. Lambin's encyclopedic knowledge of these new authorities is impressive, but his new palette of techniques for eliminating false information is more so. It marks a real shift in critical thought. External comments are no longer accepted unless corroborated by internal evidence. Gifanius and Lambin together are in a different world of sources and source use from encyclopedists like Crinitus and even Pius who worked fifty years before.

Lucretius's Lover and the Sodomy Charge

The last three sources, by modern standards the most dubious, are among the most important to biographers' apologetic projects, because these three offered details about the lover who is supposed to have driven Lucretius to drink the love potion that caused his madness and suicide.

The primary name we encounter in this matter is the supposed Lucilia, sometimes spelled Lucilla or Lucia, who is presented as either Lucretius's wife or his female lover. 172 We first encounter a suggested female lover in Girolamo Borgia's late fourteenth-century manuscript vita, and Lucilia's name joins the tradition with Pius's vita of 1511.173 The supposed Lucilia seems to derive from a letter, once attributed to St. Jerome, which is actually part of Walter Map's De nugis curialium, a compendium of anecdotes compiled in the twelfth century. The letter is a long denouncement of marriage. While cataloguing the many evils perpetuated by women over the course of history, it mentions one Lucilia, who killed her husband, whom she loved too much, by accidentally giving him a potion of madness instead of a love potion.¹⁷⁴ Lucretius is not mentioned, but Pius, or a lost earlier source, linked this story to Jerome's account, perhaps because the two were supposed to share one author. Once again, humanists expect the ancient world to be comparatively small. Which is more plausible in a world where cousins often intermarried and families reused the same few names—that this Lucilia was connected to Lucilius-Lucretius, or that two different famous cases of madness caused by love potions visited the same unlucky Roman gens?

The Lucilia story lets a biographer argue with authority that Lucretius was not himself mad or guilty of using a love potion, but was an innocent victim undone by the very type of uncontrolled love he warns readers against. The Walter Map quotation appears verbatim in Pius, though Pius is careful to say that it is others, not he, who think it refers to Lucretius. It is absent in Crinitus and Candidus's imitation, but the 1531 Navagero reprint of Crinitus appends the quotation, complete with an obvious paraphrase of Pius's discussion of it, and it is one of the first things mentioned by Giraldi. 175 Gifanius and Lambin both name Lucilia— Lucretius's wife (uxore) according to Gifanius and wife or lover (sive uxor, sive amica) according to Lambin—as one of several possible culprits suggested by unnamed earlier scholars; they do not mention the other suspects but are both careful not to say they believe the Lucilia story is necessarily true. For scholars who mention her without claiming to support the story, the dubious Lucilia defuses the stigma of love-madness without risking the biographers' reputations; though they say the tale is unproved, the final impression is still of Lucretius as victim, not madman.

Lucretius's first biographer, Pomponio Leto, presents a unique alternate identity for Lucretius's lover: "They claim this happened to him for love of a boy, whom for his brightness and extraordinary beauty [Lucretius] called Astericon."176 Giuseppe Solaro has linked this peculiar reference to a medieval gloss on line 419 of Ovid's Ibis, which contained a pseudo-Lucretian line lamenting the author's unrequited love for this young man. 177 Leto, who was himself charged with seducing his students and imprisoned on sodomy charges, was certainly aware of the dangerous stereotypes this story might reinforce. He reports it nonetheless, but is careful to frame the story so as to minimize its impact. He does not quote the pseudo-Lucretian lament but attributes the story to vague anonymous sources and sandwiches it between two better-proven recommendations sure to appeal to any humanist: that Cicero edited the poem and that Cicero, Quintus, and Quintilian praised it. Bookended by these moral character witnesses, the stigma of sodomy fades. Leto's willingness to believe the story of Astericon on such questionable evidence suggests that he himself expected homosexuality among the ancients. Lucretius is a strange fit for a male lover; the De rerum natura focuses heavily on heterosexual sex and heterosexual love, from the sex scene and sterility cures, to discussions of female pleasure, and the opening image of the adultery of Mars and Venus, which Leto treated in such detail. One quick reference in the Snares of Venus section mentions that desire may be ignited either by a "boy with feminine limbs" or by a woman, but this is drowned among far more extensive descriptions of explicitly heterosexual situations.¹⁷⁸ Nor is there any hint that Lucretius's admonitions against heterosexual love were intended to encourage the homosexual alternative. If Leto believed in Astericon, then, in his methodology, the weight of the medieval gloss, coupled with stereotype, outweighed the evidence within the text. No source after Leto mentions Astericon, and later biographers were likely unaware both of the Ovid gloss and of Leto's vita, because both existed only in unique manuscripts.

Conclusion: What Is Good Endures

By the end of the sixteenth century, thirty sources had been tapped by Lucretius's biographers, but the vast majority of readers were most likely

to have met the same four or five. Eusebius-Jerome's and Virgil's imitative passages were by far the most universal, followed by the Ovid Amores passage, Suetonius-Donatus, Cicero's letter to Quintus, Quintilian, and by Macrobius and Marcus Terrentius Varro weighing in on the critical twenty-one-books debate. More industrious readers might find the rarer Ovid and Quintilian passages, Statius, Priscian's corroboration of the twenty-one-books theory, the pseudo-Jerome Walter Map story about Lucilia, or, less often, Vitruvius or Manilius. More grammarians and rarer sources joined the source base in the second half of the sixteenth century. While Eusebius-Jerome is the only universally quoted source, two other names follow Lucretius as consistently—Empedocles and Varro, whom several ancient commentators compare to Lucretius. Many humanists follow suit, including all eight biographers and many quotation lists. Sources available on Epicureanism in general, such as Seneca, Diogenes Laertius, or Cicero's dialogues, are used in introductory letters, poems, and commentaries but not in the biographies, where comments on the philosophy are virtually absent. Lambin is the conspicuous frontrunner in source use, with twenty-one references in his biography alone and many more in the commentary. Gifanius and Pius follow closely behind, while Crinitus, the biography encountered by the vast majority of readers, employed only the nine most common sources, barely more than Avancius's printed quotation list of 1500. This distribution holds for manuscript lists as it does for print. Out of fifty-two manuscripts, five contain only the Eusebius-Jerome passage, 179 one has only the Amores quotation, 180 three include Eusebius-Jerome and the Amores, 181 and an initial page in the Florentine copy annotated by Poliziano excerpts Eusebius-Jerome, Ovid, and Statius quotations, and in the same opening section mentions Cicero, Lactantius, Cornelius Nepos, and the fact that Virgil copied Lucretian verses.¹⁸² Many others mention Cicero, Virgil, Ovid, Thucydides, and others in marginalia. Early printed editions contain similar lists, with Eusebius-Jerome appearing most often. (See Table 3.2.)

A modern biographer would say that only four of these sources offer real biographical information, while perhaps ten more illuminate the text's reception. Yet for humanists, reception is biography, because quality is tied to an author's character. By their reckoning, Lucretius must have been a virtuous man for Cicero to praise him, or for Quintilian, who says that only virtuous speakers are persuasive, to place him on the young orator's syllabus. Virgil, Prince of Poets, the vates who prophesied Christ's coming, would not have borrowed phrases from a wicked man. A man included in so many lists of the superstars of the golden age must encapsulate the virtues of that matchless era. The fact that Quintilian and Cicero tell us the text is difficult implies that its author was intelligent and industrious. Even the Orator passage excerpted by Avancius, which characterizes the rustic-seeming language of older poets as "refined," told humanists that Lucretius was refined. If a manuscript reader saw Lactantius and Jerome call Lucretius mad, the preponderance of other sources made this *furor* into divinely inspired poetic μανία, or perhaps a tragic illness brought on by female treachery. Much-beloved Ovid, also in the biographical hot seat in the Renaissance for his amorous themes, admits that Lucretius wrote on better, graver topics than himself. Perhaps even a touch of Providence is suggested by Ovid's claim that Lucretius's works, like those of the other great poets of his day, will surely last until the end of time.

Ovid's statement supports what our humanists wanted to believe, that good things endure, and that the names on Ovid's list are not perishable but, like the many excavated marble torsos sculptors were repairing with new limbs and noses, merely await discovery and correction. The fact that so many of those who testify to Lucretius's enduring importance were themselves recently restored further supported the feeling that the process of recovery had a powerful momentum. Petrarch, Pontano, and Pomponio Leto were painfully aware that many more texts were lost than recovered, and they even knew the names and titles of time's many victims, among them the lost works of Epicurus listed by Diogenes Laertius. Still, humanists had not only lists of the missing but ever-growing lists of the saved. While they knew intellectually that the majority of the classical library was lost forever, the way Lucretius's biographers read and freely conflated figures like Lucretius and Lucilius reflects a mindset that believes the ancient world is manageable and finite. Humanists' imagined golden age was small: a few hundred virtuous authors who wrote a few thousand books. If, even before the miracle of print, Poggio and Niccolò had amassed well over a thousand of these treasures, including Lucretius, then the library outlined by Quintilian, Statius, and Ovid's

Table 3.2 References to classical and medieval authors in biographies and auotation lists

	Lambin
	Gifanius
	Giraldi
ć	Candidus
aotation nac	Pius
rapintos anu y	Crinitus
gord III 6 1011.	Borgia
ia meareyar au	Avancius
cici ciices to ciassicai ai	Leto
7.7	

Uses

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ps.-Jerome Walter Map

Priscian Virgil*

Quintilian I

Vitruvius Ov. Trist. Nonius Marcellus

Servius

quote

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par.

quote facts

par.

par.

par.

quote

Suetonius-Donatus

Statius

M. T. Varro

Macrobius

quote

quote

quote letters

par. facts

Quintilian X

Ov. Amor.

Cicero

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quote

Eusebius-Jerome

Total used

quote

2	2	64	23	23		1	1	1	1	,	1	1	1									
		nse	nse	quote						quote	nse	nse	nse									
			par.	par.					quote	ı												
								nse														
facts	letters																					
	quote	quote					par.												the vita itself.		Virgil.	orgia.
facts																			ne vita, but not		nes imitated by	mployed by Bo
																		led	letters = source is used in introductory epistles that accompany the vita, but not the vita itself.		*I have found no mss. with the Georgics quote, but many mark lines imitated by Virgil.	a. Chapter 4 will cover the debate on other possible lost sources employed by Borgia.
															e	but not quoted		nation is includ	ory epistles tha	ource	rgics quote, bu	n other possibl
						facts									from the sourc	oned by name	hrased	ned but inforn	d in introduct	aly use of this s	with the Geo	er the debate o
		,		accus in	Diaconus	Ovid, Ibis	uf.	ilder	ammonicus	ıterculus					quote = direct quote from the source	use = source is mentioned by name but not quoted	par. = source is paraphrased	facts = source not named but information is included	=source is use	boldface indicates only use of this source	e found no mss	pter 4 will cove
A. Gellius	Manilius	Lactantius	Probus	Festus/Fl	Paulus 1	Ovid, Ibis	Jerome, Ri	Pliny the F	Serenus Sa	Velleius Paterculus	Arnobius	Diomedes	Charisius	Notes:	-dnote	ase=s	par.=	facts=	letters	boldfa	*I have	a. Cha

lists was regenerating nicely. It might never regenerate completely—some books were lost forever to fire and war—but names were more permanent than books, and the community of the ancient world, as humanists imagined it, was small enough that every important figure must have left some substantial footprint. Just as the circulation of fame and reputation ensured that every serious humanist in Italy knew the name and general activities of every other, so also in the small classical world they imagined, there was no room to imagine an author, or indeed any Latin-speaking gentleman, who was not known to Quintilian, Ovid, and Statius. The lost library may never return, but its catalogue, the list of titles and authors who should be in it, was presumed complete.

While the assumptions biographers made about their sources expose their preconceptions about the size and content of the classical corpus, no biographical frame was necessary for these connections to be apparent to the Renaissance reader, who knew so many sources half by heart. Quotations, mixed with humanist preconceptions about classical virtue, justified and exonerated Lucretius well before biographers got near. Ancient claims about the quality of the text established the virtue of the author, just as, somewhat circularly, the virtue of the author established the quality of the text. If, as Ovid suggests, what is good endures, the fact that the *De rerum natura* was good enough to endure the trials of the Middle Ages was itself a Providential proof of its virtue. The more notabilia-seekers spotted Lucretius's name in other texts and others' names in his, and the more closely he was tied to the other heroes of golden-age literature, the more his virtue was assured.

Yet Lucretius's exoneration was not stable. The reader of 1475 was not the reader of 1570, even if both knew Virgil by heart. New sources coming to light are not the only change to befall our newly reborn Lucretius as the sixteenth century arrives and passes. The Reformation exponentially multiplied fear of heterodoxy and atheism. The New World and new scientific and medical observations threatened to unseat Aristotle, Galen, and Ptolemy. The infrastructure of Church censorship matured to face multiplying threats. The balance of empires shifted. The center of classics publishing traveled north from Italy to France. The number of printing presses increased continuously, expanding the reach and reducing the cost of the classical education successfully popularized by

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Petrarch's followers. In Lucretius's case, fifty manuscripts became thirty print editions, likely 30,000 copies. 183 More people taught, more people read, more people bought, and the new question of marketability radically transformed what went into a book. The set of matching classics, a brilliant marketing invention, was created by Aldus Manutius and made ancient authors an even more tightly connected whole, to be purchased, owned, read, defended, and attacked together. Decade by decade, the dynamic challenges facing classicizing humanists, and the new kinds of profits to be made, led our biographers to reuse and reframe these thirty biographical fragments, presenting each new batch of readers with a different Lucretius, and a different justification for reading pagan atomism in a Christian world. We will examine the authors and motives of these eight biographies, from Leto to Lambin, in Chapter 4. Then, in Chapter 5, we will build from that cross section to trace the progress of the print editions, and in them we will see the reading process radically transformed as the seventeenth century approaches.

$\checkmark 4 \sim$

The Lofty Madness of Wise Lucretius

"DOCTI FUROR ARDUUS LUCRETI"

The Renaissance Biographies

THEN WAS IT ACCEPTABLE to read an author who was, by Christian standards, wrong? This question remains the central anxiety of Lucretius's biographers from the 1490s through the end of the sixteenth century. The necessity of addressing an expanding range of cultural anxieties about heterodoxy explains why eight biographies, one twenty pages long, were written about a poet whose known life can be summarized in a single sentence. Averroes lurks at the heart of the issue, with his infamous doctrine of the double truth, which, as we know from the trials of Averroist-influenced figures like Giordano Bruno, was a focus of European fear for centuries. Averroism posited that an argument, such as Aristotle's philosophical proof that the world must have existed from eternity, could be logically true while being theologically false. Scripture describes creation in time, but Aristotle's logical proof was, in Averroes's opinion, sound, and should be studied as an example of good logic, even if the transcendent mysteries of revelation overturned it. This led to the proposal that scientific theories, pagan and modern, should be studied even if they contradicted scripture. Opponents proclaimed that this doctrine would let heretics teach unchecked, and expose vulnerable

youths to diabolical errors, which might lead them to damnation. This debate raised the stakes as scholars asked whether it was safe to teach Epicurean "errors," and Lucretius himself discusses the Aristotelian question of the eternity of the world. It would have been too dangerous for Lucretius's apologists to directly use Averroist arguments to defend him. Instead they focus on Lucretius's character, and his connections to other ancients. By establishing that Lucretius was a virtuous person, and that the classical community that read him was similarly virtuous, they could establish that his works and opinions would not be harmful to the reader's soul, that the moral content was orthodox and the "errors" impotent. The ancient sources surveyed in Chapter 3 were the resources scholars had at their disposal to depict a Lucretius safe for Christian readers, and the ways they used and framed these building blocks changed as the concerns facing Christianity itself evolved over the sixteenth century.

These biographies' increasing length and complexity were driven by more than competitive humanist verbosity. As science became more sophisticated over the course of the 1500s, so did the Inquisition. The growing taxonomic language that would allow scientists to differentiate insects, substances, and bodily tissues with greater specificity had a cousin in the evolving taxonomy of heresy. In the later sixteenth century we still find pamphlets calling popes and Reformation leaders Epicureans, and experts calling denial of God a form of mental illness. Yet a growing vocabulary, employed in pamphlets, sermons, and Inquisition documents, struggled to competently differentiate Calvinism from Lutheranism, determinism from antinomianism, and Epicureanism from everything else. Debates over Lucretius's "insane" errors became more complex as questions of his character gave way to examinations of individual opinions within the larger work. Thus, changes in how our biographers tried to exonerate this unchristian ancient also chronicle a larger evolution in how readers thought about error and how much they were able to differentiate detail from system, and doctrine from character.

We will track this evolution through the eight biographies, plus two modified biographies and Avancius's list of quotations (see Table 4.1).

Six of these eight were produced for print, and for those we must look not only at the vitae but also at the letters, introductions, and paratexts that accompanied them. This analysis will, of necessity, stray from

Table 4.1 Renaissance Lucretius biographies and their revisions

Author	Date	Written for
Pomponio Leto (1425–1498)	Pre-1492	Unknown; possibly to introduce lectures
Aldus-Avancius quotation list	1500	DRN edition of 1500
Girolamo Borgia (1475–1550)	1502	Accompaniment for corrections by Pontano
Petrus Crinitus (Pietro del Riccio Baldi; ca. 1475–1507)	1505	De Poetis Latinis
Johannes Baptista Pius (1460/1464–1540/1548)	1511	DRN edition of 1511
Petrus Candidus (d. 1513)	1512	Modified Crinitus for DRN edition of 1512
Navagero version of Crinitus	1531	Adapted for DRN edition of 1531
Lilio Gregorio Giraldi (1479–1552)	1545	Historiae poetarum tam Graecorum quam Latinorum dialogi decem
Obertus Gifanius (Hubert van Giffen; ca. 1534–1604)	1565-1566	DRN edition of 1565–1566
Denys Lambin (1516-1572)	1570	DRN edition of 1570
Gryphius's version of Giraldi	1576	Giraldi adapted for DRN edition of 1576

Note: Items in italic are not new formal biographies, but quotation lists or adaptations of earlier biographies.

treating biographies to treating editions, but the goal of this chapter is to expose how biographers presented Lucretius the man, and how their depictions betray the evolving humanist ideals of what an ancient poet should be. A skeleton of the full narrative of Lucretius's Renaissance publication history will form around these biographies as we progress from the rough, early editions to the fierce competition of the Parisian commercial presses of the late sixteenth century. This skeleton will then be our starting framework for Chapter 5, which will examine all thirty editions. That chapter will contrast the marginalia left in the print editions with the manuscript marginalia to demonstrate how editorial efforts and larger intellectual changes affected the priorities of Lucretius's readers as the seventeenth century approached. Two questions remain central: How did Lucretius's perceived character affect readers? And when it was acceptable for an author to be wrong?

Pomponio Leto, before 1492

Pomponio Leto wrote brief biographies of several ancients whose works he edited, including Sallust, Statius, Ovid, and Seneca, and his students produced even more.² His treatment of Lucretius³ begins with a discussion of wisdom and the arts of language, framed around a quotation from Marcus Terentius Varro,⁴ another author on whom Leto worked extensively. Leto tells us that wisdom and knowledge come from God, an implicit declaration that Lucretius's wisdom and knowledge too must derive from God, downplaying the stigma of heresy. He then discusses the conviction that wisdom and language are what separate us from the beasts. This implies that the office of philosopher-poet held by Lucretius is the ideal manifestation of the divine gifts that raise humanity above animals. The supremacy of language is further emphasized by the fact that these opening lines are written in the unnecessarily elaborate and ornamented Latin that often characterizes the first sentences of humanist works, intended less to communicate with the reader than to impress and intimidate the reader with a demonstration of the author's mastery of rare and irregular Latin constructions.

This prologue quickly segues into facts. First Leto states that Lucretius condensed the thirty-seven books of Epicurus (mentioned by Diogenes Laertius) into six books, or, according to Varro, into twenty-one books. Cicero, Leto says, edited the books after the *furiosus* Lucretius killed himself, reportedly for love of the youth Astericon. Next, as an antidote to the suicide stigma, Leto presents a dense mash of antique recommendations, stringing together Cicero, both Quintilian quotations, Ovid, and Macrobius's observation that Virgil copied Lucretian lines. The prologue concludes with the peculiar statement that Lucretius wrote love poems in his youth, a claim that may possibly be an imaginative reading of Statius's *docti furor arduus* combined with stories about the youthful verses of Ovid or Catullus, from which Leto deduces that Lucretius must have done the same; it has no other apparent source.

Leto next discusses Venus and her role in natural phenomena, quoting Varro, Lucilius, Tacitus, Pliny the Elder, Cicero's *De natura deorum*, and Pythagoras, as well as Lucretius's own position on Venus as the source of life. Mars's and Vulcan's parts he illustrates with paraphrases of Homer and Varro, making it clear that Leto's discussion focuses on the opening image of the *De rerum natura*, Mars lying in the lap of Venus, though Leto does not explicitly mention the poem's opening lines in his vita. Leto's goal is to clarify that Lucretius's Venus is not base pleasure, but

rather a philosophically complex subject, and that, whatever any given author might say about the true meaning of the heavily allegorized Venus-Vulcan-Mars love triangle, it is a divine topic that even Cicero considered worthy of philosophical treatment. Leto's focus on the poem's prologue has led Giuseppe Solaro to argue that the vita was intended to introduce a course of lectures,8 but this focus also efficiently combats the stigma of hedonist sensualism that so dogged Epicureanism in the Renaissance, as now. Leto finishes this section with a quotation from Ambrosio Traversari's translation of Diogenes Laertius's life of Epicurus, which states that there are two disturbances in the soul, vo*luptas* and *dolor*, the first being natural to the human creature and the second foreign. This psychological, almost physiological, use of voluptas makes Epicurus sound closer to Aristotle or Thomas than to the sensual hedonists invoked when Petrarch imitated Horace in calling Epicureans swine little more than a century before. 9 It certainly makes Lucretius seem to be interested in the soul, downplaying his infamous denial of the soul's immortality.

Leto largely avoids the controversial facets of Epicureanism. Epicurus and Lucretius are described as wise and eloquent, and Epicurean doctrine is hardly described at all. Leto phrases the final section as a direct address to Cicero, admonishing the Orator for his inconsistency in sometimes praising Epicurus and sometimes accusing him of lusting after carnal pleasures. 10 Leto lists Epicurus's many virtues, testified to, he says, by Seneca, Diogenes Laertius, and Cicero himself, such as his strict diet and his rejection of opulent food and drink and of lovers male and female. In the face of these facts, Leto asks, how can Cicero accuse Epicurus of voluptuousness? In addition to reflecting Leto's own powerful personal feelings about Cicero, this section clearly invokes Petrarch's posthumous letters to Cicero, which expressed Petrarch's disappointment upon reading Cicero's newly rediscovered personal letters and finding that his beloved Orator did not maintain in his personal life the serenity of soul he stressed in his philosophical writings.11 Reprising Petrarch's admonishments of Cicero's inconsistency, Leto makes it seem as if the two incompatible images of Epicurus as voluptuary and ascetic both originate from Cicero's self-contradictions. As Leto grills Cicero about why he ignored this fact or that (much as Cicero so often grilled his opponents), the vita not only defends Epicurus but also makes him out to be a better philosopher than Cicero, closer to the ideal of philosophical tranquility pursued by Stoic, Skeptic, and Epicurean alike. If Lucretius was, as Jerome and Statius said, touched a bit by *furor*, that failing seems minor if Cicero himself was far from unflappable. The fact that Leto was willing to present Cicero so negatively in this quasi-invective is itself striking, given how powerfully Leto admired and identified with Cicero in many of his other works.

In the final sentence, Leto acknowledges that Epicurus thought humans had no capacity to achieve eternal happiness, and says that this *vir scientiae plenus* would have had very different opinions had he known about the true God and the fact of the resurrection. This suggests that Epicurus's "errors" arose simply because he happened to be born before Christ shared the Truth with the human race, a sin no greater than Plato's, or, for that matter, Cicero's, as Petrarch said. Thus, without any effort to excuse, allegorize, or rehabilitate the heresies embedded in Epicureanism, Leto leads the reader to find Epicurus, and by association Lucretius, free of all charges by laying the blame half on Cicero and half on the unlucky timing of Epicurus's and Lucretius' births. This closing line also reinforces Leto's own orthodoxy, just as the opening passage did, bookending the vita with reminders of Leto's Christian faith, and of Lucretius's compatibility with it.

It cannot be overemphasized how little Lucretius features in his own biography. Biographical data are confined to three sentences and one string of classical recommendations. The vast majority of Leto's 1,000 words are devoted to the discussion of arts and letters, which exhibits Leto's personal Latin skills, then the Mars-Venus-Vulcan triad, and the final defense of Epicurus against Cicero. The student about to study Lucretius with Leto's guidance is left confident that Epicurus was a good and falsely maligned sage. If any pre-Christian author is worth reading, Lucretius is. Indeed, to read the *De rerum natura* is to participate in the arts of philosophy and language that separate us from the beasts. Leto does not discuss the dramatic rediscovery of the text or the return of the ancients, but instead paints a picture of continuity, a world of arts and letters that unites all learned men. Who is Leto's Lucretius? He is one of a chorus of ancient voices that are part of humanity's ongoing, elevated,

suprabestial examination of nature, pleasure, creation, and tranquility. Plato and Augustine would both approve of this Lucretius, because he is part of that intellectual realm, open only to men and angels, that leads the soul away from error, never toward.

The Avancius Quotation List, 1500

We can now place Avancius's quotation list, and its three introductory epistles, in the context of formal vitae.¹³ The first letter, written by Aldus to the renowned humanist prince Albertus Pius of Carpi, focuses on the editor's pride in presenting a corrected edition of this much-mutilated book. 14 The inevitable comparison of Lucretius to Empedocles arises, but rather than comparing Lucretius to Virgil and Varro, as is standard, Aldus chooses Aristotle, Homer, and Stobaeus, whose compilation of Greek extracts preserved many pre-Socratics, as Lucretius preserved Epicurus and elements of Pythagoras, Heraclitus, and Democritus. Aldus was known, in his day as now, for bringing the Greek masters to print for the first time, so these comparisons to famous Greeks remind us of his other achievements, and of the unusually scientific character of Lucretius in contrast with most Latin authors. Indeed, in the following letters Avancius calls Aldus a man skilled in Latin and Greek letters (homo latinis graecisque litteris eruditus), 15 and compares Aldus to three ancient figures: Pisistratus of Athens, who founded Athens's first library and supposedly oversaw the first written versions of Homer; Nicator Seleucus, who restored to Athens the library of Aulus Gellius, which had been carried off by Xerxes; and Marcus Terentius Varro, whose position on the list was likely prompted by the frequent references to him in our classical sources on Lucretius.¹⁶ The 34 percent of manuscript annotators excited by Greek are very much the core of Aldus's intended market.

The next two letters are by Avancius. The first, addressed to the doctor and poet Valerio Superchio, describes, in playfully medical language, the great achievement of repairing the seemingly incurable mutilations suffered by Lucretius's text. The second, addressed to the studious reader, discusses the sources Avancius used to correct the corrupt 1495 edition, including careful reading of the text itself, plus fragments pre-

served in Priscian, Macrobius, and Nonius Marcellus, who, Avancius notes, calls Lucretius "Lucillius." The rest of the letter treats linguistic issues such as scansion and vocabulary, comparing Lucretius's use of variant words to their use by Propertius and Catullus. The Virgil parallels are again not discussed, and Avancius does not bring up the twenty-one-books debate.

The narrative suggested by these letters is one of the triumph of textual restoration. Aldus and Avancius have cured the incurable with their philological magic. By bringing in the Greeks, they appeal to the same project of preserving Greek learning that Lucretius and other Romans pursued in the first century. The quotation list that follows these letters, organized with the most recent recoveries at the end, takes on an even stronger sense of momentum. Who is Avancius's Lucretius? He is part of an ongoing tide of new recoveries made by Poggio, Avancius, and countless other scholars, and also part of a tradition of preservation, because he preserved Epicurus as Avancius has preserved him. Lucretius may, as Jerome says, have been driven to suicide by incurable madness, and his poem may culminate with the plague of Athens, both unfinished and uncured, but the poem itself has now been cured, and the book, its content, the other texts Aldus prints alongside it, and the continuity of preserved knowledge they contain will, as Ovid and Statius promise, last until the end of time.

Girolamo Borgia, 1502

Girolamo Borgia was a war historian and poet, heavily influenced by his Lucretian study, as we see from the extremely Lucretian subject of his poem on the 1538 volcanic eruption by Lake Avernus.¹⁷ His 1502 vita was an early work, composed when he was twenty-seven and still studying with Pontano in Naples. Scholars agree that the formality of the vita, not to mention the twenty years' labor Borgia describes, indicate that Pontano and Borgia planned to publish a corrected text, a project prevented by Pontano's death in 1503, one year after the date on Borgia's vita. Avancius's corrected edition of 1500 may have been a secondary deterrent.

The vita begins in fine Epicurean form by wishing *salutem et volupta*tem to its addressee, one Neapolitan "Elisio Poo." Borgia then laments that, though the history of human inquiry has generated virtually as many philosophical sects as there are people, still all the men of his own age seem to live only to drown their senses in bodily pleasures (corporis voluptatibus).¹⁹ This contrasts the pleasure of the flesh and the chaste and healthy pleasure recommended by Epicureanism, which Borgia feels comfortable wishing upon his dedicatee. Next Borgia quotes a paraphrase of Aristotle from Cicero, writing that man is born for two purposes, understanding and acting, like a mortal god.²⁰ This further associates Epicureanism with respectable, antisensualist authorities, refuting the stigma without ever referring to it. This portrait of Lucretius is radically divorced from Epicurean doctrine, because Aristotle's active mortal god could not be more different from an Epicurean god, which neither acts nor understands.

Borgia says he became acquainted with Lucretius through Pontano, the "oracle of our age" (nostri seculi oraculum), and that both he and Pontano labored to repair the extremely corrupt text.²¹ He then offers what biographical information he can, beginning with the birth year, which he gives as the consulship of Licinius Crassus and Q. Mutius Scaevola—one year off from Jerome's Olympiade CLXXI anno secundo. The death date given by Suetonius-Donatus is nowhere. This brief, fact-filled section clearly was not the focus of most of Borgia's energy, but it was useful enough for one sixteenth-century annotator to duplicate it by hand on the flyleaf of a copy of the 1495 edition preserved in Venice, our best evidence that the Borgia vita did circulate at least a little bit.²²

Since the discovery of Borgia's vita in 1894, scholarly interest in the vita has focused on the next section, which contains a nest of new facts with no clear source:

Vixit ann. IIII et XL, et noxio tandem improbae foeminae poculo in furias actus sibi necem conscivit reste gulam frangens vel, ut alii opinantur, gladio incubuit, matre natus diutius sterili. Cum T. Pom. Attico, Cicerone, M. Bruto et C. Cassio coniunctissime vixit. Ciceroni vero recentia ostendebat carmina, eius limam sequutus, a quo inter legendum aliquando admonitus ut in translationibus servaret verecundiam: ex quibus duo potissimum loci referuntur, *Neptuni lacunas* et coeli cavernas. C. Memmio epicureo dicavit opus. Romani autem epi-

curei hi memorantur praecipui: C. Memmius, C. Cassius, Fabius Gallus, C. Amafinius, M. Catius, L. Calphurnius Piso Frugi, qui Polidemum audivit, C. Velleius Gallus senator, Virgilius Maro, Scyronis auditor, Pollius Parthenopeus, L. Torquatus, L. Papirius Paetus, Caius Triarius, "in primis gravis et doctus adolescens," ut inquit Cicero, De fi., T. Pomponius Atticus, et hic T. Lucretius Carus.²³

He lived 44 years and, finally, because of the noxious draught of a wicked woman, killed himself in an act of madness, either by strangling himself with a rope or, as others believe, stabbing himself with a sword, and was born of a long-sterile mother. He lived on terms of great intimacy with T. Pom. Atticus, Cicero, M. Brutus, and C. Cassius. In fact he used to show the freshly written verses to Cicero, and followed his feedback, in that between readings Cicero gave advice from time to time, such as that restraint serves well metaphors, of which two instances come to mind: Neptuni lacunas and coeli cavernas. He dedicated the work to the Epicurean C. Memmius. These other Romans are believed to have likely been Epicureans: C. Memmius, C. Cassius, Fabius Gallus, C. Amafinius, M. Catius, L. Calphurnius Piso Frugi, who studied under Polidemus, C. Velleius Gallus the senator, Virgilius Maro, Scyronis the auditor, Pollius Parthenopeus, L. Torquatus, L. Papirius Paetus, Caius Triarius, "an outstandingly serious and learned young man," as Cicero said in his De finibus, T. Pomponius Atticus, and this same T. Lucretius Carus.

Many statements here are new. *Improbae foeminae* is the first suggestion of a specifically female perpetrator of the love potion, who will soon be named Lucilia. The suggestion that Lucretius was born of a barren mother is also new, as are the two proposed means of death, the friendships with Atticus,²⁴ Brutus, and Cassius, the detail about Cicero's involvement, and the long catalogue of Epicureans. John Masson, who discovered the vita in 1894, argued that this section paraphrases an otherwise unknown lost section of Suetonius's *De viris illustribus*, or possibly a grammarian's recapitulation of such a section, presumably discovered by Pontano, who discovered many rare works in manuscript.²⁵ The conjunction of several consecutive new facts certainly requires

explanation, but, as Masson's critics have pointed out, most of the details are precisely what a classically educated humanist might guess upon reading Eusebius-Jerome: standard Roman methods of suicide, the assumption that Lucretius was part of Cicero's known social circle, likely advice Cicero might give, ²⁶ and a heteronormative female lover. The barren mother story has been linked to the same Serenus lines on female sterility that may have helped perpetuate the love potion legend.²⁷

Attacks on Masson's claims about a lost Suetonius vita rapidly degenerated into a fight over the credibility of humanists in general, revolving around the question of whether or not a scholar of Borgia's credentials would present speculation as fact. The large amounts of speculation in Gifanius and other later Lucretius biographies prove beyond doubt that great humanists were indeed willing to present speculation as fact, in biography as they did in philology or, for that matter, sculpture, where an intelligent guess was the only way to restore missing limbs. Christopher Wood, among others, has discussed the issue of where medieval and Renaissance Europeans drew the line between restoration and forgery.²⁸ Premodern ways of understanding time made medieval and early Renaissance figures consider it an act of repair to replace a missing text or artifact based on presumptions of what it should have contained, whereas we moderns, with our powerful sense of anachronism and chronology, consider the same replacement immoral and, often, criminal.²⁹ The educated guesses presented by our humanist predecessors are nothing strange in a world that would hold a contest to see who could make the best new limbs for the *Laocoön* or the limbless torso that became Cellini's Ganymede, or where in 1669 Alessandro Marchetti could introduce long tracts of original material into his Italian version of Lucretius and still receive wide praise from an educated audience who still considered it a "translation." Borgia, similarly, saw himself as restoring the fragmented information passed down by Jerome and Cicero. He knew how humanist literary circles worked, so he was confident painting Cicero and Lucretius poring over the De rerum natura in the ancient world, just as he and Pontano did in his own time, and as he knows others will after him. Borgia sees this as not speculation but certainty, based on his confidence in the continuity of time.

This sense that Roman literary circles were like their Renaissance descendants is further reinforced by Borgia's list of ancient Roman Epicureans.30 This list has no traceable classical source; it is primarily made up of names that any humanist worth his salt would naturally nominate if you asked him to suggest Epicurean sympathizers. Amafinius was the oldest confirmed Roman Epicurean author, and Gaius Memmius was the dedicatee of the *De rerum natura*. Servius's treatment of the *Eclogues*, and the Georgics passage, so often read as Epicurean, justifies adding Virgil to the list. Cicero's Epicurean friends Atticus, Cassius, and Lucus Papirius Paetus are also logical choices, as is Lucius Torquatus, the Epicurean interlocutor from the De finibus. Caius Triarius, Fabius Gallus, and Cato are not known to have been Epicureans, but were associated with Cicero, and Lucius Calphurnius Piso Frugi (the grandson of the consul of the same name) was a marriage ally of Cicero, because his son, C. Calpurnius Piso Frugi, married Cicero's daughter Tullia.31 If Cicero and Lucretius had a close-knit circle of scholar-friends, it would be these men.

The final three names on the list, C. Velleius Gallus, Polidemus, and Pollius Parthenopeus, are nearly inexplicable and provide the strongest evidence that Borgia may have possessed some original source. "C. Velleius Gallus senator" may be the historian Marcus Velleius Paterculus, who has no particular connection to Cicero or Lucretius.³² Masson has suggested that "Polidemus" may be a mistake for Philodemus, mentioned by Cicero,33 and Pollius Parthenopeus might be Statius's friend Pollius Felix,³⁴ but all these identifications are tenuous. Pollius Felix, like Piso Frugi, has a nicely pseudo-Epicurean nickname, which may be enough for Borgia to include him. If his Parthenopeus nickname refers to his Neapolitan villa, that reference plus the name Lucius Papirius Paetus, also Neapolitan, makes Borgia's list suggest the presence of a classical Epicurean circle in Naples, in addition to that imagined in Rome. Naples was where Borgia and Pontano were working, where the vita's dedicatee "Elisio Poo" also lived, and where several Lucretius manuscripts were produced and used, including those bearing royal arms. This element of Borgia's list suggests another continuity—that classical Naples was a center of Epicureanism, and, perhaps, that if Epicureanism again becomes an important movement, Naples might rise anew as its intellectual center.

Borgia's image of Epicurus is in direct conflict with the lifestyle the philosopher preached. Whereas Atticus, and presumably Lucretius, loyally avoided politics, Cato, Cassius, and Cicero did not choose the garden retirement that is supposed to yield true happiness, and they suffered the consequences Epicurus prophesied: toil, stress, and death. Epicureanism has always been on the passive extreme of the debate over the passive and active life. We detect, perhaps, a hint of Civic Humanism in this representation of Epicureanism that attempts to make it into a philosophy of noble statesmen and to appropriate several of the figures who gave Stoicism such a reputation for nobility. If the goal of humanist classical education was to raise good and virtuous leaders and courtiers to guide Italy's rebirth, patrons would not hesitate to raise their sons on the same philosophy that gave us Cato, Cicero, and Virgil.

After a brief discussion of the Memmius family³⁵ and a refutation of the twenty-one-books theory, 36 Borgia moves on to the poem's content, summarizing the subjects of the six books. 37 Lucretius, he says, aimed to cast down all religions and free men from fear, and he addressed major philosophical questions, arguing that nothing can come from nothing (nihil ex nihilo gigni) and that nature consists of vacuum and matter (inane et solidum).38 These are two of the most important (and simplest) physical issues treated by the poem, and two of the most consistent capitula transmitted through the manuscript tradition. Borgia then includes a lengthy quotation from Servius, which specifies that Epicurus and Lucretius believed that the universe contained two elements, void and matter, and that matter was composed of indivisible atoms, which can be seen when sunlight streams in through a window.³⁹ A brief analysis of Lucretius's titles for Venus follows, using an example from Ovid's Fasti. 40 The final section of the vita describes the atrocious state of the text as it was found, repeatedly stressing how impenetrable the mass of mistakes would be if not for Pontano's twenty years of labor.

Who is Borgia's Lucretius? A key member of a classical Epicurean scholarly network centered on Cicero, which had branches in Rome and Naples and included many great poets, statesmen, and heroes of precisely the sort Petrarch's neoclassical educational model hoped to rear. Lucretius's Epicureanism is more akin to Stoicism than to sensualism, with clear scientific opinions making it part of the act of understanding

that helps make the human being a mortal god. If, for Leto, it was wisdom and language that separate humans from beasts, Borgia's opening quotation makes it wisdom and doing, action, participation in the improvement and leadership of humankind. Lucretius's attempt to overthrow (pagan) religions is not objectionable to Borgia, nor is his un-Aristotelian science, but Borgia actively covers up the doctrine of the passive life, substituting the claim that Epicureanism helped rear the ideal orator-statesman-hero Cicero. What could be better for the education of a Renaissance gentleman?

Petrus Crinitus (Pietro del Riccio Baldi), 1505

The Crinitus vita was not only the first one printed, but it was printed more than twenty times in the sixteenth century, while the others each appeared in only one or two editions. Pietro del Riccio Baldi (Petrus Crinitus) was a precocious Florentine humanist whose short life and career, supported by Poliziano and Lorenzo il Magnifico, left us with an influential corpus including his best-known work, *De honesta disciplina* (1504). Crinitus was a personal friend of Marullo, whose manuscript corrections exerted such a huge influence on the early form of the Lucretius text.

This brief, five-hundred-word treatment of Lucretius was originally one chapter of Crinitus's biographical compendium *De Poetis Latinis*, first printed in Florence in 1505 and reprinted ten times by 1600.⁴¹ In less than one hundred pages, this work covers eighty-six poets categorized into five periods, of which Lucretius is the first author in Book II, the period just before Virgil.⁴² Crinitus characterizes this as a period of incredible literary blossoming and outstanding human genius.⁴³ The Lucretius chapter does not differ in formula from the others in the collection, a block list of rapid-fire facts squeezing in as many quotations from other authors as possible. The one note of exceptionalism Lucretius receives comes in the contents list, which labels poets by genre, "L. Anneus Seneca Trag." or "M. Plautus Comicus." Here, rather than squeezing Lucretius into the "Epicus" classification with Ennius and Caesius Bassus, Crinitus grants him instead the unique title "Phisicus."³⁴⁴

Crinitus stands out from earlier and later biographies in his openness about the conflicts between sources. He gives no birth date, simply stating that Lucretius is a little older than Terence, Varro, and Cicero, and that Virgil's quotations and ancient grammarians' observations of them (presumably Aulus Gellius) give an approximate date of the poem's composition. 45 He dismisses Eusebius-Jerome, writing that "in those Annals (which we have from the Greek) many false things are claimed and listed wrongly contrary to the logical temporal order."46 As for the suicide, it is Eusebius, Crinitus says, not he (or Jerome), who claims Lucretius was driven mad by a love potion and killed himself. 47 He gives the poet's life span as a little over forty years, and mentions Donatus's statement that the suicide occurred in the year Virgil assumed the toga virilis, again stressing that these are another's claims (ut quidam testantur), not his own. 48 This he follows with a rapid-fire sequence of references from Ovid, Statius, Quintilian, and Cicero, including as many sources as Leto did, but in less than half the word count.

Crinitus's short encyclopedia entry format leaves him only a few lines for analysis, which he focuses on a defense of Lucretius's style. He claims that Cicero's corrections are the reason Lucretius's verses are often heavy and read rather like prose orations. 49 The De rerum natura should not be criticized for its difficult language, and he reminds us that Macrobius advises readers not to dislike old authors.⁵⁰ Vespasian, Crinitus says, preferred Lucretius to Virgil and Lucilius to Horace, an out-of-context distortion of Tacitus's words that were meant originally to mock, not praise, Lucretius. Crinitus then says that the difficulty of the poem is caused not only by the subject matter but by the poverty of the Latin language compared to Greek, a paraphrase of Lucretius's own discussion in Book I.51 Fleischmann has suggested that Crinitus's protracted discussion of the difficulty of Lucretius's language, reproduced in the front matter of so many later editions, increased rather than decreased readers' eagerness to tackle the challenging poem.⁵² After this discussion of form, Crinitus touches fleetingly on the work's content, calling it the first Latin treatment of natura rerum, and stressing the fact that it imitates not only Epicurus but Empedocles.53

Uniquely, this vita is not apologetic. Crinitus was trying to promote, not Lucretius, but his own poetic encyclopedia. He praises the idea of

Rome, the genius and lights of the pre-Augustan age, but has no need to defend Lucretius beyond defending archaic authors in general. Who is Crinitus's Lucretius? The first and only Roman poet-physicus. He is not an author for the fainthearted Latinist to take on, but the content is worthy and the heaviness of the language is Cicero's fault, not Lucretius's. A hybrid of the language of Virgil and Cicero cannot be anything but the most edifying reading. Crinitus gives no comment on Lucretius's character. This lack of any moral pitch was particularly convenient for print editors, because it left them free to add their own. Crinitus died in 1507, two years after the publication of *De Poetis Latinis*. His treatment of Lucretius was promptly snatched up by the Lucretian print tradition. Candidus printed his unattributed and slightly disguised version in 1512, then the original appeared in the 1531 Basel edition, accompanying the text edited by Andrea Navagero. It appeared in ten more editions by 1567, and in more in the seventeenth century.⁵⁴ More than one-third of all sixteenth-century Lucretius editions contained some form of Crinitus, making the best-known version of Lucretius this dense, archaizing, proselike, Ciceronian poeta physicus, not pleasurable reading but good for improving one's knowledge and one's Latin.

Johannes Baptista Pius, 1511

A year before Candidus's plagiarized version of Crinitus went to press, Johannes Baptista Pius published the first annotated Lucretius, including his own vita. Pius was a versatile and prolific editor and commentator, responsible for many important Italian editions, including a Suetonius with Beroaldo's commentary (1493), Sidonius Apollinaris (1498), Fulgentius (1498), Plautus (1511), Valerius Flaccus (1519), and the *editio princeps* of the *De reditu suo* of Rutilius Claudius Namatianus (1520). His 1511 folio Lucretius, reprinted in 1514, remained the only annotated version until superseded by the luxurious 1563 Lambin.

Pius's vita begins with Jerome's reference in the *contra Rufinum* to commentaries on Lucretius and Plautus being staples of education of his day. ⁵⁶ This opening advertises Pius's knowledge of sources unknown to earlier editors, reinforces Lucretius's position as part of the education of respectable men like Jerome, and connects Pius's Lucretius to his recently

published Plautus commentary.⁵⁷ He further reinforces the value of his project, and the breadth of his knowledge, with quotations from Cassius Dio and Hermogenes on the worth and importance of clarifying texts.⁵⁸ Pius then quotes Servius's formula for what should be treated in a commentary: the poet's life, then the work's title, the quality of the poetry, the purpose of writing, the number of books, the order of books, and finally the content.⁵⁹ This formula he follows to the letter.

Pius at once establishes himself as a more rigorous fact-checker than his predecessors, saying he conjectures (coniicio) that Lucretius was a Roman, setting out to prove what previous biographers treated as fact. His evidence: "Lucretius" is an old Roman cognomen, and Lucretius's presence in Rome is confirmed by a reference in Book I to times of trouble afflicting the state, one of few instances where Lucretius mentions his experiences. 60 For the poet's alleged insanity, Pius states there are many witnesses (presumably he means Statius and Eusebius-Jerome) but he describes the madness explicitly as "vatum . . . furorem lucretianum laudantium," the famous divinely inspired, poetic furor of a poet-seer. Pius even cites Democritus in Greek to grant a more ancient seal of approval to the concept of poetic μανία. 61 He then reminds us of the poem's quality with a cortège of praise, including Donatus, both Ovid quotations, both Quintilian quotations, Statius, Vitruvius, Cicero, and Sidonius (the only instance of him in any biography).62 Lactantius alone (unus), Pius tells us, called Lucretius a vacuous poet who, in decorating Epicurus, gave a mouse a lion's praise. Addressing Lactantius's statement that he wondered whether Lucretius, writing what he did, had a brain at all, Pius says that he thinks even Lactantius is referring to the divine madness of a vates, confirming his reading of Statius and Eusebius-Jerome. 63 Here Lactantius's insult becomes praise, implying that the advisor to Constantine believes that divine inspiration lifted Lucretius entirely from his everyday material body and into higher philosophical realms. Even Lucretius's sole (unus) critic merely reinforces the fact that the poem is too weighty for mortal comprehension.

Pius next dips into the questionable realm of identifying Lucretius's lover. He claims that there is agreement that the potion was administered by Lucretius's wife, thus that there can be no hint of immorality or weakness from Lucretius himself. He then presents the pseudo-Jerome

Walter Map reference to Lucilia, but frames it as a reference others have found, about which he reserves judgment. His lack of commitment implies that he thinks the love potion story may be fabricated and baseless, but if it is true, it was certainly a woman's fault, and not the poet's. Lucretius is a divine seer, like Virgil and Plato, beyond mortal lust and mortal madness.

On Quintilian's statement that Lucretius is overly difficult, Pius says the difficulty must not be ascribed to the poet but to the subject matter, and cites Plato stating that the eyes of common spirits cannot long endure divine rays. 64 The subtle insult to Quintilian aside, this reinforces the divine inspiration narrative; the De rerum natura is not for the faint of soul. Citing the passage in which Tacitus mocked those who prefer Lucilius to Horace and Lucretius to Virgil, Pius says Tacitus was thinking of those who do this on account of the writing, not the theories within. 65 The merits of the poem's poetic and philosophical content must be evaluated separately, and any apparent literary flaws are due to the difficulty of the subject matter, not the poet's inferiority. The poverty of the language and difficulty of the work force Lucretius to innovate, Pius explains, as Aristotle, Cicero, Jerome, Lactantius, and even Augustine did as well. Pius reinforces this point using Manilius's description of the challenges that philosophical topics pose to the poetic form. 66 The fact that the work is difficult proves that it is weighty, and worthy of print and study.

The purpose of the poem comes next in Servius's formula, a topic not addressed directly by earlier biographers. Lucretius' intent, according to Pius, was to free the mind from clouds of ignorance, and to lead it to that happiness that Virgil described (here Pius supplies the *Georgics* passage). ⁶⁷ By putting Lucretius's goal in Virgil's mouth, our biographer links the authors' aims. Now, to accuse Lucretius of exerting an unchristian influence is also to accuse Virgil, whom every educated man since Dante knew to be more on Christ's side than any other pagan. Pius says that for men of religion (Lucretius, Virgil, and, presumably, the learned reader) the aim is to free souls from the bonds of superstition, that they may fear and desire only what is appropriate. This division of religion into appropriate elements (quod sit citra decorum) and destructive superstitions exists in Lucretius, but for Lucretius the appropriate elements

are the useful facets of civic religion and metaphorical use of concepts such as Venus and Mars. ⁶⁸ Pius instead interprets appropriate religion as true religion—Christianity—employing the traditional antonyms of good *religio* and bad *superstitio*, the latter being anathema to Lucretius and Church alike. ⁶⁹ The goal of the poet, whom Pius again calls a *vates*, is the good of the state *(communis utilitas)*. As in Borgia's vita, the Epicurean rejection of civic activity is erased in favor of the conviction that philosophy will strengthen the state. Humanists' other favorite *vates* did so, Virgil supporting Augustus, and Dante hoping to save Florence and Italy. ⁷⁰ Just so their Lucretius.

After a brief dip into the twenty-one-books debate, in which Pius sides firmly with the six-book maximum, citing Nonius Marcellus, Lactantius, and Macrobius on his side and Varro and Priscian in opposition, Pius devotes the last sixth of the vita to listing and thanking (thus advertising) the sources he used in preparing his edition. Pius names five exemplars (far superior to Avancius, who had only the 1495 edition and fragments from grammarians): a copy used by Pomponio Leto and Ermolao Barbaro in Venice, one owned by the Strozzi family in Mantua, the corrections made to a print copy belonging to Pius's former teacher Philippo Beroaldo the Elder, a manuscript belonging to Antonius Urceus Codrus, transmitted to Pius via Bartolomeo Bianchini, and a set of Marullo's corrections brought to Pius by Severus, a monk from Piacenza. This breadth of access ensures his edition's superiority. As Munro points out, Pius clearly also used Avancius's edition but does not give any credit to his predecessor-rival.

Closing quotations from Albertus Magnus and Valla's translation of Thucydides stress that anyone who knows things but does not share his thoughts with others may as well know nothing. Here, for the first time, a biographer directly addresses the "errors" in the work, but Pius argues that a scholar has a duty to disseminate knowledge, even if it is unorthodox. What matters, he says, is that we ensure that students are exposed to such things when their basic knowledge is strong enough to resist error. It was widely acknowledged at the time that Plato's and Aristotle's books should be read only in the proper order, and only once the student had mastered the proper background, or they too could lead to errors such as Averroism. Pius expects Lucretius, if handled with the proper

care, to be no more dangerous to the youth than any other work of divine, superhuman philosophy.

This biography is accompanied, in both editions of Pius's text, by an equally long Expositio in Lucretium auctore Pio, and supplementary letters, which reinforce the themes of the biography. 75 The expositio begins with Empedocles, not simply mentioning him as Lucretius's model but detailing his physics, particularly its focus on the four elements, contrasted with Epicurean atoms and void. The letter then summarizes key Epicurean positions, particularly that the gods do nothing, that the soul perishes at death, that *voluptas* is the highest good a human can achieve, and that Epicurus rejects the public life. Many authorities, familiar and new, are invoked here, including Aristotle, Diogenes Laertius, Thomas Aquinas, Servius, Seneca, Eusebius, Lactantius, and Jerome. Contrasts and comparisons are made to Pythagoras, Heraclitus, Democritus, Anaxagoras, and Thales. In the final sections, Pius proposes historical explanations for Epicurus's sensualist stigma. The contrasting contents of this expositio and the vita delineate the biographical genre as Pius understands it: biography treats the work's length, purpose, and quality, and the author's character, whereas the expositio treats contents and doctrine. The biography is also distinctly more commercial, a place to advertise Lucretius the author, Pius the editor, and the superior quality of the edition itself, while philosophical, theological, and scientific issues are consigned to a secondary discussion in a letter, and, in the 1514 reprint, to smaller type. This demonstrates a prioritization of moral philosophy over natural philosophy. Whether Lucretius should be admitted into libraries and schools depends on his personal virtue more than the truth or falsehood of his physics. Pius is an exception among our editors in including any scientific discussion at all, but even for Pius, Lucretius's moral character remains primary.

In the conclusion of his *expositio*, Pius says that the doctrines of Epicurus are nearly impossible to explicate, making the philosopher oscillate wildly between seeming a Stoic and a voluptuary, a Cato and a Sardanapalus. ⁷⁶ Pius considers this vacillation to be the source of the criticisms by Seneca and Cicero, who, as Leto pointed out, praise Epicurus in one place and damn him in another. Pomponio Leto blamed Epicurus's apparent oscillations on Cicero's poor understanding, but Pius focuses

instead on the difficulty of the philosophy, and even speculates that, had Cicero fully understood it, he would have embraced Epicurus, much as Petrarch claimed he would have embraced Christianity. Pius's commentary will at last resolve this 1,800-year confusion and present the true and wholesome face of Epicurus. When discussing Epicurus's positive side, Pius consistently chooses Stoics to compare him to, further proof of the unimpeachable awe in which humanists held the Stoic school.

The priority Pius gives to moral issues is further reinforced by his dedicatory letter to Georgius Cassovius.⁷⁷ Longer than the vita and *expositio* combined, the letter contains much flattery and attempts to prove its author's learnedness by stringing together ancient references to Georgius's native Hungary, but in the course of it Pius uses classical examples from Achilles to Ovid to (briefly) touch on moral questions including *voluptas*, the *summum bonum*, and *fortuna*. No treatment of natural philosophy follows. The fact that the letter's addressee is a cleric can only partly explain the letter's exclusively moral focus. The afterlife is discussed at length, one of the most popular sections of Lucretius and another opportunity to demonstrate Pius's learnedness by invoking many classical depictions of the underworld, but even this discussion is more literary than theological, concluding with a declaration that this new Lucretius edition is a great achievement primarily because of the difficulty of the poem and its language, not its ideas.⁷⁸

A second, shorter letter added to the 1514 reprint by Pius's coeditor Nicolaus Beraldus is even more explicit in its focus on virtue. Although it is true, Beraldus says, that Lucretius dreamed foolishly (somniaverit) about Epicurus's atoms and vacuum, the *De rerum natura* should still be read, not just because of the antiquity of its theories, but because it gradually induces virtue. This assumes that Lucretius's Epicureanism will not encourage hedonist sensualism, and that its moral philosophy is compatible with the larger humanist moral program of which Seneca and Cicero are the traditional centerpieces. To round out the front matter, a poem in celebration of the edition refers to "Hoc Pius: hoc vates," equating Pius with Virgil, Dante, and Lucretius, and reinforcing again the divinely inspired poet-prophet image that Pius seeks to substitute for the less wholesome frantic suicide.

Pius's Lucretius is a poet-prophet, whose poor reputation is the consequence of the incommunicable sublimity of his divinely inspired wisdom. Pius's commentary has at last overcome the opacity that baffled even Seneca and Cicero, and has restored Lucretius's elegant and morally edifying work to the state it enjoyed when it, and its lost ancient commentary, were a normal part of the education of such figures as Rufinus and Jerome.

Petrus Candidus's Version of the Crinitus, 1512

In stark contrast to the hefty Pius edition was the first octavo, edited by the Camaldolese monk Petrus Candidus. It was printed by Philippo Giunta in Florence at the very end of 1512, and bravely dedicated to Tommaso Soderini, nephew of the Gonfaloniere who had been banished by the Medici that same year, presumably while the edition was in production.82 It is strange calling anything plagiarism in this period when copyright and authorship were barely beginning to be defined, but few works deserve the label so much as this. Candidus methodically changes every third or fourth word to disguise Crinitus's work, so blatantly that his own sense of guilt about the theft bleeds through in every phrase.83 But Candidus does add something original, a quotation list that frames the tables of standard capitula, adding the two Quintilian quotations, Varro on the twenty-one books, Ovid's Amores, and Statius, though the last two are redundant, also appearing in the vita.84 If we take these additions as indicators of what Candidus found lacking in Crinitus, we again see the broadening circulation of Quintilian and the primacy sixteenth-century editors gave to the debate over the number of books.

Candidus's volume begins with his dedicatory poem to Tommaso Soderini. Between invocations of the muses and generic praise of the patron, it spends half its lines contrasting luxurious life with the Epicurean life of crumbs and gardens, which comes closer to the divine. So Candidus clearly has Seneca in mind, and the poem attempts to rebut the stigma of sensualism. The following dedicatory letter, like the quotation list, fills gaps that Candidus apparently saw in Crinitus's treatment. It begins with an emphatic version of the inevitable comparison between Lucretius and Empedocles, so then addresses the twenty-one-books debate,

coming down firmly on the six-books side. 87 Like Pius, Candidus stresses the sources he used in preparing his text, in this case the notes of Pontano and Marullo, whom Candidus describes as the vates of his age.88 Candidus recalls Marullo's tragic death by drowning in 1500, and laments that his corrections to Lucretius's text are the only remnant of his great learning, making Candidus's volume, by implication, the sole remnant of two tragically lost vates, Marullo and Lucretius.89 Pius had already used some Marullo notes for his edition, but Candidus's, like the 1565–1566 after it, contains substantial new content attributed to Marullo, leading to Munro's conclusion that several independent sets of Marullo's corrections circulated in the early 1500s. 90 Serious interest in Marullo's notes in the 1490s and early 1500s is proved by Machiavelli's octavo manuscript copy, transcribed from the 1495 but incorporating some of Marullo's notes, 91 by the Munich 1495 copy with Piero Vettori's transcription of Marullo's text,92 and by the Marullo corrections in the 1495 incunable in Paris also used by someone working from Leto's corrections. 93

The original Crinitus vita was the one least concerned with Lucretius's moral character, and the version Candidus created reversed that. His Lucretius promoted an ascetic life, not a voluptuary one, despite his thesis that *voluptas* is the highest good. Candidus also used the biography and its frame to promote the value of his new edition. By focusing on Marullo, he concealed the fact that he had himself done little more than combine Candidus's vita and Marullo's notes with Aldus's text and Avancius's quotation list, adding nothing original. Originality was not the goal, though; preservation was. Candidus's volume preserves two *vates*, Marullo and Lucretius, whose tragic deaths left this one joint, unfinished legacy.

Andrea Navagero, 1531 Version of the Crinitus

The next major editor to enter the Lucretius scene was Aldus's son-inlaw, the poet Andrea Navagero. He oversaw the second Aldine edition, the last in Aldus's set of portable classics, and the last Lucretius to be printed in Italy for more than a century. Though the second and third quarters of the sixteenth century saw a general migration of printing and scholarship from Italy to France, there is a conspicuous conjunction between the 1517 Florentine ban on teaching Lucretius and the abrupt 1515 cutoff for Italian editions. Navagero's 1515 version contained no vita, but as the editor himself left Italy for Spain in 1516, so did his corrected text. It saw seven more editions, the first in Basel, the rest in the flourishing publishing houses of Lyons and Paris. The posthumous 1531 edition included Crinitus's vita, the first time its original text appeared in a Lucretius volume. Its subsequent reprints all contained the vita; in fact, from 1516 to 1560 every single edition of Lucretius, even the two issued by other editors, included Crinitus.

Like Candidus, Navagero did not leave Crinitus's text alone, but appended a five-sentence extract from Pius. He reproduces the section where Pius specifies that many unnamed sources say it was Lucretius's wife who administered the love potion, and that quotes the Walter Map pseudo-Jerome passage that gives her name as Lucilia. 94 With all of Pius at his disposal, the fact that Navagero chooses only this passage shows that his primary concerns were to include more information on Lucretius's life and to establish a version of the love potion story that makes Lucretius innocent. This extract from Pius continued to be printed with the Crinitus vita for the rest of the century, making the Navagero combination of Crinitus and Pius the most common companion Lucretius had in the sixteenth century.

Lilio Gregorio Giraldi, 1545

Giraldi's Historiae Poetarum tam Graecorum quam Latinorum Dialogi Decem, much like Crinitus's De Poetis Latinis, was concerned not with selling Lucretius but with reviewing the ancient world author by author. While Crinitus presented each author as a self-contained entry, Giraldi's series of little biographies are placed in the mouths of interlocutors in a (rather artificial) dialogue form. Crinitus concentrated on the literary glories of ancient Rome; Giraldi's goal was to prove the equality of the Greeks and Latins, a project that Lucretius's similarity to Empedocles facilitated. Giraldi's volume was published in Basel, perhaps in hopes of evading the same Catholic hostility that drove Lucretius printing out of Italy after 1517. Giraldi in 1545 knows himself to be writing for a reader who has likely seen Lucretius in bookshop windows and who already

has more expectations than Crinitus's reader in 1505, who might barely have known the name Lucretius.

Lucretius, Giraldi begins, was a Roman poet who followed Epicurus and wrote a work on the nature of things, which, though manifestly flawed, was nevertheless rife with brilliant wit and skill, as Cicero himself testified in his letter to Quintus.95 Giraldi follows this with the Eusebius-Jerome quotation and the claim that Pliny supports the suicide story, referring to the misattributed description of the death of Lucullus from a love potion in the Historia naturalis. 96 He includes the pseudo-Jerome Walter Map quotation about Lucilia, and treats the twenty-onebooks debate, in which he, uniquely, supports twenty-one books, and claims that Priscian, Macrobius, and Philippo Beroaldo agree. 97 He discusses Memmius and the Memmius family, then adds the usual string of Lucretius references: Donatus, Quintilian, Vitruvius, and Ovid. He follows this with his own attempt to explain the war of elements, referenced in the Tristia passage, by comparing it to Lucretius Book V, trying to establish that Ovid might have been an Epicurean, much as others had claimed about Virgil.98 He follows this with Statius, saying that some scholars interpret the *docti furor* as *insania*, others as *poetica*. 99 At the end, the other interlocutor in the dialog, Piso, asks about excerpts from Lucretius that appear in Picus. The speaker clarifies that these come from Lucretius comicus, a figure whom only Crinitus and Giraldi, the encyclopedists, consider worth mentioning.

Giraldi used Pius and Crinitus in preparing his vita, and his only new contribution is the misinterpreted Pliny passage. His brief treatment focuses on segregating the issues into soluble and insoluble, saying that the debate on madness versus poetic inspiration is insoluble but that it is possible to solve the questions of the administrator of the potion and the length of the work. This distinction delineates the scope of what Giraldi thinks a competent biographical encyclopedist must be ready to answer. It is the biographer's duty to settle material questions like deeds and numbers, while the psychological question of what went on inside Lucretius's mind may remain veiled in mystery. This is opposite of the approach used by the apologetic editor-biographers, who strove to establish Lucretius's moral character. Giraldi's Lucretius is enigmatic, possibly insane. Others argued that we are wrong to dislike Lucretius's style for

being archaic and dense, while Giraldi is perfectly comfortable presenting the *De rerum natura* as fundamentally flawed, if still peppered with brilliance.

Obertus Gifanius (Hubert van Giffen), 1565-1566

The year 1565 was an exciting but frightening time to prepare a new Lucretius. New editions had been rapid in the 1540s, declined in the 1550s, then accelerated again in the 1560s, which produced more editions than any other decade of that century, or of the next three. These included competing pocket editions by Marnef and the inheritors of Navagero's text, a bare-text Parisian quarto of Books I–III, the elaborately annotated 1563 Lambin, and Lambin's fat little pocket edition of 1565, released while Gifanius's version was in production. The pocket Lambin lacked the 1563's illuminating (and intimidating) commentary, but contained such treasures as Lambin's learned introductions, the Crinitus vita, and an index of rare and obscure Lucretian vocabulary, a godsend to first-time Lucretius readers who had been painstakingly marking such words in manuscripts for more than a century.

To compete in this dynamic market, Gifanius designed a compact but luxurious octavo, affordable but with margins wide enough for note taking. It proudly advertised its corrected text (mendis innumerabilibus liberati & in pristinum paene . . . restituti, as the long title puts it) and included two introductory letters, a new vita twice as long as the longest produced thus far, a separate discourse on the Memmius family, an extensive quotation list, poems, corrected capitula, printed marginal glosses, thirty-seven pages of Epicurus in Greek (excerpted from Diogenes Laertius), twenty-four pages of selections from Cicero on Epicureanism, a massive 170-page explanatory index, and Thucydides's account of the Athenian plague, also in Greek. Printed glosses provided variant readings from Lambin and Marullo, philological notes, Greek vocabulary, and cross-references to other classical authors and other sections of the text. The volume was Epicureanism in a nutshell, unmatched in its utility and approachability. It also copied Lambin's corrected text, sparking the phlegmatic feud that has earned Gifanius a black mark in scholarly tradition ever since. 100 Even if Gifanius did not produce an original text,

and even if the marginal credit he gives Lambin did not prevent the Frenchman from calling the Antwerp edition an act of unforgivable and barbaric theft, Gifanius still does the reader an extraordinary service by combining Lambin's improved text with appropriate paratexts to create a volume that offers more guidance than one would find in a Navagero octavo but that is more manageable, intellectually, physically, and financially, than the 1563 Lambin.

Gifanius's new vita begins with an acknowledgment that, although other learned scholars have written on the poet's life before him, he feels justified in revisiting the subject in order to open up the poet for study by the youth. ¹⁰¹ He then paints a sweeping portrait of Lucretius as an inhabitant of an age of arts and letters unmatched in human history. Lucretius, he says, was jointly trained by the twin headquarters of the Muses, Rome and Athens, and was friends with the best and wisest men of the Republic. ¹⁰² The focus on Lucretius's world and colleagues resembles the golden Augustan age painted by Crinitus and the community of Epicureans suggested by Borgia, but here it reinforces Gifanius's claims about the importance of educating the young. Lucretius's classical education takes first place, rather than the catalog of his literary peers.

A separate, darker, reason for writing a new vita is revealed when Gifanius writes that the other biographers have not performed their task in the true Roman style, because they were either deceived or frightened. ¹⁰³ He says he adds these remarks, not to criticize his predecessors, but to explain himself. Gifanius is presumably referring to general Catholic hostilities toward Epicureanism, which drove Lucretius publication out of Italy. His edition was the first produced by non-Catholic scholars. Gifanius lists as his collaborators the Dutch physician-scholar Johannes Goropius Becanus and an Englishman, Antonius Goldingamus. ¹⁰⁴ Gifanius is writing less than ten years after Lucretius was overtly discussed as a potential target for the 1557 revision of the *Index*. ¹⁰⁵ While the Crinitus and Giraldi biographies did not give a strong sense of self-censorship, the vitae of Pomponio Leto, Avancius, Pius, and Navagero all reflect the danger that surrounded Lucretian study. Gifanius's promise to say what his predecessors dared not leads the reader to expect a new kind of vita.

Gifanius next treats Lucretius's imagined childhood. Not content with the simple birth date, he provides colorful anecdotes about other events of that year and other figures of the same family, including one contemporary, Quintus Lucretius, whom he suggests could have been Lucretius's brother. 106 Young Lucretius, Gifanius says, had inborn poetic talents that would have been immediately conspicuous to parents or relatives, and he would likely have been sent to Athens to be educated.¹⁰⁷ To defend this speculation, he lists other known instances of famous Romans receiving a Greek education. He follows this with speculation about which famous Greeks would have been around in Athens at the time (Zeno of Sidon, Phaedrus) and other figures to whom Lucretius would have had access, including Roman Epicureans (Memmius, Velleius, Paetus, Cassius) and literary figures (Cornelius Nepos, the Cicero brothers, Varro, Furius Bibaculus, Calvus, Cinna, Catullus, and Calidus). This is similar to Borgia's list of Roman Epicureans, but the references to family, education, and custom transform it from mere list into a narrative that gives this vita a much greater sense of completeness than any previous attempt. No new sources are cited. Gifanius believes the reader will accept without evidence this imagined model of the classical world, in which a network of scholars and authors unite Rome and Athens in one intellectual community.

Gifanius next reports that, without doubt, Lucretius would have become a great man had he come to a mature age with his wits intact, rather than dying young and entangled in youthful error.¹⁰⁸ This paraphrase presents Jerome as implying that Lucilia gave Lucretius the potion when he was still a young man (iuveni praebatum fuit philtrum), and that Jerome's "per intervalla insaniae" literally meant that the De rerum natura was written in lucid moments during a long period of insanity that dominated the later part of the poet's life. 109 This interpretation embellishes Jerome's story with protracted tragedy and is suggestive of the classic scholar's melancholy. Even Jerome's plain propria se manu interfecit is turned into a romantic final curtain as long-suffering Lucretius "borne by his own hand, left life as if exiting a theater." This narrative of youthful promise and tragic fall reinforces Gifanius's stated didactic goal for this classroom-oriented edition. He finishes the suicide tale with a quotation from Book III in which Lucretius rebukes glory seekers who forget that, even if banished and wretched, they would still be alive. As Gifanius presents it, this passage is the experienced wisdom of a sufferer, a

juxtaposition that again invokes the Stoic sage, tranquil even in the Bull of Phalaris. Lucretius's protracted illness, with dear Memmius at his side, prompts one to imagine that, had young Lucretius been educated with texts as moral as his own *De rerum natura*, he might have escaped the philter, illness, and errors that destroyed him and lived to produce, instead of a single poem, a corpus to rival those of Ovid and Cicero.

Next Gifanius discusses the year of the poet's death, mixed with ample trivia about battles and consuls. Here, for the first time, a biographer brings in Lucretius's own reference to the troubled times facing Rome to argue that he must have written specifically during the tumult of the late Republic. Gifanius stresses again the educational value of Lucretius's arguments against ambition, invoking the plentiful tumults of his own sixteenth century. Then Gifanius crushes the twenty-one-books camp with a mix of textual evidence and citations from twice as many grammarians as any predecessor mustered. He pairs this with an argument that the poem is not unfinished, citing lines in early Book VI where Lucretius refers to being near the poem's end. Perfects the tragic narrative, making Lucretius a brave sage who stoically refused to end his own life of suffering until his work was done.

Gifanius fully endorses reading Lucilius as a vulgar form of Lucretius¹¹³ and spends as long discussing grammarians as he did establishing Lucretius's character. This lets him demonstrate that he has as much expertise to offer as his competitor Lambin. Gifanius cites Probus, Festus, Nonius Marcellus, and Servius and climaxes with well-researched lists of those who imitated Lucretius (Amafinius, Catius, Cicero, Varro, Egnatius, Virgil) and those he imitated (Empedocles, Homer, Ennius).¹¹⁴ While our other biographers have hitherto focused on Empedocles and the tradition of philosophic verse, Gifanius makes Latin literature central, calling Ennius, Lucretius, and Virgil the grandfather, father, and son of the Latin epic tradition; how could one understand the last without studying the former?¹¹⁵

At the very end Gifanius addresses concerns about the utility of poetry as an educational form, noting its reputation for including frivolous, romantic, and even crude content.¹¹⁶ Lucretius and Lucan (whom he equates as *similes rerum gravium scriptores*) have not been standard schoolbooks in recent years, but, Gifanius says, taking on the role of the

doubting reader, he himself might have fallen into the opinion that poetry was mere fancy if not for Lucretius and the recommendations of Cicero and Cornelius Nepos. His concluding words, summarizing the common view that poetry "offers nothing to bring before the youth" (nihil fere adulescentibus praebeatur), connects to his opening statement that his new vita was intended for the education of the youth (studiosis adulescentibus).

The Crinitus vita, standard by now, with little Cicero and less philology, says nothing about the utility of poetry for education, and little about the moral worth of the author. In contrast, Gifanius's speculative insertions create a complete biographical narrative, divided into clear stages: birth, education, youthful travel, mature struggle with illness, timely exit. Despite Gifanius's claim that he will treat what his Italian predecessors dared not, the biography does not remotely address the poem's controversial doctrines. The debate of the day is whether poetry, not Epicureanism, belongs in youthful hands, and even the good morals practiced in the Epicurean garden pass unmentioned. Poetry is useful for education, a claim Gifanius repeats in his opening address to the learned reader, where he states that the poem's twin merits are utility (utilitas) and pleasure (voluptas), a pair that poetry alone seems to be able to unite.117 Gifanius's Lucretius grew up among the best of Rome and Athens, strayed and repented (invoking young Augustine), used his long suffering to write words of wisdom to help others avoid the same path, and died like a Stoic sage, calmly at his own hand when his work was done. Valla's life-loving Epicurean interlocutor in the De Voluptate would not recognize him.

In the subsequent history of the Memmii, Gifanius bemoans the paucity of sources and the difficulty of constructing a narrative, contrasted with the importance of knowing as much as we can about the lineages of Cicero, Livy, Sallust, Virgil, & maxime poëtam nostrum. The irony borders on absurdity, for we have dozens of (albeit passing) references to the Memmii in Roman records of all sorts, enough for Gifanius to fill five pages, while his vita included no comparable lament about the Lucretii about whom we know next to nothing. This artificial contrast sustains the illusion that his complete-seeming life of Lucretius was based on ample evidence. A quotation list on the next page continues this illusion, 118

repeating the same sources he already used in the vita: Cicero, Cornelius Nepos, Vitruvius, Ovid, Quintilian, and Statius, making them seem new. The only two he has not already used are the Virgil Georgics passage, which he says Virgil took either from Lucretius or Epicurus, 119 and Serenus Sammonicus's reference to Lucretius as an authority on fertility in the De Medicina. Unlike his predecessors, Gifanius includes three lines of Statius instead of just the one that mentions Lucretius, and the presence of Ennius in the preceding line reinforces his claims about the Ennius-Lucretius-Virgil epic triad. 120 Discussing Quintilian's manifest disdain for poets, Gifanius writes, "This judgment of Quintilian's condemned in one blow the greater part of authors ancient and recent."121 Quintilian's hasty judgment reminds the reader of Gifanius's account of how he himself might have made the same false generalization about poetry if not for Lucretius. Eusebius-Jerome is conspicuously absent from the quotation list and appears only in paraphrase in the vita; in its original form Jerome's cold summary would threaten Gifanius's moving portrait of Lucretius's sufferings.

The largest potential objection to Gifanius's attempt to pitch the De rerum natura as a moral textbook is the association of Epicureanism with atheism and impiety. Gifanius addresses this in the initial dedicatory letter to Iohannes Sambucus. After three pages of exuberance about the restoration of the text and laments for those who refuse to study the useful and elegant art of letters, Gifanius complains about those who criticize him for printing the poem. He summarizes their objections: that Lucretius teaches that the soul is mortal and so destroys all hope of salvation and the blessed life; that he denies God's Providence, which forms the very prow and stern of Christian faith; and that he discusses the absurd indivisible atoms of Democritus and Epicurus. 122 In addition to affirming the primary place given to Providence in sixteenth-century Christianity, especially Protestantism, this list sets on parthe charge of Lucretius being dangerous to good religion with that of his being wrong about science. Though the religious dangers are still mentioned first, we have never before seen so much weight given to questions of whether Lucretius's actual physics is incorrect. In answer to these charges, Gifanius argues that, if we are to throw Lucretius away on these grounds, we must also throw away Cicero, who similarly gives unchristian views of Providence, souls, and atoms, and also the greater part of other authors, because so many err on one point of doctrine or another.¹²³ As usual, Cicero is so unimpeachable that if a criticism would apply to him, the fault must be in the critic, not the Orator.

The way to defuse these errors, as Gifanius sees it, is the method passed down by Basil the Great and other Christian scholars whose works demonstrate how we can discard those elements of the ancients that threaten faith and morals but keep those elements that reinforce morals and improve language. 124 Even such a fierce defender of the faith as Arnobius, Gifanius points out, did not recommend throwing Lucretius away. 125 Rather, he says, those elements of Epicureanism that are obviously false will not be persuasive, and it is better for students to encounter literature containing false ideas while they have the guidance of a teacher, who can firmly and permanently impress the truth on them, than for those same young people to spend unguided hours with the many authors, ancient and modern, who preach dangerous doctrines. 126

Never before has one of our biographers agreed that Lucretius, and classical authors in general, can lead youths into error if studied on their own. Earlier editors (and Lambin a few years later) insist that the errors are completely unpersuasive, even without a teacher's guidance. Only here, in Protestant lands, does our editor stress the importance of the teacher. Sola scriptura gave new weight to the act of reading a text unaided, while Protestant criticism of "false" Catholic interpretations of scripture and Church Fathers implied that false readings of texts could lead to error and sin. The potential for confusing the young is no special flaw in Lucretius or the classics if even scripture can lead to sin if read wrong. Gifanius next lists the good lessons Lucretius will teach: dignity, cunning, wisdom, modesty, temperance; antidotes against ambition, scheming, torture, cruelty and civil war, superstition, and wicked astrologers; all lessons that, he again reminds us, Cicero too approved.¹²⁷ Indeed, Cicero comes up so often in Gifanius's summary that one almost forgets it is Epicureanism and not Ciceronianism of which Lucretius is high priest.

Gifanius also lists the valuable science in the *De rerum natura:* summaries of Anaxagoras, Heraclitus, Empedocles, Aristoxenus, Democritus, and the Stoics (I 635–950), information about legendary monsters

like the Chimera and Centaurs (V 878–915), discourses on sleep, procreation, sterility, prostitutes, and love affairs (IV 962-1287), and finally thunder, lightning, the size of the sea, wind, the origin of words, Mt. Ætna, the Avernian lakes (V and VI), and the causes of illness and the Athenian plague (VI), which, he says, Lucretius's outstanding verses depict as vividly as a painted picture. 128 This sequence—the famous names in Book I, the snares of Venus at the end of Book IV, and the scientific details in Books V-VI-is a literal list of the commonly marked sections in our manuscripts, skipping the more atomistic and speculative sections in Books II-III. Thucydides's account of the plague had been connected to Lucretius as early as anonymous manuscript notes of the late 1400s and early 1500s. By including Thucydides's text, advertised on the back of the title page as the source of Lucretius's morbid final tableau, 129 Gifanius further highlights the plague scene, ever of special interest due to the epidemic that had by now maintained a permanent, if itinerant, residence in Europe for more than two centuries. 130

The excerpts from Epicurus's own writings, taken from Diogenes Laertius, seem at first glance to make this volume a complete collection of all Epicurean texts available, but Gifanius is careful to pick and choose even here. He includes the letter to Herodotus, which he labels as Epicurus's *Physics* (ΤΑ ΦΥΣΙΚΑ), and the letter to Pythocles, his *Astronomy* (TA METEΩPA).¹³¹ Gifanius omits the third surviving letter, which summarizes Epicurean moral philosophy, including denial of the afterlife and the efficacy of prayer, inserting in its place a text he titles Canonica Epicuri.132 This excerpt from Diogenes Laertius's summary of Epicureanism focuses on epistemology and the vocabulary Epicurus used to discuss sensation, perception, and cognition.¹³³ Gifanius leaves out Diogenes Laertius's discussions of Epicurus's life and personality, as well as the Kuriai doxai, the list of sayings of Epicurus with which Diogenes Laertius ends Book X. The useful and interesting elements of Epicureanism are, for Gifanius, epistemology and natural philosophy, details that a fair portion of our Lucretius manuscript readers annotated. Discussions of the soul and moral questions do appear in the two included letters, but the only letter focused entirely on the Epicurean lifestyle and its questionable theological beliefs is omitted, as are the moral sayings intended to guide the lives of adherents. Yet the stated purpose of Gifanius's volume

is the moral education of the youth. Apparently Lucretius himself, not Epicurus, is the moral teacher Gifanius seeks to present. It is Lucretius whose life and moral character are defended at length in the vita; Diogenes Laertius's many testimonials about Epicurus's good character are not worth including. Gifanius's Lucretius is not valued as the mouth-piece of his Greek master. Rather Gifanius seeks Lucretius the Roman, a poet who links Ennius and Virgil and who died as nobly as Cato and Cicero. Epicurus, like Thucydides, provides useful natural philosophy but has no place as a moral instructor in Gifanius's imagined classroom. Cicero does. The Cicero excerpts in the volume come primarily from the *Academica* and *De natura deorum*, but also from letters to Cassius (Ad Fam. XV 16) and Atticus (Ad Att. II iii), the *Tusculanae quaestiones*, *De divinatione*, and *De fato*. ¹³⁴ Moral philosophy is welcome from a Roman mouth, one who commixes Epicurean doctrines with discussions of other schools, especially the Stoics.

In his opening address to the learned reader, Gifanius again invokes Cicero, not as a recommender of the text but as the first of the series of editors responsible for bringing the *De rerum natura* to its current state: Cicero, Marullo, Petrus Victorius, Pius, and Lambin. Gifanius specifies that Lambin was aided in his work by many learned scholars, foremost Turnebus and Auratus (Jean Daurat). Gifanius places himself at the end of the list that Cicero began, a continuity of philological endeavor reinforcing the idea that the ancients, like humanists, spent their leisure hours parsing unusual scansion and debating verb forms. Gifanius also includes his colleagues Becanus and Goldingamus, and thanks two professors of the Louvain Collegium Trilingue: Petrus Nannius, and Nannius's student and successor Cornelius Valerius. 135 Gifanius's catalogue of colleagues and supporting scholarship, which he places in a letter, corresponds to passages that Pius, following Servius's formula, chose to include in the body of his vita. Gifanius has rejected Servius and moved all discussion of the provenance and restoration of the text to his letters, enabling a more narrative and portrait-like biography. No earlier biographer has so separated Lucretius the man from Lucretius the text.

The last two figures on the list, Nannius and Valerius, both taught Lucretius formally at Louvain, putting into practice the guided exposure to Lucretius that Gifanius had in mind. In 1542 Nannius wrote his Somnium Alterum in Lib. ii Lucretii Praefatio, in which he describes his difficulties forcing unhappy students through Lucretius's difficult archaic Latin and complains of the absence of a good classroom edition. Nannius then describes a dream in which his soul is transported to a Democritean heavenly cosmos where he witnesses a trial, in which the ghost of Virgil is convicted of plagiarism for stealing lines from the Dererum natura. Nannius passed away almost ten years before the publication of Gifanius's edition, but his description of how difficult it was to guide students through Book I, and of his soul straying from his body as he sits sulking about the lack of good editions of Lucretius, are palpable in Gifanius's elaborate attempts to make the text more penetrable.

After the catalogue of fellow scholars, Gifanius briefly discusses his own first encounter with the text, which he had approached already well aware of the general hostility Lucretius received because of his difficult language and, above all, because "Epicurean teachings contradicted current doctrine and common belief."¹³⁷ Gifanius was persuaded to approach the author regardless, he says, because of the urging of learned contemporaries and the testimony of so many wise and respected ancients. "These things that lead to rhetorical beauty and erudition and to understanding of the ancients, because the young seem likely not to understand them easily on their own, are extra-deserving of supervision."¹³⁸

Linguistic issues occupy the bulk of this letter, especially archaic Lucretian forms (*nil* for *nihil* etc.), which Gifanius clearly considers more central than doctrine. The marginal commentary too focuses on philology, as does the index, whose nearly 200 pages of tiny print concentrate on vocabulary and comparisons with other authors, with some clarifications of Lucretius's errors. The entry on "Atomi," for example, first lists the many poetic synonyms Lucretius uses for the term, then describes the "atoms of Epicurus," a theory founded on observations of motes in a sunbeam, but, Gifanius says, it is an absurd and most grave error to think that all solid things could be made of such a material. The error belongs to Epicurus, not Lucretius.

Gifanius lived to oversee a second edition of his Lucretius in 1595, which included no written acknowledgment of the now-deceased Lambin's vitriolic protests over the theft of his text. There are signs that he did take Lambin's criticisms somewhat to heart, however, preserved in Gifanius's hand annotation in his own personal copy of his first edition. He Evidently made in preparation for the second edition, these notes prove that he did undertake a serious new examination of the text, and likely traveled to Italy to examine manuscripts in person, in answer to Lambin's complaint that the "thief" had not seen a single manuscript. It is unclear why few of these changes appear in his reprint.

Annotation in the Gifanius Classroom Editions

In the thirty years between Gifanius's first and second editions, Lucretius publication had slowed considerably, and most of the newer editions were pocket versions, as cheap as possible. Marginal annotation sheds light on these late editions' actual use. 142 Of a selection of twelve copies of the Gifanius 1565-1566 edition, four have no notes, 143 one has annotations only in the front matter, 144 another mostly in the front matter but occasionally in the text, 145 two have scattered notes in the early books, 146 one has notes mostly in I-II but a few thereafter,147 and only three have notes throughout.148 Of six sample copies of the 1595 reprint, two have one note each, the others none. 149 All these notes mark notabilia or vocabulary. Statistical analysis of such a small sample is problematic, but if these examples of text usage are typical, then few copies of these editions enjoyed thorough use cover to cover, and it was equally as likely for a reader to focus exclusively on Gifanius's introductory letters and vita as it was for a reader to make it through the whole poem. Those copies whose readers stopped annotating halfway through may be student copies from courses that, like Nannius's, bogged down in the heavy verse, but the absence of any precise repetitions in the marginalia means these are just as likely to be the notes of independent readers. No systematic classroom application can be proved, but what can be proved is that Gifanius's introductory paratexts, especially his vita, received, statistically, the heaviest annotation of any part of the volume. In many cases his portrait of Lucretius as a pseudo-Stoic Roman sage was the primary knowledge of Lucretius that readers came away with.

Denys Lambin, 1570

In 1570 the indefatigable Lambin produced a much-expanded second edition of his annotated 1563 quarto. A vehement Aristotelian trained in Paris and in Rome, Lambin became a royal reader in 1561 and published a series of classics including Horace, Cornelius Nepos, Demosthenes, Lucretius, and a posthumous Plautus in 1576. 150 He also lectured publicly on the De rerum natura. 151 In preparing his Lucretius, which remained definitive until the eighteenth century, Lambin consulted four manuscripts, including the ninth-century Codex Quadratus. 152 He then supplemented his corrected text with an overwhelming 300,000 words of commentary. While Gifanius's version endured thirty years virtually unchanged, Lambin's second quarto, printed only seven years after the original, included new letters, multiple indices, and the century's longest Lucretius vita. Gifanius spurred these additions. The index and vita were precisely those elements Gifanius had included that Lambin's 1563 lacked, and the new letters endlessly decry the "great wrong" done to Lambin (and Lucretius) by the "mutilator and plagiarizer" whom Lambin refuses persistently to name. 153 Lambin then outdoes the thief with a longer vita, and indices covering not just key terms but every word in the poem and key words in the commentary. These ambitious improvements left Lambin's 1570 edition well over a hundred pages longer than his first edition, and its 1583 octavo reprint is nearly as thick as it is wide.

Lambin's is the first vita to begin, as most modern ones do, by admitting that only a few dubious scraps of real information about Lucretius survive. 154 After the work done by Crinitus, Pius, Giraldi, and others (he still refuses to name Gifanius), there seems, Lambin says, little left for him to add. 155 This does not deter him from producing a vita ten times the length of Crinitus's. Lambin outlines the goals of the vita, including every element in Servius's formula and adding new tasks: determining the poet's nationality, family, occupation, and *ingenium*—character or ability. 156 Lambin's account of Lucretius's childhood education is even more elaborate and speculative than Gifanius's. 157 It is likely, he tells us, that Lucretius had an inborn talent for poetry and philosophy, and he probably traveled to Athens and there received a complete Epi-

curean education from Zeno of Sidon, whom Cicero referred to as the leader of the Epicureans. ¹⁵⁸ Epicureanism, Lambin tells us, teaches one to shun the stresses and struggles of public life, so the fact that there are so few surviving references to Lucretius's career or public presence proves he followed Zeno's advice and led a noble but private existence; for Lambin, absence of evidence is evidence of Epicureanism. ¹⁵⁹ Lambin then praises the poem with a sea of superlatives, supported by Cicero, Cornelius Nepos, Atticus, Ovid, and Vitruvius. ¹⁶⁰ He compares the praise offered in the Cicero letter to standard honors given to Homer and Virgil, and criticizes Virgil as inferior to Lucretius in nature and ability (naturae et ingenii). ¹⁶¹ Oddly, the lines Virgil copied from Lucretius pass unmentioned.

Lambin takes an almost personal offense at Quintilian's claims that Lucretius's poetic language is not good reading for a young orator. Lambin likens Quintilian's comparison of Macer and Lucretius to comparing a mouse and an elephant, parodying Lactantius's criticism that, in praising Epicurus, Lucretius gave a mouse a lion's praise. Lambin then lists the many great poetic, rhetorical, and philological precedents for mixing Greek vocabulary with Latin as Lucretius does, and great orators who have been aided by the study of Greek philosophy, including Pericles, Demosthenes, and Cicero himself. 162 What would Quintilian say today, Lambin asks, if he claimed Lucretius was too difficult even back when the work was still unmangled by time and scholarly incompetence?¹⁶³ If today's tattered remnant is still beautiful, Quintilian's criticisms of the original must be groundless. Rather, the poem should be mandatory reading for any gentleman or orator who proposes to speak in front of popes, kings, and emperors.¹⁶⁴ If, for Gifanius, the poem's educational value was principally moral, for Lambin it is practical, a baptism in elegant speech that will prove efficacious in political spheres. Lambin does not acknowledge the apparent paradox of learning political language from a retiring Epicurean. Zeno and Athens may have taught Lucretius to avoid the limelight, but Lambin does not expect this lesson to affect the burgeoning young humanist.

Lambin rejects outright the claim from Eusebius-Jerome that Cicero edited the poem, a fact Gifanius had touted and that every previous biographer had pitched as a key recommendation of the poem. In fact,

Lambin is outright indignant at the suggestion that Lucretius would have left behind an incoherent, rough, and unpolished fragment in need of posthumous completion, or that Cicero, in his letter, would have praised something so rough as highly as he did. Lambin points out the poem's many repeated verses, not likely to be left in by an editor who made the substantial changes that others attribute to Cicero. He uses quotations from the *De rerum natura* itself to argue that Empedocles and Epicurus are the only palpable influences on the work. The poem is Lucretius's alone, and its rehabilitated form Lucretius's and Lambin's.

Lambin repackages the suicide completely. The circumstances of Lucretius's death are "hard to say" (difficile dictu), he claims, but unnamed persons, intending to adorn the poet's death with greater tragedy, have ornamented the suicide legend with various explanations, from the love potion, to grief over Memmius's banishment, to general grief over the fallen morals of the Roman state. 168 This invokes even more clearly than Gifanius the suicides of noble Stoics. The latter two suggestions are completely new to Lucretius's biography as we know it-Lambin has invented them and attributed them to anonymous others, only to claim that they cannot be verified. By pretending to rebut others, he can insert new and flattering information without any evidence. He never quotes Eusebius-Jerome as the source of the love philter and suicide stories, but simply acknowledges that Eusebius places Lucretius's birth in DCLVII but others in DCLVIII¹⁶⁹ or DCLI.¹⁷⁰ By omitting Jerome's text he avoids any need to address a potential corroborating witness to Lucretius's furor. He then expands greatly on the character of Lucilia, telling us that she erred in administering the potion, whose aim was love, not death. Having thrown even Eusebius-Jerome into doubt, Lambin has no obligation to discuss Lucilia at all, but doing so lets him rebut one more potential stigma. There may not have been a suicide, or a love potion, but if there was, then Lucretius's wife was, like the poet, innocent, and the potion was not the suicide's central motive. Tragic melancholy, lost friendship, and the fallen morals of degenerate Rome were too much for such a noble soul. Earlier, Gifanius had not called the Rome of Lucretius's day degenerate, because the good morals of Lucretius's Roman neighbors were central to his argument for Lucretius as moral teacher. Lambin takes the opposite approach, depicting a Lucretius who is, like Cicero,

better than his degenerate age, or who may have been. Lambin consistently refuses to say whether or not he thinks the suicide story, which he ornaments in order to defend Lucretius, was invented by scholars in order to ornament and defend Lucretius.

Lambin next spends more than twice the length of the entire Crinitus vita crushing the twenty-one-books camp and those who (like Gifanius) accept the Lucilius variant. Here he uses an ocean of obscure citations unmatched by earlier biographers, including several new examples from grammarians, a few of which we still consider valid sources.¹⁷¹

The purpose of the *De rerum natura*, Lambin proclaims, is *ataraxia* (ἀταραξία), the philosophical tranquility that formed the core of Epicurean, and Stoic, eudaimonism. Epicurus, he says, saw two primary torments that plagued human existence: religio, which Lambin carefully defines as useless fear of the gods (timor deorum inanis), and fear of death.¹⁷² Epicurus combats these two plagues, he says, with the two doctrines of denial of divine Providence (deorum providentiam) and denial of the afterlife and the immortality of the soul. No earlier treatment has come nearly so close to the Epicurean theses closely associated, in the modern world, with atheism. Lambin goes on to say that Epicurus erred greatly in these opinions and that we Christians must disagree vehemently with him, but that Lucretius's own wisdom is independent. Lucretius reported these Epicurean errors, but he did not himself generate them or necessarily believe them. Moreover, the poet could not have understood these complex doctrines well enough to explain them if his own understanding of the nature of things had not been profound.¹⁷³ The fact that Lucretius can understand such grand errors—Lambin lists among the errors the claims that the world is governed by chance, not gods, and that there are many worlds that must all eventually come to destruction—and the fact that he is able to comprehensibly summarize these errors are themselves proof that Lucretius is an intelligence worth studying.¹⁷⁴ We do not read Lucretius for the Epicureanism, but because a genius capable of understanding Epicureanism must have valuable and original ideas of his own. Lucretius's own mind interests Lambin, as it has no previous biographer.

What does Lambin believe the poem's goal was, then, if Lucretius did not actually believe in the doctrines of Epicurus? To oppose paganism.

The aim, as Lambin puts it, was to use poetry, especially personalizing and vivid descriptions (Lambin supplies the Greek terms σωματοποιία and ὑποτύπωσις) to depict how wicked *religio* oppressed and terrified humankind before Epicurus dared oppose her. Epicurus's weapons in this opposition, according to Lambin, were the tools of scientific understanding, that is, knowledge of the nature of things, specifically *physica* and *physiologia*. Lucretius does not want the reader to become an Epicurean; he wants the reader to absorb classical science, from Epicurus, Democritus, and others, and use it against false religion. This is our earliest overt editorial suggestion that the scientific content of the poem is the most useful part. It is also the first direct articulation of how Epicurean science will indeed be used by most of its readers in the following centuries: useful theories are to be extracted while the parts that don't fit new information are left behind.

Lambin supports his arguments for the value of the poem's scientific content as a weapon against superstition with a quotation from Cicero's De Finibus that describes Epicurus's method of seeking freedom from confusion and fear through scientific knowledge: "If we have a stable knowledge of things, and stick to that model (regula), which is virtually fallen from heaven so we may understand things, . . . we will never be swayed from sense by anyone's rhetoric." Two old dangers rear their heads in this quotation. First is the general Renaissance concern over whether or not reading classical texts for their language incurs danger from their pagan content. The second is the Lucretius-specific concern over whether the honey of poetry may trick the reader into drinking too deeply from the cup of those Lucretian heterodoxies that come so dangerously close to atheism. Here Cicero suggests that rhetoric (oratio) can be misleading, but that scientific knowledge is the antidote. Used in the context of Lucretius, Lambin makes this passage imply that preexisting Christian knowledge will armor the reader against the few errors Epicurus makes, and that the new truths we learn from Epicureanism, and other pre-Socratics treated in the poem, will serve as further armor against future errors. Not only is Lucretius safe, but reading him makes one safer. Cicero's statement that the regula descends to us from heaven recalls Neoplatonic models of divinely emanating knowledge, popularized by Ficino and others who promoted classical philosophers as a second secular revelation, intended by God to support the Christian one. Mainstream Catholicism too, through Augustine and Aquinas, had long stressed that true knowledge, including scientific understanding, descended from on high. Lambin makes Cicero seem to argue that Lucretius too is part of a divine Christian plan to free humanity from the thralls of pagan superstition. Epicurus, for all his denial of it, becomes a tool of Providence.

The atom itself is absent from Lambin's discussions, both of ἀταραξία and of scientific knowledge. Cicero's discussion of heaven-sent regula bears no relation to the Epicurean atom-centered epistemology that Lucretius outlines in the rarely marked technical sections. When Lambin lists the doctrines and topics covered by the poem, atoms appear only once, in the description of creation from chaos, which appears in his list of Epicurean errors. Though Lambin has explored Epicurean doctrine in greater depth than any previous biographer, his presentation of the material is little different from the Piacenza manuscript that illustrated Lucretius's Epicurean cosmos with pseudo-Aristotelian diagrams. Lucretius has real scientific knowledge, useful if corrected, but Epicurus's absurd atoms remain one of the least important elements. Lambin closes with a passage from the beginning of Book V that praises Epicurus as godlike because he conquered so many vices and often spoke in godlike fashion about the gods and nature of things. This final reminder that Epicurus did in fact believe in gods rebuts the charge of atheism. Even though he has firmly separated Lucretius's ideas from Epicurus's errors, Lambin still makes sure to establish that Lucretius did not study a man who actually denied gods.

Elaborate as it is, Lambin's vita is a mere sliver of the paratexts that wrap his Lucretius. Some of the additions to the text are direct responses to Gifanius, as in Lambin's discussion *De C. Memmio Gemello*, which makes a point of being slightly better than his rival's treatment of the Memmius gens.¹⁷⁷ Others are new features, which Lambin advertises in the opening letters, particularly his philosophical index, which allows quick access to Lucretian lines connected, not just to figures mentioned in the text like Democritus and Epicurus, but to Plato, Diogenes Laertius, Plutarch, Cleomedes, Cicero, and Thucydides's account of the plague.¹⁷⁸ Other additions directly treat Epicurean unorthodoxy.

Two poems, written in praise of the edition, flank Lambin's introduction. One is by Iacobus Helias Marchianus, written newly for the 1570 edition, and the other is by Auratus, originally written for the 1563 edition. Auratus's original poem treated Lucretian denial of immortality, marveling that Lucretius would insist that immortality cannot be made from mortal components when his work, made from mortal words and a mortal author, is immortal, and here reconstructed. 179 This poem overtly addresses the atomist argument against the afterlife, which claims that any composite substance is dissoluble and therefore mortal. If Lucretius's magnum opus can be resurrected, so, presumably, can his immortal soul. Marchianus's poem, in contrast, stresses the new edition, saying that before Lambin's repairs the shattered text lay wallowing in a gutter, to combine several of his hyperbolic metaphors. 180 Lambin alone made Lucretius legible, he repeats, and even the version printed by the unmentionable plagiarist is legible only thanks to what was stolen from Lambin. Read together, these two poems make Lambin the agent of Lucretius's resurrection and the edition material proof of Epicurus's folly in denying the afterlife.

It is in the dedicatory letter to Charles IX, consistent in the 1563, 1570, and 1583 editions, where Lambin works hardest to legitimize the publication of the poem's most theologically radical content, writing:

Albeit Lucretius attacked the immortality of the soul, denied divine providence, abolished all religions, and placed the highest good in pleasure (voluptas). But this fault belongs to Epicurus, whom Lucretius followed, not to Lucretius. Even though the poem itself is alien to our religion because of its beliefs, it is no less a poem. Merely a poem? Rather it is an elegant poem, a magnificent poem, a poem highlighted, recognized, and praised by all wise men. Moreover these insane and frenzied ideas of Epicurus, those absurdities about a fortuitous conjunction of atoms, about innumerable worlds, and so on, neither is it difficult for us to refute them, nor indeed is it necessary: certainly when they are most easily disproved by the voice of truth itself or by everyone remaining silent about them. ¹⁸¹

Here, even more strongly than in the vita, we are asked to separate Lucretius from his master and attribute all faults to Epicurus. The same

unacceptable doctrines are singled out, and the "errors," especially atomism, are presented as being so absurd that they lack any persuasive power. In the intentional absence of Eusebius-Jerome and Statius, this is also the first discussion of madness we have found in Lambin, but it is Epicurus whose ideas are *insanas ac furiosas*, language that neatly displaces the stigma of insanity from Lucretius to Epicurus, Lambin's repository for all things negative.

The rest of the letter focuses on reinforcing Lucretius's connections to other authors in the classical canon, and on defending the pagan classics in general. Long lists of mandatory authors are proposed, including Plato, Xenophon, Aristotle, Catullus, Virgil, Propertius, and, equal to all, Lucretius. Why read these pagans? They teach the reader to use beautiful language to ornament our own pious Christian literature, as Lambin says was done by the ancient sacred fathers of the Church. 182 Justin Martyr did this, he tells us, also Basil the Great, Clement of Alexandria, Tertullian, Augustine, and others, all of whom read many pagan philosophers and poets and praised their writings. 183 Gifanius made this exact argument, even invoking Basil in the same context, but for Gifanius the purpose of reading remained moral education, while Lambin makes it more rhetorical: classical techniques will make our words convincing. Little wonder that Lambin took such offense at Quintilian's claim that Lucretian language was not a good model for the young orator.

Lambin later addresses hypothetical objections raised by the learned reader, who, he says, will no doubt fear that Epicurus and Lucretius were irreligious (*impii*). Lambin answers:

What of it? Does it then follow that we, who read them, are irreligious? First, how many things are there in this poem, especially the ideas and theorems of other philosophers, that are agreeable? How many that are likely? How many that are outstanding, and almost divine? These let us claim, these let us take hold of, these let us appropriate for ourselves.¹⁸⁴

Lucretius's capacity to summarize other philosophers makes him more than a handbook of Epicurean errors. The *De rerum natura* is a textbook

of non-Epicurean classical science, with unfortunate but ignorable atomist tangents. Aided by reason, contemporary science, and Lambin's commentary, readers could comfortably ignore the atomism of Books II and III, as earlier Renaissance readers had been doing for 150 years.

Passages throughout the introduction, and even the commentary, reinforce Lambin's portrait of Lucretius as anti-pagan, but not anti-theist. Lucretius's focus on tranquility and moral edification, Lambin argues, makes him morally superior to Homer, whom Plato wanted to throw out of the republic for his portrayals of gods sharing human faults and weaknesses.185 Treating the initial invocation of Venus, Lambin says that Epicurus *supposedly* denies that the gods do not heed prayers or govern Earth, but that Lucretius himself clearly rejects this, because he invokes Venus and attributes actions to her, from calming the sea to generating peace among men. 186 He then quotes a letter of Victorius Florentinus that theorizes that Epicurus, while wishing to deny that gods have any pains, nevertheless admits that they hear human prayer and that they ought to be worshipped by men due to their excellence.¹⁸⁷ On these grounds, and contrary to our modern reading (and his predecessors), Lambin writes, "Epicurus, as much as he denied that the gods are weighed down by human affairs, nevertheless did not do away with prayer or veneration or the cult of the gods."188 But Lambin knows he cannot fully exonerate Epicurus, so he again retreats into segregating the content of the De rerum natura into good Lucretian and negative Epicurean elements. It is Epicurus, he says, who, in seeking to free humanity from fear, "overturned all religions from their foundations . . . But let us say that in this Epicurus, as in many other things, was impious" (impius).189 Lucretius, meanwhile, we retain for our canon.

Lambin's most direct answers to charges of impiety come in the secondary dedicatory letters that precede Books II–VI, dedicating each book to a different friend or patron. The last three, dedicating Books IV, V, and VI to Muretus (Marc-Antoine de Muret), Adrianus Turnebus, and Ioannes Auratus, respectively, concentrate on the dedicatees' contributions to scholarship, but the first two, dedicating the controversial Books II and III, focus instead on why a dedicatee would want his name associated with such dangerous content.

Book II is dedicated to the French "prince of poets" Pierre de Ronsard. This letter stresses again Lucretius's elegant language and his place in a list of great poets: Homer, Hesiod, Pindar, Anacreon, Apollonius, Theocritus, Callimachus, Virgil, Horace, Tibullus, Propertius, Ovid, and so on. 190 Lambin actually apologizes for giving Ronsard the everunpopular book that explains Epicurus's theories about chance conjunctions of atoms, and adds that we must laugh at Epicurus's madnesses (rideamus licet Epicuri deliria). 191 Lambin does not use the lofty furor or generic insania that Statius and Jerome applied to Lucretius; instead he uses delirium, a term specifically associated with folly and derangement of the senses. The insane and laughable atomic theory is indeed a product of madness, as Lactantius suggested, but of Epicurus's madness, not Lucretius's.

The dedication of Book III to Germain Vaillant de Guellis, bishop of Orléans and primary dedicatee of Lambin's posthumous 1576 Plautus, directly addresses Book III's attacks on the immortality of the soul. Lambin points out that many ancient authors discuss the soul, but that not even Plato's elegant arguments can definitively prove its immortality.192 The De rerum natura does, he admits, deny any afterlife, but Lucretius also sympathizes with the possibility of an eternal soul. Lambin supports this claim with a quotation from Book II where Lucretius says that we are all made of earthly and heavenly matter, and that, at death, the earthly returns to earth and the heavenly to the heavens. 193 This, in Lambin's reading, shows that Lucretius's views on the afterlife differ from those of Epicurus. Why then should the bishop read this book, Lambin asks anew? Because of its elegant verses, new vocabulary, 194 and many useful topics, including temperance, thrift, the fleeting nature of love, the causes of disease, thunder, magnets, and many other things195 that are not actually treated in Book III but that remain Lambin's primary, and only, defenses.

Again in these letters Epicurus's "false" and "delirious" atomism is strictly segregated from Lucretius's "useful" treatments of natural philosophy. This categorical segregation of universal theory from the practical, earthly aspects of natural philosophy that we would, in modern terms, call "science," is, in our biographies, wholly new. Lambin's decision to displace the madness onto Epicurus, rather than to paint Lucretius

as a vates and his furor as divine $\mu\alpha\nui\alpha$, also reflects a desire for a different kind of legitimacy for this different kind of knowledge. Divine inspiration might have been where one looked for sagelike knowledge of sublime and primordial things, but for eclipses and phases of the moon one wants a calm mind capable of clearly articulating the theories and data of others, and of observing the world with senses untroubled by delirium or by divine transports. The scientific revolution was young in Lambin's day, and Bacon's call for systematic empiricism still a generation off, but Epicureans too are empiricists, and in painting Lucretius as a source of knowledge of the material world, Lambin clearly has in mind a model of natural philosophy that segregates earthly from sublime knowledge. Here in 1570, a classical sage or prophet is no longer the best authority on earthly things. Lucretius is given the personality, not of a Platonic sage or even a Stoic sage, but of an empirical Peripatetic or a practical Roman Stoic, like Cicero or Seneca, morally elevated but also engaged in earthly affairs, skilled in practical wisdom and well equipped for practical observation. It is hard for a modern to read Lambin's segregation of Epicurean theory from Lucretian natural philosophy without calling to mind the modern label "scientist."

The goal of the 1570 edition was to reclaim Lambin's great work from Gifanius, who, according to Lambin, had snuck in at night and painted over his masterpiece with base and sordid colors. 196 It succeeded. Lambin's Lucretius remained the Lucretius for well over a century, and he is commonly cited to this day, while Gifanius is nowhere. Gifanius was not nowhere in the 1500s, though, and the 1595 reprint of his edition, with no acknowledgment of Lambin's protestations, made his Lucretius, with its narrative of youthful fall and long-suffering pseudo-Stoic patience, a continuing rival to Lambin's persuasive, clear-headed, scientific genius. Lambin passed away in September 1572, shortly after the death of his friend Petrus Ramus in the St. Bartholomew's Day Massacre, leaving his precious Lucretius to be reprinted, repackaged, and abridged at the whim of any profit-seeking editor who agreed that reprinting this pagan textbook was a safe investment. Lambin entreats us to read Lucretius, half for language that we can use to strengthen our own orthodox writings and half because his rare intelligence let him depict with equal art the theories of Democritus and Heraclitus, 197 the errors of Epicurus, and Lucretius's own original scientific observations. For two centuries it was this Lucretius, clarified by Lambin's rigorous commentary, that circulated across Europe in the name of good letters and general scientific knowledge. Such a Lucretius could reach an audience who, without Lambin's assurance that it could not mislead them, would not otherwise have been willing to expose themselves to this infamous Epicurean.

Gryphius's Version of Giraldi, 1576

Thirty-one years after the original publication of Giraldi's *Dialogi*, Gryphius added Lucretius to his famous set of compact classics. He advertised his text in the long title as the joint product of Turnebus and Lambin, both also now deceased. He included, in excerpt, the first half of Giraldi's little vita of 1545. The result fits neatly on a single sheet and covers the basics: the poet's identity, Eusebius-Jerome, Cicero, the suicide, and the twenty-one-books debate. Omitted are the Donatus, Quintilian, Vitruvius, Ovid, and Statius quotations and the declaration in Giraldi's original that we do not know on which side of the inspirationlunacy divide Lucretius's furor fell. Word count explains the editorial decision to clip the vita, as does form, because the final discussion trails off into dialogue format. Still, it would not have been difficult to include the famous quotations Giraldi listed in his final paragraph, so the decision to omit them may reflect discomfort with the moral ambiguity of Giraldi's possibly mad Lucretius. Just as Lambin, six years earlier, paraphrased Jerome and omitted Statius in order to suggest that the suicide was an invention, Gryphius's omission neatly dodges the stigma of insanity.

The Gryphius Giraldi is not a particularly glorious endpoint for our history of sixteenth-century Lucretian biography, but it is in many ways typical of late sixteenth-century printing. It straightforwardly steals from past scholars in an overtly competitive attempt to supersede past editions, and sacrifices detail in service of making the pocket-sized volume as cheap as possible. The suicide is neatly blamed on a woman, while the insanity, which Pius tried to romanticize with his *vates* imagery, is glossed over. The primary name partnered with Lucretius in this vita is not Epicurus, nor even Empedocles, but Cicero.

Conclusion: A Second Virgil Becomes a Second Aristotle

Over almost a century, from the 1490s to 1576, the thirty-odd atoms of information that survive about our poet combined to form many different substances indeed. Pomponio Leto presented a Lucretius who, while he would have been better if Christian, is maligned by those who call him a sensualist, and should be read by all who would practice the arts of philosophy and language. Avancius painted Lucretius as part of a canon of classics newly rediscovered and restored. Borgia, in 1502, painted a romanticized, close-knit scholarly community of ancient Romans in which Lucretius and Cicero collaborated on their joint masterpiece, much as Renaissance humanists labored together over its restoration. Crinitus, in 1505, focused on the value of imitating the golden Augustan age. Pius's Lucretius, in 1511, was a *vates* who, like Virgil, sought to teach moral virtue and freedom from fear. The 1539 edition of Navagero's text, produced after Lucretius studies fled Italy for France, added exonerating details about the suicide to a new version of Crinitus. Giraldi, in 1545, wove a web of bare facts, but Gryphius's abridgement elided the still-problematic suicide. The rivals Gifanius and Lambin both focused on the poem's didactic utility and the value that classical literary techniques had for Christian students, though Gifanius pushed moral education, while Lambin alone highlighted natural philosophy. None of them call atomism anything but error.

Lists of names are the one constant in these narratives. Techniques, issues, even the most basic facts come and go, but every single biographer places Lucretius's name in at least one long list of other ancients. The themes of the lists vary: poets, epic poets, Roman poets, Roman Epicureans, philosopher-poets, natural philosophers, lights of the Augustan age, textbooks of Quintilian's education or of Jerome's. Most figures in these lists do not themselves mention or use Lucretius; rather, the biographers link them, or cite ancients who linked them. Famous names grant Lucretius quality by association; obscure names highlight the web of contact that united all members of the humanists' imagined classical world. No textual evidence was necessary to support biographers' claims that Lucretius studied with Zeno in Athens, or debated with Brutus, Cassius, and Atticus at philosophical salons hosted by Ci-

cero. The ancient philosophers and poets were, as humanists understood them, a small, interconnected elite much like themselves; if Leto or Lambin knew all these figures, logically they knew each other too. These repeated lists of names are a virtual catalogue of the authors our biographers expected to find in an imagined classical library. Their willingness to connect and conflate names suggests that they believe that this catalogue, unlike the library itself, was reasonably complete. They may not have had the books, but they thought they had all the names.

While the use of lists is constant, the types of lists are not. Earlier biographers concentrate on linking Lucretius to Latin predecessors and successors; later biographers draw more on his Greek connections and scientific predecessors. In discussions of Lucretius's madness the focus likewise shifts gradually from poetry to science. The poetic mania of the vates, although an ideal way to destignatize the furor and further connect Lucretius with Virgil, is exploited by Pius, and a little bit by Candidus, and nowhere else. The more civically grounded tragic image of Lucretius the pseudo-Stoic proves a better fit for humanist educational models, so the madness becomes poison or disease, not mania. To enhance the pseudo-Stoic portrait, Lambin and Gifanius segregate Lucretius from Epicurus, ascribing all error to the master and making Lucretius sound as little like an Epicurean as possible. Lucretius's treatments of non-Epicurean predecessors are given more attention by biographers than predecessors of what we consider Lucretius's own school, and while Epicurus is praised for opposing superstitious paganism, Heraclitus, Aristotle, and Plato often receive more attention than Epicurus and Democritus. Girolamo Borgia, working with Pontano in 1502, did briefly mention a few Epicurean principles, such as matter and vacuum, but by 1570 when Lambin mentioned the same, he did so only as examples of Epicurus's madness.

Lambin believes that the student of natural philosophy should read Lucretius for his views on weather, magnets, plague, and reproduction, never atoms. Indeed, the vita strives to convince us that Lucretius's natural philosophy is unrelated to Epicurus's atoms. To this end, Lambin segregates sublime from earthly science. While Epicurus dreams madly of lofty errors like void and chaos, the learned reader is told to prefer the Roman Lucretius, who relates his own intelligent observations of such

concrete mysteries as water spouts and evaporation. Lambin's segregation of speculative, theoretical questions from observable, material ones was neither universal nor even common among our biographers—Gifanius five years before Lambin made no such division. Yet it is telling that here, in the late sixteenth century, Lucretius's most influential editor chose to present science, the preferred attributes of a scientist, and the preferred contents of a scientific text in such a new way. For Lambin, we read Lucretius on the nature of things earthly, not things sublime. In 1570, as the scientific revolution accelerates, an editor now expects questions of natural philosophy to be of interest even to the classics student.

If later Lucretius biographers, like Gifanius and Lambin, placed less emphasis on his status as part of the classical canon than on his individual intelligence and skill, it is because his position in the canon had already been secured. What had not been secured was his position in the classroom, because there remained a split between the authors who were considered safe for school and those reserved for a mature master. As the marginalia reveal, the classroom-oriented octavos did not see extensive annotation, and apart from Gifanius, later printers focused on producing either impenetrably scholarly commentaries or tiny pocket copies, not editions designed specifically for the classroom. A student on a budget would buy whatever Lucretius a bookshop offered, large or small, but the quartos and pocket copies that do contain hand annotation do not contain repeated similar annotations or other indications that they were used in schools. Lambin and Gifanius's emphasis on teaching thus indicates, not successful classroom use, but that Lucretius was not being taught as widely as they wished. The struggles of Nannius and Valerius at Louvain likewise suggest that Lucretius was an unpopular school text, at least among students. What an editor must defend in 1570 is no longer Lucretius's canonical status, nor even his good character, but his educational value.

Our biographers place that value in language, and every biographer from Leto to Gifanius makes the defense of Lucretius's moral character, and consequent proof of the work's quality, his centerpiece. Not so Lambin. He instead expects us to care less about Lucretius's morals than about his scientific doctrine. He treats the suicide only briefly, while attacks on the immortality of the soul, politely avoided by most predeces-

sors, Lambin counters over and over, from the poem on the back of his title page to his dedicatory letter, which aims to establish, not only the doctrine's absurdity, but that Lucretius himself did not believe it. Epicureanism may be as wrong as it likes, but Lambin's Lucretius must be correct on questions of physics, because Lambin recommends the *De rerum natura* for the education of youths, not just in language, but in Greek natural philosophy, useful for the scientific studies that were gathering momentum as the sixteenth century closed. These are the goals our editor-biographer expects to drive his reader, but a reader always has a personal agenda, and the private reality of Lucretius's sixteenth-century reception, how the text was actually used in libraries, homes, and occasional classrooms, left its real traces in the marginalia added by the thousands of anonymous readers who, over thirty editions, did pick up the *De rerum natura* for reasons of their own. This we shall examine in Chapter 5.

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The Poverty of the Language

"PROPTER EGESTATEM LINGUAE"

The Lucretian Print Tradition

HEN A SINGLE EXEMPLAR of Lucretius came into my hands I hesitated to print it, because it was difficult to correct from one copy those [verses] that had been neglected and ignored by scribes, but when I could not find another [copy], moved by that very difficulty, I wanted to make such an extremely rare book available even if from only one exemplar."

So writes Tommaso Ferrando, the first editor to print the *De rerum natura*, who multiplied tenfold Europe's access to our Epicurean didactic poem. When the *editio princeps* appeared in 1471–1473, at least twenty-two of the fifty-four Renaissance manuscripts had already been transcribed, but at least ten more would follow. No vitae had yet been written, Marullo's corrections were likely not yet under way, and the attentions given to the poem by Adriani and Pomponio Leto would not reach their peak for more than a decade (see Table 5.1 and Appendix C). Critics, Renaissance and modern, have stressed the severe deficiencies in Ferrando's text, and serious scholars continued to prefer the manuscripts, but for the fifteen years before the *editio secunda*, Ferrando set the text before numerous scholars who would have had no other access. He also needed, for the first time, to defend the act of publishing

Lucretius. In his brief sixteen-line concluding letter, Ferrando describes, with typical humanist passion, the nobility of this attempt to revive and correct the poem. In terms now familiar from our biographers, he lauds the genius and intelligence of Lucretius noster and informs us proudly that the De rerum natura was imitated by the poetarum princeps, Virgil.² Presenting Lucretius as a pseudo-Virgil is ideal in the manuscript period, when annotation proves that most readers' dominant interests were the Latin language itself and the dream of reconstructing lost works of genius. The more sophisticated editions that followed Ferrando's required more articulate apologetic paratexts, as the spread of Lucretius, and printing in general, brought this radical pseudo-Virgil before new and hostile eyes. By 1570 Denys Lambin would pitch Lucretius as a sourcebook of natural philosophy and a substitute for lost Greek thinkers, less as another Virgil than as another Aristotle or Pliny the Elder. The engine of this shift, which changed Lucretius's scientific value from a rare interest to one worth advertising in a dedication, was the evolution of the printed text itself, and a parallel change in the process of reading. The text Poggio carried to Florence 1417 was not the same one an eager Montaigne brought home from the print shop in 1563, nor could Poggio have imagined how Montaigne's distant generation would approach the poem, or what they would create with it.

The end of an era of printing is clear in the 1510s. In the earlier, Italian-dominated era, folios and quartos strove to imitate the manuscripts that were still in frequent production. That the first four editions were all printed in the Venetian dominion suggests a Venetian interest in Lucretius.³ When after 1515 the centers of printing migrated north from Italy to France and the Low Countries, folios and quartos, intended to imitate manuscripts, gave way in the second decade of the sixteenth century to more affordable small editions, and thereafter larger formats were produced only to facilitate commentaries and glosses. The most plentiful editions were the ten pocket-sized sextodecimo versions that dominated the second half of the sixteenth century; in those years, quartos and octavos were inevitably followed by smaller editions condensing the same contents. In the 1540s, when demand supported five editions

Editio princeps; final editor's note Paratexts Tommaso Ferrando Editor (Publisher) Chronology of Lucretius editions and related works Size Brescia Place Table 5.1

502, Girolamo Borgia, manuscript vita

Hieronymus Avancius (Aldine) Theodorus de Ragazonibus)

(Paulus Fridenperger)

3efore 1495, Pomponio Leto, manuscript vita

Verona

1471/1473

1486

Year

Venice

 1495^{a}

Venice

ca. 1501, J. Baptista Pius, *Praelectio in Titum Lucretium et Suetonium Tranquillum* $^{
m b}$

"Non te animus . . . "; carmen C. Lyncinii Corrected text, two letters, quotation list

Carmen beginning "Non te animus ..."

.504, Raphaelis Franci Florentini in Lucretium Paraphrasis cum Appendice de Animi Immortalitate (Bologna) .502, Avancius letter and corrections to Lucretius, in Aldine Catullus, Tibullus, Propertius (Venice)

Annotated, with letters and expositio l. Baptista Pius (H. B. de Benedictis) [505, Petrus Crinitus, De Poetis Latinis (Florence) Bologna

Petrus Candidus (Juntine) Florence

Aldus' letter to Albertus Pius (no vita) Candidus vita; Marullo's corrections Annotated, with letters, based on 1511 Crinitus vita (no Aldus letter) J. Baptista Pius (Ascensius & Parvus) Andrea Navagero (Seb. Gryphius) Andrea Navagero (Heinrich Petri) Andrea Navagero (Aldine) .536, Aonius Palearius (Antonio della Paglia), De Immortalitate Animorum (Lyons) 1535, Scipione Capece, De Principiis Rerum (Naples) °× Venice Lyons Paris Basel 1512 1515 1514 1531

Crinitus vita; marginal glosses; Aldus letter Crinitus vita; Aldus letter Andrea Navagero (Prigent Calvarin)

Matches 1534; vita, glosses, and Aldus letter

Crinitus vita

Andrea Navagero (Seb. Gryphius) M. Vascosan) R. Rescius)

Louvain

Paris

1540 1542

	Similar to 1534; vita and letter, no glosses	Matches 1546; Crinitus vita and Aldus letter	
1545, Lilio Gregorio Giraldi, Historiae Poetarum tam Graecorum quam Latinorum Dialogi Decem (Basel)	Andrea Navagero (Seb. Gryphius)	Andrea Navagero (Seb. Gryphius)	
Poetarum tam (16°	16°	001
lio Gregorio Giraldi, <i>Historiae l</i>	Lyons	Lyons	
1545, Lil	1546	1548	1

1558 1561 1563 1564 1565 1567 1570 1576

Matches 1546; Crinitus vita and Aldus letter Annotated, Gifanius vita and supplements a. A supposed annotated Milanese edition of 1491 is certainly a ghost, likely generated by a confusion with Lucan. See W. B. Fleischmann, "Lucretius Carus, Titus," in Annotated with letters and supplements Annotaated, Lambin vita, based on 1563 Annotated, Lambin vita, based on 1570 Catalogus Translationum et Commentariorum, ed. P. O. Kristeller and F. Edward Cranz (Washington, D.C., 1960), 2:352. C. A. Gordon, A Bibliography of Lucretius Contains a carmen and an explicatio Limited annotations, Giraldi vita Crinitus vita, multiple letters Matches 1564; Crinitus vita Matches 1567; Crinitus vita Books I-III only Matches 1589a Matches 1589a Crinitus vita (Frankfurt) London, 1962), treats this and other ghosts in section 7, 273-278. On the possible 1496 Brescia edition, see Appendix C. 1580, Ianus Mellerus Palmerius, Spicilegiorum . . . Commentarius Primus . . . Salustii, Lucretii, Plauti . . Lambin and Turnebus (A. Gryphius) Lambin and Turnebus (Jean Bienné) Obertus Gifanius (F. Raphelengius) Andrea Navagero (Seb. Gryphius) Denys Lambin (P. G. Rovillius) Denys Lambin (P. G. Rovillius) Denys Lambin (A. Wecheli) Obertus Gifanius (Plantin) (Christophorus Plantinus) (Christophorus Plantinus) (Christophorus Plantinus) 1589, Girolamo Frachetta, Breve Spositione di Tutta l'Opera di Lucretio (Venice) Jean Foucher) Marnef 4° 4° 16° 16° ŝ 16° 4° 16° 16° °s Frankfurt Antwerp Antwerp Leiden Leiden Leiden Paris Lyons Paris Paris Lyons Paris Paris 565-1566

1589a 1589b

 1597°

1595

b. No date is printed on the edition, but one exemplar has a manuscript note dating to 1501. See Fleischmann, "Lucretius Carus, Titus," 351; also discussed later in this c. For ghosts and lost editions, including the 1496 and 1596 editions, see Appendix C.

in a single decade, Lucretius's audience became larger and less affluent, enjoying cheap pocket copies, or, in the case of the 1543 Vascosan quarto, buying just the first two books, the only ones likely to be used in a class.

The dominant names are familiar from our survey of biographies: Aldus, Avancius, Crinitus's vita, Pius, Candidus, Navagero, Lambin, and Gifanius. Supplementary works relating to Lucretius also appeared in the sixteenth century. Raphael Francus's 1504 In Lucretium Paraphrasis included an appendix on the immortality of the soul. The first commentary on Lucretius to be printed independently of the text was written in Italian by Girolamo Frachetta and published in 1589. From a philological and interpretive perspective, the four most important editions remain the 1500 corrected Aldus-Avancius edition and the first editions of each of the three annotated versions: the 1511 Pius, 1563 Lambin, and 1565-1566 Gifanius. Yet in terms of mass reception, the heart of Lucretius's reception is seen in years like 1546-1548 and 1564-1565, when booksellers sold enough pocket copies to justify a reprint within one or two years. Perhaps forty patrons commissioned manuscripts of Lucretius before 1471, but at least a thousand people bought the pocket versions of Navagero's text in 1546-1547 alone. All of these readers encountered the poem filtered by Navagero's introduction and Crinitus's biography.

The Incunables

The incunables contain limited but vivid paratexts. The 1486 Verona editio secunda, another manuscript-like folio, reproduced a version of the poem very close to Niccoli's manuscript at the Laurenziana. A peculiar supplementary poem follows the main text. Poems praising the author, editor, or patron are common ornaments in Renaissance books and, while often formulaic, reflect the idiosyncrasies of each author and the challenges faced by each editor. The poem in the 1486 edition has an unusual form: its anonymous author cobbled together a rough pastiche of lines excerpted from the *De rerum natura* itself, with minor changes of case and vocabulary and occasional original insertions:⁴

THE POVERTY OF THE LANGUAGE > 197

		Based on
		Lucretius
1	Non te animus fallit graiorum obscura reperta:	I 136
	Difficile inlustrare latinis versibus esse.	I 137
	Multa novis verbis propter egestatem linguae rerumque	I 138
	Novitatem: ut ipsa petit maiestas & ratio cognita rerum.	
5	Quam nunc sapientiam appellas: memmiadae tuo	V 10
	Hanc e tenebris tantis & tam clarum lumen	V 11-12
	De summa caeli ratione deumque & omnem rerum	I 54
	Primordiam naturam tam clare luce locasti.	V 12
	Ex quo queque creata foedere sint.	V 56-57
10	Unde omnis natura creet res auctet alatque.	I 56
	Quo ue eadem rursum natura perempta resolvit.	I 57
	Haec materiem & genitalia corpora rebus reddenda	I 58
	In ratione vocasti: & semina rerum appellasti.	I 59-60
	Haec eadem usurpare ratione tua fideli:	I 60
15	Corpora prima: quia ex illis sunt omnia primis.	I 61
	Sed tua virtute suavis amicitiae & sperata voluptate	I 140
	Studioque vis nunc effere suum laborem	I 141
	Aureaque sua dicta perpetua semper dignissima vita.	III 12
	Ut tibi sua dulcia dona talibus in rebus	
20	Comunia esse saluti: capitique insignum petere coronam.	I929&IV4
	Intellecta haec prius quae sint: contempta relinquas.	I 53
	Si haec sint vera ratione sensuque: accede ad opus.	
	Si autem sint falsa & ratio quoque falsa & sensus: relinque.	
	Unde scias quid sit scire & nescire uicissim.	
25	Nam nihil egregius est: quam res cernere a dubiis apertas.	IV 467-468
	Ratio enim neminem decipit nec decipitur nunquam. Finis.	

- Your soul does not deceive you that the obscure inventions of the Greeks are difficult to make clear in Latin verses.
 - Often new words [are needed] because of the poverty of the language and the subject's
 - Novelty: as authority and a reasoned understanding of things demands.
- 5 For your scion of the Memmii, you have drawn such clear light,

which you now call wisdom, out of such shadows and by such clear light located the lofty order of heaven and the primordial nature of the gods and all things: From what law all things were created,

10 Whence all nature creates and nourishes things,
Into what nature again reduces those that have been destroyed.
This matter and bodies that generate things but must themselves be returned:

You have called into reason: and you have named them the seeds of things. This too it is possible to perceive with your faithful reason:

First bodies: because all things are from those first things.

But by your virtue of sweet friendship and by hoped-for pleasure and eagerness you wish to carry out his labor

And his golden words most worthy of eternal life,

Because you wish for his sweet gifts shared in such times

to be salvation to you: and to seek an illustrious crown for [his] head.

These things that have been considered already: discard in contempt.

If these things are true by reason and sense: accede to them.

If rather they are false and even reason and sense are false: abandon them.

Whence you know what it is to know and not to know in turn.

25 For nothing is more excellent: than to separate clear things from doubtful ones.

For reason deceives no one and is never deceived. End.

The poem's initial acknowledgment of the difficulty of the philosophy and language is borrowed from Lucretius's treatment of the poverty of the Latin language in Book I. This subtle apology for the poor condition of the text affirms that the difficult language of the *De rerum natura* was indeed problematic, even for the highly competent Latinists who would have been this edition's main customers. The remainder of the first half of the poem praises the achievement of drawing light from what was dark, and lists the topics Lucretius treats: the primordial nature of things, creation, destruction, first bodies, and so forth. Exposition of the nature of the gods takes pride of place in the list, invoking Cicero's *De natura deorum* and suggesting a rather more pious and orthodox treatment than the reality. Material topics prevail in this list;

Lucretius is presented as natural philosopher more than as poet. Yet the questions of natural philosophy are grand ones, questions of creation and metaphysics, not the technical details that drew Lambin's attention in his 1570 vita. The author of this poem lauds Lucretius's Epicurean theories about physical and metaphysical questions that "can be perceived with your faithful reason (ratione tua fideli)." This implies a pious knowledge, enabled by the light of reason, which Neoplatonism and medieval epistemology had long made synonymous with divine illumination. This invocation of religious orthodoxy is reinforced by fideli, faithful reason.

In the longest set of original lines (22–24), the author urges the reader to accept the portions of the work that are proved true by reason and sense (ratione sensuque), and abandon those sections that prove false. The poet adds, excerpted from Book IV, "For nothing is more excellent than to separate clear things from doubtful ones, for reason deceives no one and is never deceived." This implies that the act of sorting true from false is pleasurable activity. Not only that, it is one the faithful reader should feel proud of enjoying.5 Thus, the act of reading Lucretius remains a process of sorting true from false, not of attempting to systematically understand the Epicurean system, nor of seriously considering the "errors," which the editor expects to be conspicuous among the truths. A greater proportion of this paratextual poem is devoted to questions of philosophy and material science than is customary in our paratexts, suggesting a genuine expectation on the editor's part that the reader, who has just finished reading Lucretius when he encounters the *carmen*, has enjoyed the poem's philosophical content, at least for those pieces that are, by reason, "true."

In the 1490s Pontano was continuing his decades-long studies of Lucretius, while in Florence Adriani harvested Lucretian arguments against superstition to wield against Savonarola, and Machiavelli would soon produce his manuscript, combining elements of the 1495 edition's text with Marullo's corrections and some readings whose source remains unknown. Machiavelli's dissatisfaction with the printed editions available at the time was well justified, because the 1495 quarto reproduced the text of the 1486 with minimal improvement. The editor faithfully copied the earlier twenty-six-line anonymous *carmen*, but added another

sixteen-line dedicatory poem by C. Lyncinius to Nicolaus Priolus (Priuli):⁶

- Unice Nicoleos venetae nova gloria gentis Quique sacrum referas ex Helicone melos. Carmina Romani semper victura lucreti Excipe: ut a putri sint procul illa situ
- Qui priscos celebras vates veneraris & ornas Et tua quod rarum est carmina blanda probas. Non minus ingenuas artes studiumque loquendi Ipse foves cultu grandis amice novo. Adde quod & doctos dextra virtute requiris
- 10 Et cupis in nitidos semper habere lares.

 Haec animi virtus: haec est quaesita per annos
 Gloria: ut e sacro pectore vivat honos:

 Dii (praecor) Augusti specimen sortemque metelli:
 Concedant votis tempus in omne tuis
- 15 Vive diu nostrique memor sis denique noster Et mea sint cordi munera parva tibi.
- Incomparable son of Niccolo, new glory of the Venetian people and you who return sacred music from Mount Helicon,
 Receive the immortal verses of Roman Lucretius:
 so that they might be far from dust and decay,
- You who celebrate and honor and embellish the old poets, and—a rare thing!—win approval for your own charming poetry. No less do you yourself foster the renewed cultivation of the liberal arts and the pursuit of eloquence, my great friend. Moreover, by your practical virtue you seek out learned men
- and you desire to welcome them forever into your elegant home.

 This is the strength of soul, this the glory sought over many years, that honor may sustain itself from a pious heart.

 May the gods (I pray) grant your prayers that the model of Augustu
 - May the gods (I pray) grant your prayers that the model of Augustus and the fate of Metellus last for all time.

15 Live long and remember us and be always ours [mine] and may my small gift be dear to your heart.

This time the praise focuses on language. Lucretius is a *vates*, an honored poet-seer, as Pius too will label him sixteen years later. The *De rerum natura* is a work of good, clear verse, but there is no reference to its content—we could as easily be talking about Virgil. The verses imitate Lucretian language, particularly the references to Helicon (mentioned four times in the *De rerum natura*)⁷ but they also invoke Horace (as will the verses in Pius's 1511 edition⁸), both in their treatment of the patron-client relationship and in their use of the *vates* image. Though no other Latin author is mentioned, connecting Lucretius to Horace this way begins the process of positioning him as part of a unified Latin poetic canon.

Martin Ferguson Smith and David Butterfield have recently argued that a 1496 Brescia edition, long thought to be a ghost, was in fact a genuine reprint, likely matching the *editio princeps*. If so, the existence of an eager audience for Lucretius is confirmed by the suggestion that the initial print run of likely several hundred copies had sold out in only twenty-five years, despite two competing editions.

In 1500 came the vastly corrected (and actually legible) first Aldine edition, overseen by Avancius. This edition contained formal introductory letters, a table of corrected humanist substitutes for the capitula, and its pseudo-biographical quotation list. Its three long introductory letters, two to patrons and one to the learned reader, were a dramatic change from the earlier editions, which had only brief final verses to voice editors' ideas. As discussed in Chapter 4, Aldus and Avancius stress in this edition the restoration of the ancient world and Lucretius's place in the classical canon. Aldus focuses on Lucretius's Greek peers, such as Empedocles, Aristotle, and Theophrastus, while Avancius focuses on Latin peers, Catullus, Statius, and Virgil. The dedicatory letter to Albertus Pius, the same letter that stressed Lucretius's value as a preserver of lost philosophical fragments comparable to Stobaeus, urges the patron to admit this book into his most learned academy, "not because [Lucretius] writes things that are true and must be believed by us . . . but because he sets down the doctrines of the Epicurean sect in elegant and learned verse, imitating Empedocles, who was first among the Greeks to set out philosophic precepts in poetry." The study of erroneous philosophy is justified by the quality of the language. The rest of this letter, and much of the other two, focuses on the difficulties of correcting a work so ravaged by barbarians, further reinforcing the editor's focus on language over philosophy. Their great achievement in 1500, much like the achievements boasted by all three earlier editions, was the repair and restoration of this beautiful member of the regenerating Latin library.

Early Sixteenth-Century Activity

Attention to Lucretius expanded greatly between 1500 and 1511, when Pius's annotated edition was published. Marullo drowned in 1500, but his manuscript corrections continued to circulate, as they had since the mid-1490s. Around 1501 Pius published his brief eight-folio *Praelectio in Titum Lucretium et Suetonium Tranquillum*, and although the little treatise did not mention Lucretius other than in its title, it did publicly proclaim Pius's interest in the poet to whom he would later dedicate so much attention. In 1502 Aldus printed corrections to his 1500 Lucretius edition in a volume of Catullus, Tibullus, and Propertius, cementing for his readers his expectation that anyone who would buy other Latin poets should own his *De rerum natura*. In the letter's introduction, Avancius again invokes the greatness of his and Aldus's expertise and achievements in restoring Lucretius. He follows this by connecting publication with immortality, and calling both Lucretius and Catullus *vates*. 12

Lucretian interest continued to grow in the first decade of the sixteenth century. Pontano died in 1503, but his twenty years' labor left behind the Borgia vita and Borgia's transcription of his annotations. In 1504 came the publication of *Raphaelis Franci florentini in Lucretium Paraphrasis cum appendice de animi immortalitate*, printed in Bologna. The work was dedicated to Tommaso Soderini, later the dedicatee of the 1512 Juntine edition. The *Paraphrasis* proposes to pay particular attention to the question of the immortality of the soul, already an issue in Florence thirteen years before the 1517 ban. Despite its introductory claims that it will treat Books I–III, it covers only Book I, so has very little discussion of the afterlife or atomism, but the fact that the project was undertaken at all establishes a firm connec-

tion between Lucretius and denial of the afterlife in Tuscany by 1504. ¹³ This is also the period during which Erasmus's friend Egnatius (Giambattista Cipelli) lectured privately on Lucretius in Venice. ¹⁴ Crinitus's *De Poetis Latinis* appeared for the first time in 1505, and Crinitus's death in 1507 left his vita free to be pillaged by editors. Aldus's corrected text dominated this period, along with what individual improvements could be made from the 1495 quarto and hitherto uncollated manuscripts. The next contributions to Lucretius's life came in Pius's annotated edition of 1511, then in the affordable and practical Juntine Candidus octavo of 1512; both based their texts on the 1500 Aldine, though neither acknowledged it. ¹⁵

Pius's 1511 commentary and its 1514 reprint are, with the limited exception of the Francus *Paraphrasis*, the first attempt to systematically defend Lucretius in print and the first point at which an editor proposed an explanation for the apparent errors of Epicureanism. Pius's explanation was, first, that the topics Epicurus treats are too complex to be presented clearly and, second, that the vates Lucretius found Latin an insufficient medium to communicate concepts the human mind cannot understand without divine aid. Epicurus and Lucretius are not wrong, according to Pius, merely unclear, when they seem to stray from orthodoxy. Pius is the first Lucretius editor to explicitly invoke the claim that the classics are useful for moral education. He presents Lucretius as a moral philosopher and concentrates on explicating the concepts of voluptas, the summum bonum, and fortuna. This moral focus is in line with the interests in moral philosophy exhibited by manuscript annotators. The 1514 Paris reprint of this edition was the first Lucretius printed outside Italy and marked the beginning of Lucretius's northward march. That Pius's commentary was reprinted within three years of its initial publication indicates a substantial commercial audience.

The 1512 Candidus Juntine, printed in Florence between the production of the two editions of Pius, was a successful attempt to produce a compact Lucretius matching Aldus's octavo classics before Aldus himself got around to it. Its modified Crinitus vita and the inclusion of Marullo's notes made it an excellent volume, though it was not itself reprinted. ¹⁶ The edition's dedicatory verses to Soderini, much like those of Pius, stress Lucretius's status as a moral philosopher. This reflected both the interests of manuscript readers and, likely, a more acute need to justify

the publication of Lucretius in Florence as the hostile environment that would lead to the ban worsened.

Readers continued to leave marginalia in these editions, whose broad availability and superiority to many manuscript texts marked the end of the manuscript era.¹⁷ Corrections are still the most common type of annotation in editions printed in the 1500s and 1510s, and other common trends continue. Readers mark the wormwood simile, remarks about the poverty of Latin, famous men in Acheron, the snares of Venus, rare vocabulary, and resemblances to Virgil and other favorite authors. In Pius's commentary, discussions of other classical authors, both literary and philosophical, are hand-annotated much more frequently than discussions of Lucretius alone. One reader of a 1511 copy heavily annotated discussions of sleep in Book IV, especially Pius's treatment of Plato's and Aristotle's views on dreams; another marked discussions of weather as well as dreams, supplying Greek vocabulary.

While all the old trends remain, interest in atomism increases significantly in these annotations. We may recall that, out of thirty-two incunables, ten had philosophically significant marginalia but only six showed clear interest in atomism, and most of those had just one or two notes on the topic, some of those dismissive. In contrast, two copies out of the nine examples of the 1511 edition that I have examined marked discussions of atoms. 20 Out of six copies of the 1514 reprint, only one reader left substantial marginalia, but concentrated it almost entirely on the atomistic sections of Books II and III.²¹ One copy of the 1512 Juntine octavo concentrates five out of its eighteen substantive notes on issues related to atomism in Books II and III, also marking wormwood, the snares of Venus, and the plague.²² A second copy, whose notes are concentrated in the beginning of Book I, marks atomist questions such as whether anything can come from nothing.23 In eighteen copies of the 1515 Aldine octavo, only six contain hand annotation, but of these one has extensive annotation on atomism, another bracketing on the discussions of the soul in Book III, and a third, which also marks Greek vocabulary and similarities to Catullus, labels several critical proto-atheist doctrines with "Sed falso," pointing out what one reader saw as Lucretius's errors.²⁴ These notes cannot be firmly segregated from their predecessors, because manuscripts and incunables were both still in use in the 1510s, and some of these annotations might have been made in later decades. Nonetheless,

compared to earlier copies there is a distinct increase in these volumes in what portion of annotation focuses on atomist and proto-atheist passages.

The 1515 Aldine edition, edited by Aldus's son-in-law Andrea Navagero, was the last Italian edition of the sixteenth century. It dominated Lucretius production for forty-three years, providing the model for seven more versions printed in Basel, Lyons, and Paris. This edition was the last of Aldus's series of octavo classics, with a text based on Avancius's but including new corrections by Navagero. The volume's new dedication by Aldus to Albertus Pius was reproduced in every reprint except the 1531, making the letter Lucretius's most common companion after the Crinitus vita, which also accompanied it in six of the eight editions. Perhaps as many as 5,000 sixteenth-century readers encountered Lucretius through the filter of this single paratext. The brief letter first affirms Aldus's intention to dedicate all his philosophical publications to Albertus, whom he calls an "ornament of this age of learned men." He hopes, he says, that reading Lucretius will help free the prince from a rumored illness, which Aldus attributes to the fact that recent tumults had deprived the prince of time to carry on the philosophical studies that he had so enjoyed since his boyhood days, when Aldus had been his tutor. ²⁵ The letter then turns to the question of unorthodoxy, characterizing Lucretius as a poet and philosopher of the greatest antiquity but full of lies (plenus mendaciorum) and who, because he followed the Epicurean sect, held very different views about the nature of God and the creation of things than Plato and the Academics. 26 The positive comparisons that had dominated Aldus's letter of 1500, likening Lucretius to Empedocles, Theophrastus, Ennius, and Aristotle, are absent; only this depiction of his inferiority to the Platonists remains. In addressing why Christian men, who believe in the true God, should read such things, Aldus answers:

But truth, the more it is sought, appears that much clearer and more noble: thus is the Catholic faith, which the Lord Jesus Christ when he lived among men declared to humankind: it seems to me that Lucretius and those who are similar to Lucretius must be read, but as false men and liars, as they certainly are. Thus we have touched on these points: so that if anyone reading these things of ours does not know of the lunacies of Lucretius, let them learn it from us.²⁷

Much like the strange pastiche verses that accompanied the second edition, Aldus here advertises the value of the process of sorting true from false, making Epicurean errors a merit, rather than a flaw, in the work. His brief justification for this claim is purely religious, without any reference to Cicero, Quintilian, or Plato, as others have used. Rather, he invokes fact that the True Faith itself was originally left for people to sort out on their own, and that humanity succeeded. This approach assures the reader that Aldus himself does not promote Epicureanism, and that Lucretius is no threat to Christianity. Apart from the healing effects Aldus expects the text to have on his patron, the only claims he makes about Lucretius's utility are that his errors will make truth shine the more brightly, and that it is better to encounter lunacies (deliramenta) in this form than elsewhere. The poem's six proto-atheist arguments are assumed to be sufficiently ubiquitous by 1515 that the reader will surely encounter them somewhere, if not in this edifying form. Fifty years later, Gifanius's 1565 vita will make a similar argument, that it is better for young people to encounter errors in the classroom where the teacher is ready to correct them. The *De rerum natura* is a safe arena in which to encounter unorthodox ideas, and an inoculation against more virulent forms of heresy. Whereas Gifanius in 1565 seemed to expect that unorthodoxies might be dangerous and persuasive to youths if encountered in idle hours without a guide, in 1515 Aldus argues that truth will prevail even if his widely marketed octavo (without guiding commentary) is read outside the classroom. The rest of Aldus's letter concentrates on praising the dedicatee and the improved text, which makes this edition superior to its Juntine competitor. By prescribing the De rerum natura as a treatment for the prince's illness (therapy of the soul, as Ficino would put it), Aldus asserts the utility of the classics and makes Lucretius seem as useful as Plato, even if—or perhaps because—he contains falsehoods that make truth shine brightly. Five reprints would make Aldus's Lucretius the most common version encountered by readers through 1558.

Mid-Sixteenth-Century Activity

Those behind the 1517 Florentine ban did not consider Lucretius a useful inoculation, nor did the Counter-Reformation thinkers who debated

placing Lucretius on the *Index*. Yet publishers could still turn profit from the poem. The Navagero Aldine text was reproduced in octavo format in Basel in 1531, with the Crinitus vita attached. Next an octavo with the Crinitus vita and Aldus's letter, presenting Lucretius as a therapeutic test of faith, was printed in Lyons in 1534 and again in Paris in 1540. These were, until Gifanius's 1565 edition, the last octavos, the last editions marketed specifically for the libraries of private scholars interested in assembling personal sets of the Latin canon. Hand annotations in the octavos continue to be concentrated in early books and often consist of corrections and literary allusions, but one copy of the 1540 edition betrays a strong scientific interest, with frequent marginal citations from Greek scientific figures, including Heraclitus, Anaxagoras, and Empedocles.²⁸

The octavo-dominated period of the 1530s also saw the first editions of Scipione Capece's De Principiis Rerum (1534) and Aonius Palearius's De Immortalitate Animorum (1536). Both works imitate the De rerum natura in style, format, and imagery and somewhat in content. Scipione Capece was the head of the Neapolitan Academy, who accepted voluntary exile from Naples after suffering persecution for his unorthodox philosophy and Protestant sympathies. Capece's treatise treats astronomy, geology, and other technical aspects of natural philosophy. Palearius was an Italian Lutheran, burned at the stake for heresy by the Inquisition in 1567. As its title suggests, his work was a direct attack on Epicurean denial of the afterlife, defending the Christian model of immortality.²⁹ In it, Palearius connects denial of the immortal soul to the denial of the existence of divinities, stating that the former stems from the latter, despite Lucretius's separation of the two.³⁰ Palearius embraces those classical sects he considers nonatheist, dedicating most of Book I to repeating proofs of the existence of the divine from the Stoics and Peripatetics, Book II to proofs of the immortality of the soul, and Book III to Christian authors. Palearius's defense of the soul's immortality was printed just two years after the 1534 Lucretius, by the same printer, Gryphius, and in the same format, so that the two books were easily bought and bound together, as occurred in a volume preserved in Basel.³¹ Palearius's refutation could thus serve as a direct companion or commentary, defusing the atheist potential of the

first Lucretius to be printed after the flare of anti-Lucretian sentiments in 1517.

Both Capece and Palearius were seriously persecuted for their unusual religious beliefs, much like Panormita, Valla, Leto, and others who had worked on Epicurean topics in the fifteenth century.³² While they were not persecuted for their Lucretianism—indeed, Palearius's staunch Lutheranism was anything but—this conjunction still demonstrates the continuing connection between Lucretian studies and unorthodoxy. Epicureanism was of particular interest to unorthodox scholars. Lucretius, consequently, continues to appear in the Inquisition's sights in association with Luther and other heretical influences.

Mid-sixteenth-century Lucretius production concentrated on thin quartos with wide margins, designed for classroom use, which students often bound together with other classroom texts.33 In the same decades appeared the first pocket editions, a form that would continue to be extremely popular into the seventeenth century. The Calvarin quarto of 1539 included Crinitus's vita and Aldus's letter, as the octavos had, while the 1542 Rescius edition included only Crinitus. In 1545 Giraldi published his Historiae Poetarum tam Graecorum quam Latinorum Dialogi Decem, which supplied a new treatment of Lucretius's life. The 1543 Vascosan and 1561 Foucher quartos both lacked any significant paratexts, and much of the poem was lacking in them as well. Vascosan printed only Books I-II and Foucher Books I-III, which, as we know from marginalia, teachers' laments, and Raphael Francus's aborted *Paraphrasis*, was more than the average lecturer could get through in a term. Lucretius was being taught in Louvain in this period by Petrus Nannius and his successor Cornelius Valerius, and it was in 1542 that Nannius wrote his Somnium Alterum in Lib. II Lucretii Praefatio, lamenting the poem's density, his students' unreadiness to move past Book I, and the absence of a decent classroom edition.34 This was a need that the 1542 quarto, printed by the local Louvain publisher Rescius, was likely designed to meet. Even more explicitly designed to meet teachers' needs was the 1565-1566 Gifanius edition, though, coming after the publication of Lambin's 1563 edition, it inhabited a very different world of Lucretius publishing.

Marginalia are where we would hope to find evidence that these editions saw real classroom use, but surviving copies of the four midcen-

tury classroom quartos are comparatively rare. Of the seven copies I have examined, the only significant notes are in two copies of the 1542 Louvain edition. One contains a range of very standard literary, vocabulary, and natural philosophy notes in Book I.³⁵ The other, in contrast, has notes only on the atomistic sections of late Book II, even skipping a Virgilian section in II 1023–1056 while marking the atomistic discussions before and after.³⁶ Though the sample size is very small, this suggests that atomism occupied an increased portion of reader interest in the 1540s. The frequency of marginal corrections decreases dramatically in these editions, even compared to earlier sixteenth-century printed copies, and annotation of vocabulary is also rarer than in the manuscript period. Content displaces language as the focus of annotators' energy.

The ten pocket editions, which began with the three posthumous reprints of Navagero's text in 1546, 1548, and 1558, are tiny volumes, some only 10 centimeters high, and lack the wide margins preferred for classroom note taking. These are literally pocket books, intended—as was often the case for editions of Cicero, Caesar, or the moral maxims of Valerius Maximus—to be carried as private reading material for the edification and moral self-education of gentlemen (or ladies). They were also designed to minimize paper use and the number of days required to produce them, making them as cheap as possible for the printer. The fact that ten such editions were produced in the fifty-one years from 1546 to 1596 shows that Lucretius's promoters had been successful in securing him a place in the Latin canon, for leisure reading as well as classroom use. Several of the surviving copies bear signs of heavy use and abuse; in fact, dense marginalia are more common in these volumes than in the quarto books specifically designed for the classroom.³⁷ Such heavy, often scholarly use proves that the market for pocket copies went far beyond leisure reading, as their affordability made them appealing to scholars and, likely, students. In the twenty-three samples of sixteenthcentury pocket versions I have seen, notes are far more common in earlier pocket copies; I found no significant notes in any pocket copy printed after 1565. Hand annotation in general undergoes a distinct decline in the last quarter of the sixteenth century. The books are still being bought—otherwise so many editions would not be printed—and it is

safe to assume many of them are being read, but annotation, the expression of thoughts in margins, and especially the improvement of the book for future readers or personal rereading, has become a less important part of the reading process. Reading after 1565 has become more passive, more about absorption than repair.

Late Sixteenth-Century Activity

After a lull in the 1550s, which saw only one 1558 pocket reprint of the Navagero, the 1560s brought a burst of new Lucretian production and the fiercest competition yet among his publishers. In this decade came Lambin's Parisian lectures on Lucretius, his titanic 1563 commentary, and the beginnings of his rivalry with the "thief" Gifanius. 38 At the same time a Parisian publisher, Marnef, took over the niche formerly occupied by Gryphius's pocket Navagero reprints and produced two more pocket versions, with Crinitus as their sole accompaniment, in 1564 and 1567. Lambin released a 1565 pocket version of his own, hoping his superior text could steal the pocket market from Marnef, and even threw in the Crinitus vita for good measure. Marnef did still sell enough to print another run, but Marnef's edition does not seem to have sold to serious scholars as often as Lambin's. Scholarly notes are common in examples of the pocket Lambin, whereas the copies of Marnef in my sample were, with the exception of a single note, blank. Marnef's paratexts made no effort to defend Lucretius or guide the reader, whereas Lambin's pocket copy provided a vocabulary aid and reproduced a number of the letters from the 1563 edition.

In the 1560s and 1570s, then, for a reader content to settle for Marnef's uncorrected version, Lucretius is still the mad suicide and friend of Cicero portrayed by Crinitus. In the higher-end book market, Aldus's depiction of a Lucretius whose lunacies make truth shine in contrast is replaced by Lambin. He portrays Lucretius as a genius, invaluable for his ability to summarize ancient Greek natural philosophy, wrong in places due to Epicurus's insane errors, but who, according to Lambin, did not deny the power of prayer and did not attack religion. Lambin does not attempt to back away from Aldus's long-reproduced claim that the *De rerum natura* is full of mad ravings: he simply displaces the blame onto

Epicurus. In this same period, Gifanius's edition supplies a third version, reinventing Lucretius as pseudo-Stoic sage whose wild youth and later conversion make him a model for moral education.

In none of these versions is Lucretius an Epicurean. In fact, he becomes less Epicurean with every version, and only Aldus, whose portrait fades out in the 1560s, makes any claim that Lucretius believes in atoms or the mortality of the soul. Lucretius's poem is a Ciceronian moral digest of Greek philosophy in Virgilian verse, wholly compatible with those grand elements of ancient philosophical religion that humanists believed were compatible with Christianity. The Epicurean elements are flaws, no more authentic to Lucretius than the mistakes injected by medieval scribes. Just as philologists like Leto and Avancius had repaired the text, so commentators like Pius and Lambin believed they had repaired the message. The Lucretius they reconstructed was orthodox at heart, and would have been completely orthodox if not for the misfortune of his contact with Epicurus.

Lambin may be the first editor to promote Lucretius as an authority on natural philosophy, but he excludes the "insane" atoms. Not so his readers. Notes in these editions—which, in copies printed as late as the 1560s, are as likely to be in seventeenth-century hands as sixteenth continue to demonstrate increased interest in physics and atomism. Of the two most heavily annotated anonymous copies of the 1563 edition I have found, one has frequent brackets on atomistic discussions and the other has long notes discussing physical, philosophical, historical, and cultural topics, with cross-references to numerous authors, including Ennius, Cicero, Diogenes Laertius, Diodorus Siculus, Cassius Dio, Horace, Pliny, and Terence.³⁹ In the pocket Lambin, one example has underlining in the early books, mainly on atomist and scientific topics, while another has mainly notes on cultural and historical topics. 40 In Gifanius editions, one annotator marks only notabilia, another marks mainly questions of biography and natural philosophy, a third supplies summary headings focused largely on physics, while a fourth focuses exclusively on the moral philosophy in Book III. 41 Notes in the 1570 Lambin reprint are rare, and those I have found focus on secondary topics like the causes of storms and the Greek nicknames of girls; even the Vatican copy containing the autograph notes of Aldus Manutius the Younger

focuses on vocabulary and cross-references to other ancients.⁴² Thus, in stark contrast to earlier activity, in fully one-third of the annotated copies printed in the 1560s the majority of annotations concentrate on topics closely related to the poem's six proto-atheist arguments, especially systematic atomism and the mortality of the soul. Lambin and Gifanius may describe these questions as errors, but for a new crop of readers they are the centerpiece. One member of this new crop deserves particular attention.

Montaigne's Annotations

Montaigne's place as the father of modern skepticism and the lynchpin of the seventeenth-century Pyrrhonian crisis has been admirably established by Richard Popkin and others. 43 The works of Sextus Empiricus, whose excerpted maxims Montaigne inscribed on the roof beams of his study, are traditionally identified as the key source of Montaigne's crisis and argumentation, but Lucretius was a second point of transmission from classical to modern skepticism. The importance of the numerous Lucretian quotations in the *Essais* has long been recognized, but the recent discovery of Montaigne's heavily annotated personal copy of the *De rerum natura* provides a new window on his use of Lucretius. On October 16, 1564, at the age of thirty-one, Montaigne, still mourning the recent death of his dear friend La Boëtie and some years away from beginning his Essais, completed the herculean labor of reading and annotating the whole of Lambin's 1563 Lucretius, including the text and commentary.44 He recorded the date of his first reading in a note, but certainly added further annotations afterward. 45 Because Lambin's edition appeared late in 1563 and may not have been available for sale until January 1564, Montaigne was one of Lambin's first readers and applied himself to the book with enthusiasm immediately after its release.46 Michael Screech has published a loving and comprehensive transcription and analysis of these annotations, and in the light of this study it is now possible to compare Montaigne's pattern of interests directly with those of his contemporaries and predecessors, and thus to clarify, as we did with Machiavelli, just how exceptional his use of the text was.

Montaigne's notes, mainly in French but some in Latin, include marginal annotations and extensive writing on the flyleaves, and extend to the blank pages tucked between sections of the edition. Screech accurately divides the pages of flyleaf annotation into two subsections, philological and substantive. The philological notes, a set of brief references to specific lines by page number, in fact represent the first three categories of annotation identified in other copies. They include numerous corrections, either Montaigne's own or referencing Lambin's.⁴⁷ They also comment on scansion and other poetic issues, Lucretian vocabulary including *cluere*,⁴⁸ and words whose linguistic interest is highlighted in Lambin's commentary. Corrections appear here and there in the marginal annotation, and Montaigne began to transcribe the changes indicated in the printed corrigenda at the back of the volume, but soon gave up. Thereafter, the few corrections he noted were his own.⁴⁹

Screech says that in the course of preparing his transcription, he was struck by how often Montaigne commented on the poetry. Frequently Montaigne wrote "perelegans" (very elegant) beside particularly beautiful, passages.⁵⁰ Screech uses this observation to argue that Montaigne valued Lucretius as a poet as well as a philosopher, against critics who have focused too exclusively on Montaigne's interest in Lucretius's moral philosophy. In the context of earlier annotations, we can now say that Montaigne's interest in the poetry represents a clear continuity with earlier readers. Montaigne, like many predecessors, comments on Virgil's imitations of Lucretius,⁵¹ marks repeated lines,⁵² and marks notabilia, including famous authors like Ennius,53 the "Guerre de Troïe,"54 and the rites of Cybele.⁵⁵ He also brackets the entire description of Acheron in late Book III and quotes it several times in the Essais. He does not transcribe famous names into the margin, as many predecessors did: instead he extracts Lucretius's descriptions of fear and superstition.⁵⁶ Here notabilia have given way to something more philosophical, and, indeed, notabilia constitute a tiny minority of Montaigne's notes.

The flyleaf of Pomponio Leto's Neapolitanus, which indexed unusual vocabulary by page number, remains our clearest proof of the primacy that Lucretius's manuscript readers—even those who did engage with the philosophy—gave to Lucretius's Latin. Montaigne creates a similar list of unusual vocabulary, but his concordance of vocabulary, which begins on

the page immediately following the *Errata*, is followed by a topical index, listing page-by-page lines of particular substantive interest.⁵⁷ Unlike Lambin's second edition of 1570, the 1563 edition used by Montaigne contained no printed index, so he created this substitute, topical as well as linguistic. His homemade index is so extensive that, having exhausted the rear flyleaves, Montaigne returned to some front pages he had left blank before, and even resorted to blank pages between sections of text to fit everything in.⁵⁸

The themes of Montaigne's index are instantly conspicuous. He concentrates on atoms, physics, and sensation. Some of his preferred lines have been marked by earlier readers, such as the argument that nothing can come from nothing,⁵⁹ but especially in Books II-III he draws attention to numerous lines treating the limits of space and time, and the shapes and technical functioning of atoms. Other themes he remarks upon include the definition of pleasure as the absence of pain,60 the argument that the apparent order of nature does not prove that gods created it, 61 and the sections on the swerve and free will in late Book II that interested Machiavelli and Adriani. 62 Several dozen entries in Montaigne's index concentrate on perception and sensation: how color, taste, and so on derive from the shapes and textures of atoms, and how vision functions. Montaigne also marks ten pages that treat the suggestion that the gods live apart from the world in perfect tranquility. 63 Another section of notes concentrates on discussions in late Book II and Book III of fear of death, age, decay and the inevitability of mortality, both of individuals and of the world.⁶⁴ He also thoroughly indexed the traditionally neglected technical proofs in Book III of the mortality of the soul and the distinctions between the *animus* and *anima* and their relationship to mens,65

Screech's analysis clearly demonstrates that Book III was Montaigne's favorite. The annotation here is extraordinarily dense, and Montaigne comments at the end of the index of Book III: "Read the entire Book: nothing is more exquisite on contempt for life." He also quotes this book disproportionately often in the *Essais*. Montaigne's preference for Book III contrasts starkly with the patterns in manuscript-period marginalia. Anonymous annotation by his contemporaries in copies printed in the final decades of the sixteenth century does demonstrate increased inter-

est in physical questions, but Montaigne's extraordinary focus on atomistic detail and, above all, on perception and sensation is unique. Yet for all that uniqueness his final analysis—that this section serves as a brilliant treatment of contempt for life—returns to the moral philosophy that did interest earlier readers. The concept of contempt for life, which Montaigne treats in II.14 and elsewhere in the *Essais*, looks at how the fear of losing pleasures poisons our enjoyment of them, and thus how life's pleasures themselves sow misery, as our fear of losing them outweighs our enjoyment. This topic, which Montaigne treats with more quotations from Seneca than Epicurus, is again the type of broad, syncretic ancient moral philosophy that interested our earlier readers and helped biographers recast Lucretius as a pseudo-Stoic. However much attention Montaigne gave to atomism, he still valued the same broad themes, compatible with other schools and with Christianity, that appealed to his predecessors and contemporaries.

Sensation and cognition dominate Montaigne's annotations. 67 Notes indexed from Book IV concentrate on perception and Epicurean shells and several of Lambin's discussions in the commentary of how the senses can be deceived. 68 One topical index entry, so acute in Montaigne's mind that it slipped into the earlier philological index rather than the later topical one, treats the formation of the jumbled, hybrid simulacra that led people to believe in chimeric beasts. This was a subject of great import to Montaigne, as a skeptic interested in Epicurean claims about the unreliability of sense perception and in the resulting weak empiricism that Epicurus develops in order to enable partial reliance on the senses as a source of flawed but nonetheless useful information. Descriptions of sensation that Montaigne picks out include both Epicurean claims about what physical circumstances make the senses more or less trustworthy, and the core Epicurean epistemological claim that direct perception of atoms, and thus of the true nature of reality, is impossible. 69 Never before have we encountered anything like Montaigne's detailed evaluation of Lucretius's theories of how mirrors could work—could, because all such Epicurean material models are presented as unproved possibilities, provisional theories, not facts.⁷⁰ The primacy of Montaigne's interest in these unique Epicurean discussions of the perfection and imperfection of perception is indicated even in such subtleties as a slip of the pen in

which, beside a discussion of indivisible smallest particles, Montaigne writes *invisibles* instead of *indivisibles*.⁷¹

Lambin and other editors recommended reading Lucretius for the information he preserved about pre-Socratics and other ancient schools. Lucretius serves Montaigne in precisely this way, because in defending sensation as a source of knowledge Lucretius repeats arguments used by ancient skeptics in their assaults on the possibility of empirical certainty. For example, in one famous passage Lucretius addresses the skeptical observation that a square tower, when seen from a distance, looks round.72 Yet unlike a skeptic who would stop there, Lucretius tries to explain the cause of the deception, arguing that from a distance the tower's sharp corners are not visible because the intervening air acts like a lathe, buffeting and smoothing the atomic shell cast by the tower before it reaches the eye. Approaching to a nearer distance will reduce the lathelike effect and render the eye more reliable, though never perfectly reliable. Epicurean weak empiricism admits no direct perception of atoms, and in this case any amount of air between eye and subject results in some deterioration of the shell. The more rarified shells that facilitate thought also suffer such buffeting as they encounter one another on their journeys between source and brain. This results in such gibberish ideas as centaurs and unicorns, but also implies, though Lucretius does not directly discuss this implication, that even thought itself has no real access to the structures of things, only to their deteriorated images. This Epicurean weak empiricism undermines the reliability, not only of inductive reasoning based on sensory observation, but also of deductive reasoning, because the thoughts on which deduction is based are themselves generated by deteriorated atomic shells and just as subject to distortion as sound or vision. Yet it also proposes solutions for minimizing that distortion, and the unreliability of senses and thought: approaching closely, reexamining, withholding judgment in more uncertain circumstances. Unlike Pyrrhonism, which ends in doubt, Epicurean mitigated skepticism gave Montaigne fresh fodder for doubt, and unique suggestions for how to act despite doubt, suggestions very close to the methods that will be articulated by the next generation of empirical scientists.

Screech remarked upon Montaigne's conspicuous interest in the poem's romantic and sexual themes. Montaigne comments on the distinc-

tion between labra and labia, interpreted by Verrius Flaccus as moderate and immoderate kisses, and notes Book IV's "long and very fine digression on love" and its comments on sterility and fertility. 73 We can now confirm that Montaigne's interest in the snares of Venus section is a typical one; in fact, far more conspicuous than these few notes is the fact that they are outnumbered, by more than twenty to one, by his notes on phantasms, mirrors, sleep, and cognition. His interest in Book V begins with Lucretius's proofs that the world was not made for humanity, then turns to questions of astronomy and cosmology, again with a focus on perception.74 The primitivism passage, on the golden age and the development of language and human institutions, he indexes closely and quotes repeatedly in the Essais, but like his predecessors he focuses on the later section treating moral degeneration rather than the description of natural selection. 75 Book VI, with its popular discussions of rainbows, magnets, water spouts, and other natural phenomena, plus the Athenian plague, is the least closely indexed of all and has little in its margins.⁷⁶

Montaigne marks the popular wormwood passage with a bracket-like stroke, and in the topical flyleaf index, but he labels both instances of it as "a long digression on his poetry" rather than anything specifically related to moral questions. The only notes near the passage in Book I point out that these lines are repeated in Book IV.⁷⁷ Another note in the following section marks where Lucretius returns to the question of whether the universe, and its supply of atoms, is infinite.⁷⁸ The famous metaphor of the deceiving doctor, so striking to our Italian humanists, Montaigne neither comments upon nor excerpts. The danger that classical eloquence might lure readers to accept false doctrines does not vex a skeptic about to set out to explode the credibility of all doctrines. He does, like many predecessors, mark Lucretius's comments on the poverty of Latin.⁷⁹

It cannot be overstated how extraordinarily detailed these marginal annotations are. Hundreds of subtopics are carefully labeled, and many are cross-referenced, with as many as fifty related passages given by page number in a single entry. ⁸⁰ If Machiavelli and the annotator of Laur. 35.32 marked a few atomistic details, Montaigne marks everything: why the supply of atoms must be infinite, how their surface textures create what we perceive as taste and viscosity, how patterns are generated, every

subtopic on atomism and soul theory. He carefully compares passages from disparate sections of the text, particularly those that appear to contradict each other, as in Book II, where discussions of zones of heat and cold seem to contradict the argument for infinity.⁸¹ This careful evaluation of the Epicurean system stands in radical contrast to the unsystematic mindset represented by Cippellarius's illustrations in the Piacenza manuscript, and many other earlier cases of readers interested in trees but not the forest. Annotation on questions of moral philosophy, such as suicide and education, exist, but are in the distinct minority.⁸² Most of Montaigne's notes are neutral, stating no opinion, but he overtly states he finds the swerve ridiculous.83 As Screech points out, this rejection of the Epicurean solution to the impetus of creation and the source of free will proves that the young Montaigne was never convinced by the Epicurean system; without the swerve, that system falls apart. It also distinguishes Montaigne's interests from those of Adriani and Machiavelli, for whom the swerve seems to have been more central.

"Contre la religion" appears nine times in Montaigne's margins, and as a topical citation in his index.84 Leto's opinio non christiana and other comments had concentrated on Lucretius's discussions of the mortality of the soul in Book III. In contrast, the assaults on religion highlighted by Montaigne's contre la religion are related, not to the soul, but to nature, or superstition. Of the dozen passages so labeled, three treat the removal of gods from the operations of the natural world, arguing that the Earth was not created for the human race, that it operates without the gods, and that it is not animate.85 A further three mark points that combine this theme with attacks on superstition, where Lucretius overtly argues that human belief in active gods derives from the absence of material explanations for weather, magnets, lightning, and other material phenomena.86 The first passage so marked is I 66-71, which praises Epicurus as the first person who dared stand up to wicked superstition. This passage is followed shortly by Montaigne's comment "religion cause de mal" near the infamous sacrifice of Iphigenia.87 Also labeled as against "religion" is the beginning of Book V, where Lucretius lauds Epicurus's "divine" achievements in freeing men from fear. The same label marks the following primitivism section, in which Lucretius declares his intention to explain the natural origins of the world and

human civilization, including how people began to erroneously believe in divine governance and Providence.⁸⁸

Only two of the passages Montaigne marked as against "religion" touch on the mortality of the soul, which was the primary focus of Leto's labels. Montaigne painstakingly annotates Lucretius's attacks on the soul throughout Book III, but his labels, while numerous, are simply summary, identifying arguments, often in contrast with Lambin's attempts to undermine them in the commentary. The label *contre la religion* is not attached to any of the technical attacks on the soul or afterlife. Montaigne does apply this label to the beginning of Book III, in which Lucretius lists Epicurus's great lessons: that the gods dwell apart in oblivious happiness, that nature supplies all without their participation, and that there is no Acheron. However, the presence of the first two arguments is more than enough to justify the label even without the third.

Montaigne also applies the label contre la religion to page 266, containing III 1033-1052, a passage toward the end of the description of the torments of Acheron that lists great men who have succumbed to death. Montaigne labels, indexes, and brackets this section and quotes it in his Essais and on the beams of his library. 89 But this is not a direct assault on belief in the afterlife. Rather, this passage mocks those who fear death without realizing that worldly cares, fears, and obsessions trap them in misery. This idea does somewhat rely on the Epicurean denial of the afterlife, for its conclusion that death is positive because it marks the end of care, but it is much less directly at odds with belief in an afterlife than are the technical sections earlier in Book III. This passage seeks only to prescribe a philosophical therapy for worldliness, not to argue for the physical impossibility of life after death. The "contempt for life" Montaigne praised at Book III's conclusion, whose general message was that philosophy can bring earthly peace, was also employed by other less problematic ancients, such as the Stoics and Platonists, and by many Renaissance figures including, of course, Montaigne. Montaigne's choice to label these thoughts contre la religion while simultaneously praising and using them is more than a little peculiar. He may simply have intended to note Lucretius's basic denial of the existence of Acheron, but he might also have had in mind the more specific association of denial of otherworldly punishments with irreligion and atheism.

For Leto in the fifteenth century, attacks on the immortal soul were the most unchristian element of Lucretius. The terms of the 1517 Florentine ban and the declaration by the Fifth Lateran Council of 1513 confirm a general anxiety about deniers of the afterlife around the beginning of the sixteenth century. For Montaigne, half a century later, mechanical materialism, a nature that can function without gods, is a far greater concern than mortalism. I am not the first Lucretian scholar to argue that the key novelty offered by Epicureanism to potential atheists was not any specific doctrine, such as anti-Providentialism or denial of the soul, but instead its coherent physical system that could account for creation, existence, and natural phenomena without divine participation. Epicureanism let the unbeliever throw away the dominant God-dependent physical models and still have a physics to fall back on, rather than having to embrace ignorance. It seems that Montaigne too felt this novelty, that nature without active gods, more even than denial of the soul, was *contre* la religion. This concern about Lucretius's attacks on divine participation may well reflect the rise of early deism rather than atheism, because deist assaults on organized religion likewise rested on their denial of the necessity of divine interference in the everyday world after creation. Montaigne was also the first to label as irreligious Lucretius's account of how early humans invented religion out of fear. We may feel the diffusion of Machiavelli's influence here, because Machiavelli's utilitarian comparison of Roman and Christian religions not only earned him the title of arch-heretic, but also demonstrated anew the dangers posed to belief by Lucretius's sociocultural explanations of its origin.

Montaigne does not depart wholly from the interests of his peers and predecessors. His willingness to evaluate atomism as an internally consistent system parallels the increased materialist interest manifest in anonymous annotations in editions from the same decade and later. He also shares his predecessors's interest in those elements of Epicurean moral philosophy that are compatible with Stoicism and neoclassicized Christianity. These subjects constitute the minority of Montaigne's annotation but dominate his use of Lucretian quotations in the *Essais*. Yet, valuable as moral questions are to Montaigne's quest to develop an ethical system compatible with his skepticism, far more central to his reading of Lucretius are the debates, encapsulated in Lucretius's discussions of

sensation, between the strong skepticism of Pyrrhonian attacks on the senses and the mild skepticism of Epicurean weak empiricism. This is something new for Montaigne, a window on skepticism radically different from that provided by Sextus Empiricus. In fact, such a direct confrontation between two different forms of classical skepticism, one fiercely Pyrrhonian and the other compatible with limited dogmatism and with scientific empiricism, exists, to my knowledge, nowhere else in the surviving corpus of classical philosophy.

Lucretian Skepticism

The scope of this project ends in the first decades after 1600, when the octavos and pocket editions of the 1580s and 1590s were being read and annotated. But if we may follow the skeptical thread forward for a moment and peer briefly past Montaigne and into the seventeenth century, at the extreme limit of our study two new figures take center stage in the history of skepticism: Pierre Gassendi and his close friend and confidant Marin Mersenne. There is no room here for a detailed treatment of these figures, but a brief glance may further reinforce the central place Lucretius deserves in our understanding of the development of modern skepticism and scientific thought.

As the first self-proclaimed "Christian Epicurean," Gassendi has a clear debt to Lucretius. His debt to philosophical skepticism is also clear, and, indeed, he confessed himself a skeptic in his correspondence with Mersenne. Gassendi set out not only to defuse the Epicurean threat and create an Epicureanism comfortably compatible with Christian doctrine, but to oppose Aristotelianism. His Exercitationes paradoxicae adversus Aristotelos attacks Aristotle with fierce skeptical arguments, many familiar from the writings of the oldest Pyrrhonists, and some from Lucretius. As Richard Popkin has illustrated, Gassendi adopts an unusual form of skepticism, which Popkin terms "constructive skepticism" or "mitigated skepticism," and which he identifies as the ancestor of modern pragmatism and positivism. Antonia LoLordo has challenged Popkin's characterization of Gassendi as a skeptic by observing that Popkin concentrates on Gassendi's early writings, while his later Syntagma is much less skeptical and more concerned with outlining a positive program

for knowledge. ⁹³ In both works, however, Gassendi, like Epicurus and Lucretius before him, is expounding a system of antidogmatic weak skepticism. All sensation is false—this is the case because we sense only distorted shells translated by the senses into yet-more-distorted sense perceptions, which make us think atoms have color and flavor when all they truly have is shape and size. Thus, we can never know things themselves. All sensation is true—this is also the case because all sensation gives us true knowledge of sensation, not of things themselves, but of perception. Thus, even though the mind and senses are incapable of knowing the world itself, we can accumulate real knowledge of the world as mapped by the senses. We can then base our choices on our real understanding of the world mapped by the senses, behaving as if it reflected reality, while knowing it does not. This is not only mitigated skepticism, but a form of mitigated skepticism we recognize as provisional belief in the modern sense.

This mitigated skepticism was even more strongly articulated by Gassendi's friend Marin Mersenne. A central figure in the proliferation of the new science of the seventeenth century, Mersenne aided the publication of the works of Galileo and Descartes and counted Campanella and Étienne Pascal among his numerous friends and correspondents. Mersenne was not an Epicurean, but he was a fierce opponent of Pyrrhonism and argued for an arena of partial knowledge very similar to that carved out by Gassendi. While the weakness of the senses means that we cannot know the essences of things, Mersenne says, we can know about our observations of things. We can base rules on these observations and develop a systematic science based on our true knowledge of observations. Judgment must not be suspended, as the Pyrrhonists would have it, but limited to arenas in which knowledge is possible: knowledge of what we perceive, rather than of what is.

There is no place within the present study to systematically evaluate Mersenne's work for overt Lucretian traces in order to establish a direct line from Lucretius to this radical new form of skepticism. Yet Mersenne's intimate association with Gassendi is certainly enough to have given him extensive indirect exposure, and strong parallels between the specifics of Mersenne's mitigated skepticism and that of Epicurus further establish his debt to the Epicurean form. On the subject of sensa-

tion Mersenne argues, as Lucretius does, that we can compensate for the unreliability of the senses by tracking how our sensory observations change in different circumstances. Mersenne also believes that we can have certain knowledge of obvious logical principles, such as that something exists rather than nothing, and that evil is to be avoided. Thus both Mersenne and Epicureanism employ the same three-part division of knowledge. Logical questions can be deduced with certainty. Sensory data is real and useful, and can be used as a basis for our understanding of the world, but is divorced from any knowledge of material reality. Material reality, meanwhile, is unknowable, but that unknowability does not require us to suspend judgment, because the other two forms of knowledge are sufficient. For an Epicurean, the former two forms are sufficient for happiness. For Mersenne, they are sufficient for faith and virtue, and for the construction of systematic methods of knowledge seeking and the accumulation of a body of knowledge about the (perceived) real world. In other words, they are sufficient for science.

Mersenne is not an Epicurean. He defends Aristotelianism as the best system currently available to humanity, 95 and his passionate refutations of the "impiety" of deists, atheists, and libertines demonstrate his fierce antipathy to the proto-atheist elements of Lucretius's system. 96 He does not employ atomist epistemology or physics to justify his mitigated skepticism, as Gassendi does. Instead Mersenne surrenders the possibility of true knowledge of things-in-themselves, not because of the impossibility of sensing atoms, but because of the same ancient Pyrrhonist arguments familiar to Montaigne, to Descartes, and to Lucretius, from the works of Sextus Empiricus. He thus combines the Epicurean solution to Pyrrhonism with a wholly non-Epicurean cosmology and moral philosophy, in his case a deeply Christian one. Provisional belief has been snipped from the Epicurean tree and is ready to be grafted onto Mersenne's Christian material science and, thereafter, onto any number of other scientific worldviews as the Enlightenment approaches. The baby step Machiavelli took in his cuiuslibet comment, when he was willing to consider Lucretius's logic about infinite supply regardless of what shapes matter actually took, has here become a bold stride.97

Before we return to the sixteenth century, a quick comment of Mersenne's will illuminate another change in how sources are being read.

He writes, "Even if Euclid was the most evil man in the world, the whole would still be greater than its parts and right angles would still be equal, for the truth of sciences is independent from our customs and our ways of living." In other words, the truth of a philosopher's observations are no longer dependent on his moral character. By 1625 the first hints of cultural relativism have weakened the Renaissance presumption that wisdom travels along with good morals. Mersenne does not look to philosophers for Truth—synonymous with God and Good—but for small truths based on sense perceptions. Now that knowledge is no longer absolute, the elaborate attempts of Lucretius's biographers to defend his moral character are no longer so necessary to convince the reader of his utility. He can be wicked, his soul oriented away from God, while his analysis of sense perception, touted by Lambin, remains useful.

Biographers must still argue that Lucretius is not dangerous to his readers, however, even in the seventeenth century. Mersenne, in his writings, defended the necessity of censorship, though, unusually, not permanent censorship nor the destruction of texts. 99 Texts that may mislead the ill-prepared, particularly women, he specifies, should be kept out of the hands of those they may harm, even at the expense of the pleasure of those who want to read them. However, the ability of a particular text to do harm may change over time, he argues, and the unique concerns and crises of specific historical moments may make the same text dangerous in one era and safe in another. Mersenne takes Aristotle's Metaphysics as his example, arguing that if it was once banned by the Church, it was because it was, in earlier days, imperfectly understood and thus dangerous to the Catholic faith and had to be kept out of the hands of heretics. Now that it is better understood it is safe, he says, and useful to the sciences and to Christianity. Like sense perceptions, the doctrines of philosophers cannot be directly understood but must be analyzed, and can deceive if improperly understood. If some new heresy should arise based on Euclid or Aristotle, he says, their circulation should again be justly restricted. He could as easily have been speaking of Lucretius. In 1625 pious editors and biographers, culminating in Gassendi's Christian Epicureanism, had succeeded in making the De rerum natura safe for orthodox readers, yet the new heterodoxies of radical

deism and libertine atheism were growing and would soon forge new and dangerous weapons from Lucretius's old ideas.

The Wake of Lambin—Translations and Commentaries

Notes in general grew scarcer in all editions printed in 1570 and later, as reading habits changed. Marginal corrections decreased as Lambin's authoritative text all but eliminated the impulse to improve the poem line-by-line. The multiplication of editions may also have decreased the expectation that any particular copy would be used again. Topical notes on idiosyncratic readers' interests are the majority in this period; readers were reading for themselves, not for the benefit of others.

Lambin died in 1572 and the Lucretius publishing boom died with him. For the rest of the sixteenth century, and much of the seventeenth, no editor dared attempt to supersede him. In Lyons, Gryphius published a reprint of the pocket Lambin in 1576, and in 1583 the famous Plantin publishing house produced their own unwieldy octavo version of the already bulky 1570 Lambin quarto. The remaining sixteenth-century editions are limited to three Plantin pocket copies and the 1595 reprint of Gifanius, all produced in Antwerp or Leiden. Except for three Lyons reprints, no more Lucretius would be printed in France until Michel de Marolles's facing-page French-Latin edition, printed in Paris in 1650. This marked the beginning of the translated editions, which appeared in English in 1656, De Wit's facing-page Latin-Dutch edition, printed in Amsterdam in 1701, and Italian at last in 1717.¹⁰⁰

That the country that had first received Lucretius would take fully three centuries to publish the poem in the vernacular demonstrates the persistence of Counter-Reformation hostility toward the *De rerum natura* in Italy. Only two Italian Lucretius editions were published in the entire seventeenth century, compared with twenty-eight in the rest of Europe. ¹⁰¹ Alessandro Marchetti completed his Italian verse translation in 1669 and sought permission from Cosimo III to publish it in 1670, but even though he had promised to mark all "errors" with an asterisk, his petition was denied. ¹⁰² Despite this rejection (and despite serious liberties in translation taken by Marchetti) his translation was popular enough to circulate widely in manuscript. Manuscript copies of Marchetti's

translation are as common as Latin Lucretius manuscripts in collections today, if not more so, and copies were possessed by Leibniz, Holbach, and Voltaire. 103 An Italian Lucretius was in demand, but fear blocked the publication of Marchetti's translation. His vernacular rendition would have brought the poem's dangerous content into the reach of less educated classes, whose interests were certainly not in the Latin language alone, and who were assumed to be less equipped for sorting truth from error. Even in 1717 Marchetti's text was not issued by a standard Italian press. Its title page claims it was printed in London, though it lists no publisher and may well have been clandestinely printed in Italy. It was this vernacular edition of 1717 that prompted the Church to finally place Lucretius on the *Index*, proving once again that it was not scholarly access to Epicureanism the Church feared, but the broad access offered by the vernacular. 104 Those learned enough to read Latin could apparently be trusted with Lucretius's "errors," but not those less educated, who could not be trusted to read wisely.

The fact that thirty editions of Lucretius, including translated versions, were printed in the seventeenth century seems to match the thirty pre-1600 editions. However, the number of presses and printing houses active in Europe increased exponentially in the seventeenth century, so this actually represents a proportional decline in the frequency of editions (though not necessarily in the number of volumes printed, as print houses grew and print runs grew larger, particularly those of Plantin). The decline in the frequency of editions was matched by an increase in variety, with a proliferation of translated and even illustrated editions. The elegant 1725 Leiden edition collected in one volume the paratexts of Pius, Lambin, Gifanius, Tanneguy Lefevre, and Thomas Creech, including their introductory letters, as well as vitae, *testimonia* from ancient and medieval authors, comments, and corrections. Such editions, *cum notis multorum eruditorum*, were common products of Dutch presses in the seventeenth and eighteenth centuries.¹⁰⁵

The 1580s saw two more publications about Lucretius. The philologist Ianus Mellerus Palmerius worked in Bruges and is best known for his work on Sallust. His 1580 volume, Spicilegiorum Ian. Melleri Palmerii commentarius primus, quibus pleraque Sallustii, Lucretii, Plauti, Terentii, Propertii, Petronii Arbitri, tum fragmenta apud Marcellum:

multa Cornelij Taciti: quaedam etiam Catulli, & aliorum scriptorum . . . emaculantur . . . tentantur, was published in Frankfurt by Corvinus. Volume I contains no actual commentary on Lucretius, but the final letter promises a "Reditum ad Lucretium libro quinto," which was intended to be the fourth item in a proposed second volume. Though I have found no trace of this second volume, the fact that Palmerius proposed to treat Lucretius alongside these other authors again proves Lucretius's status as a standard part of the Latin canon in the 1580s. Book V, on which Palmerius announced his intention to concentrate, contains limited treatment of the soul or atomism, concentrating on astronomy, natural phenomena, and the origin of the world and civilization. Book V was therefore an appropriate book to excerpt if one agreed with Lambin and other later editors who stressed the poem's utility as a general sourcebook on ancient natural philosophy.

Girolamo Frachetta's Italian-language commentary, Breve Spositione di Tutta l'Opera di Lucretio, was printed in Venice in 1589, dedicated to Frachetta's employer and patron, Cardinal Luigi D'Este. The Breve Spositione was a perfect union of the literary interests manifest in Frachetta's previous publications: his 1583 De Universo Assertiones Octingentae, an encyclopedia of works treating physical and metaphysical questions of the material and immaterial universe, and his 1585 vernacular commentary on the canzone of Guido Cavalcanti. The publication of the vernacular Breve Spositione on Lucretius in 1589 is in some ways remarkable, given the exodus of Lucretius printing from Italy in the later sixteenth century, but in it Frachetta focuses on refuting Lucretius's attacks on orthodox religion. The volume's subtitle, "In which the doctrines of Epicurus are closely examined, and it is demonstrated in which ways they conform to the truth and the teachings of Aristotle and in which ways they differ," promises to focus once again on sorting errors from truth, where truth is dominated by Aristotle. 106 The initial subject index reveals Frachetta's interests. Under Lucretio it lists eleven individual entries on why his attacks on the immortality of the soul are insufficient (Ragioni sue per provar l'animo esser mortale, sono insufficienti & vane). It contains separate sections on how his general arguments are weak (Argomento suo debole), how they are vain (vano), and how they are selfdefeating (che si ritorce contro di lui). Another six full pages (one-quarter

of the entire index) lists entries under the heading *Errori di Lucretio*, indexing errors on subjects ranging from Providence and religion to vacuum and the causes of the shapes of animals.¹⁰⁷ After the lists of errors, the longest entries include those on *Anima*, *Aristotile*, *Atomi*, *Iamblicus*, and *Plato*. The index has a literary focus as well, including recent authors like Pico and Petrarch, along with the ancients. It contains as many notes on Boccaccio as on Cicero, and more on Hesiod and Homer than on Epicurus.

Frachetta's commentary is not just an attack. In his introduction, Frachetta discusses the importance of providing vernacular treatments of difficult authors, like Aristotle and Lucretius. The latter he describes as a reviver of the doctrines of *grande Epicuro*, to whom, he says, are falsely attributed many lies.¹⁰⁸ In a preliminary discussion, which addresses issues similar to our vitae, Frachetta poses three questions: whether or not Lucretius was a poet, what topic he treated, and who he was. We have never before seen Lucretius's status as a poet debated, but Frachetta questions whether we should categorize him with Virgil and Ennius or whether he is better evaluated alongside the natural philosophers like Aristotle. He chooses Aristotle, stressing that Lucretius took as his subject "the nature of things, or natural matters" (la natura delle cose, ò le cose naturali), which, he says, is the same subject as the natural philosophy of Aristotle.¹⁰⁹

In the miniature biography that answers the question of who Lucretius was, Frachetta describes him as a Roman man (huomo, not poeta) who lived after Ennius and Lucilius, during the time of Catullus and Virgil, and died when Virgil assumed the toga virile. He followed Epicurus's Athenian philosophy, "whose opinions I examine in this work in order to return them to the light." Frachetta immediately follows this statement of purpose with a citation from Lactantius about the supremely stupid (stultissimus) theories of Epicurus about which Lucretius raved (quae delirat Lucretius). He then cites Varro, Macrobius, and Priscian and makes fresh comparisons to the natural philosophy of Aristotle. He addresses the invocation of Venus at the beginning of the poem, claiming that it shows that Lucretius did not deny prayer as thoroughly as Epicurus did—the same argument made by Lambin. Lucretius's attacks on religion, Frachetta says, were inspired by the wicked and supersti-

tious cults of his day and were not intended to apply to modern Christianity, a point he illustrates by pointing out that St. Jerome, like Lucretius, criticized the sacrifice of Iphigenia.111 Frachetta uses Varro's alternative incipit, and his story of the twenty-one books on the division of Earth and sky, to bring in Aristotle once again. He believes Varro's incipit is genuine and may have been part of the De rerum natura, or may have been from another work by the same author. He reminds the reader that Aristotle himself wrote many works treating both natural and moral philosophy. By reinforcing Aristotle and Lucretius as twin students of cose naturale as well as moral questions, Frachetta encourages the reader to treat the *De rerum natura* the same way Aristotle's works had long been treated by Christian scholars who segregated the unacceptable claims, such as the eternity of the world, from the acceptable remainder. Lucretius the natural philosopher is to be explicated and used, and Lucretius the heretical religious theorist is to be separately trounced.

Frachetta's arguments are familiar from our vitae. Here, even more powerfully than in Lambin, Lucretius is recommended for his contributions to natural philosophy and his information about non-Epicurean thinkers like Pythagoras, Democritus, and even Zoroaster, who occupy more of Frachetta's time than Epicurus. The moral philosophy that Giraldi had attempted to promote is of no interest to Frachetta. Poetry is not a valuable facet of the work either. Those who value Lucretius for his Latin would choose Lambin, not Frachetta's vernacular paraphrase. Frachetta acknowledges that the verse is attractive, but Lucretius's peerpredecessor is Aristotle, not Empedocles, and his tradition is scientific, not literary. Here in 1589, interest in material science has moved Lucretius entirely out of the category of poetry and into the category of scientific textbook. A textbook full of errors, but errors to be analyzed and sorted—as Gassendi and Mersenne will do—not ignored.

Conclusion: Lucretius's New Readers

A four-way tension plagues Renaissance attempts to categorize Lucretius as an author. Some consider him a poet, like Virgil and Ennius; others a moral philosopher, like Cicero and the Stoics; others a natural

philosopher, like Pliny and Aristotle; and others, though rarely, a materialistic atomist, like Democritus. From Crinitus's *De Poetis Latinis*, which created the unique category of "Phisicus" to describe Lucretius, to Frachetta, who actively debated whether to call Lucretius a poet or a natural philosopher, the labels scholars attached to Lucretius made claims about the utility of his work, who should read him, and which other ancients should be considered his peers. Categorically separating Lucretius from Epicurus made it easier to rewrite Lucretius's identity to serve editors' evolving needs.

Gifanius came too late. He alone among our many editors placed primary emphasis on Lucretius's value as a moral philosopher. His effort to promote the *De rerum natura* as a didactic text strove both to counter the objections of religious moralists and to answer the needs of teachers like Nannius and Valerius, who continued to find that students were overwhelmed by the poem's difficulty and underwhelmed by its charms. Moral philosophy had been the primary philosophical interest of the manuscript readers, who spent so much ink on Lucretius's solutions to the snares of Venus. Gifanius tried to make Epicurean inoculations against love into the core of the text, but working in 1565 he was behind the tide of Lucretius's changing readers. Notes on moral philosophy were at their peak in the Italian period, before the 1517 Florentine ban and the migration of printing north to France. For later readers, Lucretius was more a natural scientist and an atomist. In the later sixteenth century a new reason to read Lucretius focused on knowledge of the material world, be it the details of natural philosophy that Lambin promoted or the atomistic physics his readers actually underlined. Even the biographies became more materialist, as Pius's attempt to portray Lucretius's madness as that of a divinely inspired poetic vates gave way to natural narratives of illness or poison. Lucretius's mind had to remain earthly because his capacity to articulate complex scientific theories emerged as a central merit of his work.

In the 1590s Frachetta's complete lack of interest in Lucretian language is still an exception among printed paratexts, but not so among hand annotations. Notes on scientific, atomist, and proto-atheist arguments occupy an increasingly large portion of annotators' energy, subtly in the 1510s and definitively after the 1550s, whereas the energy spent on

corrections, vocabulary, and poetry tapers off.¹¹² Printing did indeed transform the act of reading, and the act of annotation, but it was not the arrival of printing that did so, but the maturation of texts that print enabled. The manuscript-like folios and quartos produced in the first sixty years of publishing were designed for elite scholars interested primarily in the process of repair. Manuscript readers in the fifteenth and early sixteenth centuries read Lucretius in order to improve the text as well as their own knowledge of vocabulary and history. Print readers of the midsixteenth century continued their predecessors' interest in notabilia but dropped philological activities in favor of natural philosophy. Montaigne is not alone in the 1560s in his reversal of the traditional ratio of philological to topical annotation. A new type of reading is occurring in the later sixteenth century, one that values content over form. Earlier readers came to Lucretius to restore this great ancient poet; later readers came to use him.

This new reading method was possible in part because there were new readers. The codification of a definitive corrected text and the proliferation of reading aids made the poem increasingly more penetrable as the sixteenth century progressed. Only the very best philologists could make sense of the immediate descendants of Poggio's mutilated discovery, but the thousands who bought reprints of Navagero's corrected Aldine in the 1550s or Lambin's elaborately explicated editions in the 1560s could extract what they wanted from the poem with only moderate mastery of Latin. The De rerum natura was still difficult to understand, enough so that Nannius's students at Louvain could barely get through Book I. Yet even if no amount of improvement of the text itself fully made up for the difficulties introduced by what Lucretius described as "the poverty of the language and the novelty of the subject matter," struggling readers could rely on Lambin's easy-to-read prose commentary. Frachetta's vernacular paraphrase eliminated the need for Latin altogether, and his detailed index of Lucretius's errors put comprehensible atomism in instant reach. If Lucretius's first Renaissance reception introduced his ideas to a few dozen of Europe's finest philologists and experts-to Marullo, Adriani, Leto, and a tight network of their peers—this new stage presented the text to a new category of less specialized readers, far more numerous than their predecessors, who

had not existed a hundred years before because the books that enabled their reading did not exist.

Yet these are the same years in which Gifanius and Lambin promoted Lucretius as a font of good morals and language. When Lambin said the pious reader would ignore the atomism and focus on the language, he was accurately describing the dominant reading habits of thirty to fifty years before. Rather than dissimulation, I believe Lambin's claim is a sincere reflection of the reading habits that he learned when he trained as a philologist in the 1530s through 1550s. Lambin's first encounter with Lucretius came in the period still dominated by the Crinitus vita and by Pius and Aldus, who introduced Lucretius to young Lambin as a virtuous Virgilian *vates*, almost too brilliant to be understood, whose errors, not his own fault, made truth brighter by contrast. The apologetic strategies employed by Lambin and other editors were carefully calculated to make Lucretius seem orthodox, but given how they had been taught to read classics, most of these editors and their peers likely genuinely believed that Lucretius was orthodox and that his mistakes were few and unconvincing. Lambin's 1563 Lucretius was designed to make this genius accessible to nonexperts, so that any Latin reader could absorb his Roman virtue and Greek science. Lambin succeeded, but in the privacy of their libraries, young Montaigne and his contemporaries used the liberated text in an altogether new way. 113

Conclusion

"DECEPTAQUE NON CAPIATUR"

Deceived but Not Betrayed

Lithe mid-1500s when the act of reading changed. The clean, explicated classics made available by printing houses in the second half of the sixteenth century fundamentally transformed the main goal of scholarly reading, from an act of repair to an act of digestion. Certainly the outstanding Latinists who read the early manuscripts—Marullo, Niccolò Niccoli—did understand and digest the text; and some—Adriani, Leto—grappled with its most radical content. Nevertheless, with the possible exception of Machiavelli, for all these figures and for their many anonymous peers, reading in the manuscript era still focused on the project of repair. Those few early scholars who did read the *De rerum natura* for both style and content did inject radical Lucretian ideas into certain circles of fifteenth-century humanist discourse, but even these applied more energy to repair than to any other aspect of reading, and they were outnumbered, at least twenty to one, by scholars who read with nothing but repair in mind.

Repair here means more than the literal restoration of the text, though that was an important goal. Humanists aimed to repair the world through the recovery of the lost golden age, especially its language and its library. Reading edifying classics was supposed to repair the fallen morals of Italy and Europe. Recovering classical eloquence was supposed to repair

humanity's weakened ability to practice philosophy and inspire virtue. Repairing humanity's mastery of Latin by studying ancient vocabulary, repairing our shattered knowledge of the ancient world by indexing names and cultural trivia, all these forms of repair contributed to the golden age that humanists believed might soon return, if they were industrious enough. The numerous anonymous readers who focused their annotation on moral philosophy, notabilia, and elements of language saw themselves as agents of this project of repair. The desire to reconstruct the lost libraries that had reared Roman heroes made it obligatory for humanists to read every classic regardless of its content. This instinct was magnified by the tendency, manifest in Lucretius's biographies, to imagine the ancient world as a close-knit community of literary circles, not unlike the Lucretian circles at work in Florence, Rome and Naples. This imagined, unified classical world is manifest in the tendencies of editors and biographers to minimize the distinctive elements of Lucretius's thought and to emphasize his similarities to other classical philosophical schools, as well as in annotators' common focus on those moral aspects of Epicureanism most compatible with the Neoplatonic-Neostoic face of ancient thought that Renaissance Christian syncretism made desirable. If Cicero was, as Petrarch argued, so virtuous and wise that he was almost Christian, his friend and collaborator Lucretius must have been as well.

This characteristically fifteenth-century drive to repair the produce of the ancient world let the *De rerum natura* work much as Lucretius had intended, using its elegance to lure many into reading, correcting, and multiplying a text whose bitter philosophy they might not otherwise have chosen to taste. The fact that manuscript readers came to the text primarily to repair it does not mean they did not also understand it, but it does mean that the majority of early readers were indifferent or resistant to the poem's more radical messages. This majority easily dismissed Epicurus's "errors" and concentrated on poetry and notabilia. The reality of the ancient world was stranger and more heterodox than Petrarch had imagined, but humanists' faith in their imagined version made it possible for a surprisingly large portion of readers to filter out the elements of Lucretius and other ancients that threatened that utopian vision. Ficino burned his youthful work on the *De rerum natura* when his careful reading of the poem revealed a side to Lucretius that frightened

even such a radical as Ficino, but most of Ficino's peers were too charmed by Lucretius's pastoral verses to linger on Epicurus's "errors." Some key figures did drink deeply, but the poem's radical content was absorbed only by scholars who already had unusual interests before they came to the text, manifest in the atypical reading methods employed by Leto and Machiavelli. It was Lucretius's language, and the less-Epicurean aspects of his moral thought, that secured the poem's circulation and survival.

More readers drank deeply as the sixteenth century progressed. The reversal of the patterns in later annotation coincides with the midsixteenth-century codification of a definitive corrected text. Once corrected editions and commentaries made a legible and fully explicated Lucretius available, repair was no longer the focus. Even the restoration of humanity's ability to write good Latin, and our knowledge of the ancient world, might feel in a sense complete when Lambin could outline Lucretius's life in detail, when his modern commentary could provide more information about notabilia than Lucretius does, and when Lambin, and the poets and scholars who contributed to his paratexts, wrote such good Latin. After Lambin, and to a lesser extent after Aldus and Pius in the second decade of the sixteenth century, a new, much larger audience of less skilled Latinists could encounter the restored classical library and approach books, not as restorers, but as they imagined the ancients did. Young Cicero read, not to repair texts, but to digest them. In the transition from the stage of correcting and pillaging the text to that of reading mainly for content, Epicurean science, which had for so long been ignored by the majority of readers, began to speak.

Lucretius's Renaissance *fortuna* here is one traceable thread in a larger philosophical shift. Beginning in the second quarter of the sixteenth century, the early humanist projects of repair, including moral education and restoration of the ancients, were eclipsed by a new style of reading. This shift, which applied to many more texts than just Lucretius, was enabled by the fact that Renaissance humanism was in some sense an inherently finite project. Text by text, ancients like Lucretius were recovered, restored, and reproduced, and their works were used as the foundation of an educational model focused on repair. Once each text was safely on the shelf, and once the majority of scholars and princes were educated in Latin, Greek, and textual exegesis, repair was complete,

and a second stage of reception redirected the energies that had been occupied in saving texts to using them. Thus, recovered texts enjoyed two waves of Renaissance reception, one in which they reached a limited audience of skilled philologists, the majority of whom spent nine-tenths of their energy on repair and one-tenth on digesting the ideas, and a second in which the poem's content penetrated far more broadly, and more easily. Humanists had succeeded in restoring, or rather creating, a library that could educate the next generation as they imagined ancients were educated. They wanted the new generation to be different, and it was, if not in the way they had expected.

For Pomponio Leto, denial of the immortality of the soul was the noteworthy "unchristian" element of Lucretius; for Montaigne it was instead Lucretius's materialism that stands "against religion." Nor was either alone in his own era. A scattering of Leto's peers followed him in marking the *opinio non christiana*, while fully one-third of Montaigne's contemporary readers annotated atomism. Two changes enabled this shift, both inseparably tied to the completion of the humanist project of repair.

One change was strictly internal: a mangled manuscript had become a legible annotated edition. Montaigne had no need to duplicate the efforts Leto put into indexing alien vocabulary and puzzling out thousands of garbled errors. He was free to concentrate on assembling crossreferences that exposed the systematic challenge materialist physics posed to theist claims that only a divine plan could explain nature. Lucretius's statement that the soul dies with the body is, in a few clear lines, an overt challenge to Christian orthodoxy. The danger posed by a mechanistic model of nature is not as clear unless one reads the whole epic poem carefully enough to understand it systematically, as Montaigne did easily but Adriani and Machiavelli had to struggle to do, and Cippellarius, when illustrating the Piacenza manuscript, clearly failed to do. Understanding Lucretius's atomist system was certainly possible in 1417, but it was an order of magnitude easier after 1563. Also easily understood in Montaigne's day, thanks to Lambin's detailed commentary, was the window on classical skepticism provided by Lucretius's summary of the debates between extreme Pyrrhonist skepticism and the mitigated skepticism of Epicurean weak empiricism.

The second change was external: both skepticism and material science were greater concerns in 1560 than they had been a century before. On the scientific front, discoveries of Copernicus, Vesalius, and others had challenged Aristotelian science and sent the scholarly community in search of new, and old, alternatives. The annotators who left conspicuous scientific annotation in the late sixteenth-century copies were clearly excited by these questions; but had the same questions arisen a generation earlier, the scientific community would have found Lucretius, and other ancient scientific sources, still largely impenetrable. Thanks to earlier editors, apologists, and publishers, scholars looking for scientific alternatives did not have to be philological experts to penetrate the ancient sourcebook; they found Lucretius ready and waiting on the shelf. Meanwhile, these and other challenges to established science and belief, especially those posed by the Reformation, triggered a crisis of confidence in both traditional and new claims to truth, creating fertile ground for the revival of skepticism. While Sextus and others preserved the arguments of classical Pyrrhonism and academic skepticism, the form of mitigated skepticism transmitted by Epicureanism symbiotically strengthened the new science of the seventeenth century by providing a powerful new mental tool: provisional belief. This let the scientific method become not merely a tool for the acquisition of knowledge but a guide for daily life, as it is in the modern day.

While some of the causes of this reversal of reading interests were external to Lucretius, they were not external to the larger process of textual repair. The great scientific discoveries of the sixteenth century, which increased general interest in natural philosophy, were made by researchers who were themselves products of an educational system shaped by humanism and enabled by the produce of the printing revolution. The availability of legible books created a new, larger Latin reading public, who transformed Europe's intellectual landscape, which in turn further transformed new readers. Restoration of the text and restoration of the imagined ancient community of scholars succeeded in parallel. If at most a few dozen fifteenth-century scholars worked seriously on Lucretian philosophy, by the dawn of the seventeenth century hundreds, if not thousands, of readers had seriously examined this alternative physics, which emphasized the separation of divine from natural causes.

This separation, which had been uniquely employed by Machiavelli in his moral thought a century before, could now become a widespread tool for innovation in mechanical thought, and, eventually, in religious radicalism.

The focus on virtue in humanist educational projects protected radical ancient sources like Lucretius and expanded their audience. Introductions and title pages, displayed in bookshop windows, advertised Lucretius as a classical sage like Cicero and Virgil. Lambin's honeyed descriptions of Lucretius's honeyed language exploited readers' eagerness to absorb ancient virtue and eloquence, luring in readers who might never have picked up a book written by a supposed atheist. Even if at first few readers spent much energy on the most radical sections of the poem, some pens and eyes did linger on unorthodox ideas, more as the sixteenth century progressed. Censors and teachers, those on the lookout for unorthodoxy, could not easily access this private reading. For those authorities with the power to permit or ban Lucretius, the virtuous, orthodox reading motives outlined in editors' paratexts were far more conspicuous than the subtle activities of individuals. Humanists' fierce defenses of the inherent value of classical Latin persuaded figures like Ghislieri to keep Lucretius off the *Index* and on the shelves, even as his most radical ideas gained potency. This made Epicureanism the most and frequently the only-widely known materialist physics available at the beginning of the seventeenth century. When new seventeenthcentury speculative treatises on material science began to circulate, Lucretius was already stably available in every collector's library, the obvious familiar source to compare new thinkers to. Just as Lucretius had long been the most widely printed source on plague despite numerous contemporary treatments, he was the most widely available source on nondivine science. This positioned Lucretius as a resource for the libertine, deist, and atheist movements that would gain momentum as the Enlightenment approached, and for orthodox scholars concerned about unorthodoxy who, in compiling their lists of famous atheists, had no better window into what a real atheist might actually think.

Lucretius's denial of the immortality of the soul is radical and closely tied to the development of atheism, but his materialism and the mitigated skepticism of his weak empiricism would prove much more impor-

tant to the development of modern thought. These doctrines were not separable for Lucretius, but Renaissance editors repeatedly separated them in their attempts to defend his character. In the early decades of the text's reception, Lucretius the pseudo-Stoic received more attention than Lucretius the atomist. Post-Reformation heretic-hunters might add Lucretius to their lists of famous atheists, but even in the print-dominated early sixteenth century there often was no atheist Lucretius; the atheist was Epicurus, while Lucretius, as one line let editors claim, believed we come from heavenly seed. These distortions—or rather clarifications, made by editors who seem to have genuinely believed that Lucretius was as orthodox as they claimed—made it easy to segregate the atomist physical model and weak empiricism from less desirable doctrines, such as denial of the immortal soul and denial of Providence. Once these doctrines were segregated, the undesirable ones could be minimized and the atheist stigma left behind. The charges of immorality, criminality, and sodomy, which were the heart of premodern paranoia about atheism, attached specifically to those who do not fear punishment after death, much more than to denial of divine action in nature. That in the 1600s Gassendi could be a Christian atomist was facilitated by this kind of segregation. That his friend Mersenne could inject mitigated skepticism into a wholly non-Epicurean system was an even more potent consequence of this segregation. Lucretius's heretical face had been replaced by a scientific Lucretius, whom Frachetta encouraged us to read as Aristotle had long been read, with his few unchristian elements set aside or creatively reinterpreted. Such a Lucretius could contribute his materialist model of nature, and his remedies against absolute skepticism, to the palette of theories that it was acceptable for a good Christian scholar to consider.

If we leave behind denial of the afterlife and of Providence, we have in Epicureanism, not the seeds of atheism, but the seeds of deism. The same Lucretian portrait of the evils of religion that Montaigne labeled anti-religious, Voltaire will praise as he campaigns, not against theism, but against religious abuses. Of course, such proto-deism, Gassendi's heavily Christianized Epicureanism, and any modified atomism that admits an afterlife, are incompatible with Lucretius and Epicurus's original eudaimonistic goals, which require the complete absence of divine

action and punishment in order to free humanity from fear. For the reception of Lucretius's materialistic eudaimonism in approximately the form he intended, one must await the French materialists of the mature eighteenth century, men like Julien La Mettrie and Baron d'Holbach; though, of course, Enlightenment forays seeking materialist roads to happiness in the Epicurean garden will also uncover the shadowy paths taken by our darker materialist moral philosophers, Diderot and the Marquis de Sade.² Few, if any, of these radical figures would be recognized by Lucretius as Epicureans. Still, just as one does not need to accept Epicurus's specific account of how lightning works to suggest that thunderbolts might not be thrown by Zeus, so one does not need to believe in Epicurean physics to use it to prove that one can create a physics that functions without divine participation. Provisional belief makes it possible to use one theory to reject another, even if one does not believe that either is, in any absolute sense, true. Thus, it was atomic naturalism's function as a hypothetical example of a coherent god-free physics, rather than the persuasiveness of atomism itself, that enabled seventeenthand eighteenth-century radicals to move away from traditional European models of God. The fact that this radical materialism was easily accessible to eighteenth-century radicals, theist and atheist alike, was thanks to the creative speculation of seventeenth-century Christian atomists, before them the curiosity of sixteenth-century readers lured in by promises of wisdom and virtue, and before them the industry of fifteenth-century philologists, attracted by the dream of repairing the scholarly utopia of their imagined ancient world.

Was Lucretius an atheist? By our modern definition, no; but in the premodern sense he was a uniquely dangerous atheist: a systematic, articulate philosopher whose doctrines had the potential to undermine traditional proofs of the existence of God, whose science could replace Christian Aristotelianism, and whose artistry could deceive humanists into spreading these unorthodoxies across the Christian world. Deceive but not betray, because Lucretius never intended to spread atheism. He intended the *De rerum natura* to liberate its readers from feeling obligated to accept the dominant mechanical, moral, and theological models of society. He succeeded. Throwing off the yoke of error was the goal for Epicurus and Lucretius, Petrarch and Ficino, Montaigne and Mersenne,

Voltaire and Diderot. The Enlightenment located its utopia in the future, the Renaissance in the past, but aiming for either required the demolition of the present. Lucretius offered the mental tools for such demolition. Equally valuable, he offered provisional belief, which lets us live comfortably in a world in which the truth is constantly demolished and replaced. These tools were always in the pages of the *De rerum natura*, but they became revolutionary only when scholars were ready to use them. This required more than the poem's rediscovery; it required the transformation of the text, and of the act of reading.

APPENDIX A

Lucretius Manuscripts

Known Latin Manuscripts, and Key Sources on the Lucretian Manuscript Tradition

Renaissance Latin Manuscripts of Lucretius¹

Items marked with a dagger (†) are not included in Appendix I of Cosmo Gordon's *Bibliography of Lucretius*.

- Baltimore, Walters Art Gallery. W.383 (De Ricci 434). (Paper, 21×14 cm., no decoration. Written in Rome by Giovanni Sulpizio Verolano [Verulanus] 20 Dec. 1466. Frequent notes in hand possibly Verolano's; see also #38 below. Contains on 131^{r-v} the anonymous cento that appears in the *editio secunda*, in a hand that seems to match that of the annotator.)
- 2. **Basel**, Öffentliche Bibliothek der Universität. F.VIII.14. (Between 1458 and 1513, likely ca. 1470. Paper, 21×14.5 cm., undecorated. Ownership note of Bonifacius Amorbach dated 1513. Frequent notes by copyist, a few notes by a second hand on fols. 1–6 may be Amorbach's. Cover boasts annotations by Pomponio Leto, but it is in fact based on his corrected copy at Naples, #26.)
- 3. **Berlin**, Staatsbibliothek zu Berlin. Lat. Fol. 544. (XV 3/4. Mbr., 28×19 cm., white vine. Few notes, mostly corrections).†
- 4. Cambridge, Cambridge University Library. Nn.2.40. (Before 1471. Paper, 27.5×18 cm., white vine, arms of Aragon/Sicily. Very frequent notes, some attributed to Noyanus/Noianus, see #12.²)
- 5. **Cesena**, Biblioteca Malatestiana. S. 20.4. (1458–1465. Mbr., 35×24 cm., white vine, humanist script. Bound with *Carmen de moribus Romanae Ecclesiae* and Hesiod *Opera et dies*. No notes.)†
- 6. **Florence**, Biblioteca Medicea Laurenziana. Laur. 35.25. (XV 2/4. Mbr., 25×17 cm., white vine, rubricated. Written for Piero de Medici, owned in 1526 by

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- Lorenzino and Archbishop Giuliano de Medici, grandsons of Lorenzo di Pierfrancesco de Medici. Frequent notes, likely in the same hand that annotated #25 below.³)
- —, Laur. 35.26. (XV 3/4. Mbr., 28 × 18 cm., white vine with portrait of a man, possibly Epicurus. Nicolaus Riccius scripsit, lettera formata. Medici arms. Very few notes.)
- 8. ——,—, Laur. 35.27. (XV 2/3. Mbr., 24×15 cm., white vine. Written for Lorenzo the Magnificent and his brother Giuliano. Very few notes, ca. 1526.)
- 9. ——, Laur. 35.28. (1470–1475. Mbr., 31×20 cm., white vine. Transcribed by Bartolomeo Fonzio for Francesco Sassetti. Sparse notes by Fonzio.)
- 10. ——,——, Laur. 35.29. (XV. Paper, 21×14 cm., undecorated, *lettera corsiva*. Frequent notes, attributed to Poliziano.)
- 11. ——,——, Laur. 35.30. (1429–1437. Paper, 21×14.5 cm., undecorated. Hand of Niccolò Niccoli. Frequent notes.)
- 12. ——,——, Laur. 35.31. (XV. Paper, 24.5×18 cm., white vine, rubricated, *lettera formata*. Sparse notes, some attributed to Noyanus/Noianus, see #4.)
- 13. ——,——, Laur. 35.32. (XV. Paper, 22×14 cm., undecorated, *lettera corsiva*. Very frequent notes, some associated with Marcello Adriani.)
- 14. ——,——, Laur. Conv. Soppr. 453. (XV. Paper., 23×17cm., empty spaces left for decorative capitals, *lettera corsiva*. Very few notes.)
- 15. Florence, Biblioteca Nazionale Centrale. Panciat. 176. (XV 4/4. Paper, 31×12 cm., undecorated, humanist hand. Occasional corrections and notes in multiple hands in Greek and Latin.)†
- 16. **London,** British Library. Harleian 2554. (Later XV. Paper, 21×13 cm., undecorated, *lettera corsiva corrente*. Frequent notes.)
- 17. ——, Harl. 2612. Ends at VI 232. (XV 2/3. Paper, 22×15 cm., gaps left for decorative capitals, narrow upright *corsiva*. Occasional notes.)
- ——, Harl. 2694. (XV 4/4. Mbr., 15×7 cm., written by Clemens Salernitanus, illuminations including world map, *lettera anticha corsiva*. Occasional notes.)
- 19. ——, MS 11912. (Ca. 1485. Mbr., 26.5×18 cm., written at Naples by Gianrinaldo Mennio, illuminations, *lettera formata*. Colophon: *Iohannes Rainaldus mennius excripsit*. Occasional notes.)
- 20. **Milan**, Biblioteca Ambrosiana. Ms. P 19 Sup. (Early XVI at latest. Paper, 20×15 cm., undecorated. Very frequent notes in two hands.)
- 21. _____, ms. E 125 Sup. (1458-1464. Mbr., 29 × 20 cm., white vine, arms of Aeneas Sylvius Piccolomini (Pius II). Very frequent notes, two different hands.)
- 22. —, ms. I 29 Sup. Fragment, contains only I.1-II.117 on fols. 58^{r} - 77^{v} , stops at end of a gathering. Bound with other excerpts: Donatus's life of Virgil; Frontinus, *De Acquaeductu*; Quintus Smyrnaeus, *Ilias*; Ioannes de Sacrobosco, *De Sphaera* (illustrated); Bruni's Latin translation of Aristotle's *Ethics*; and an unidentified treatise titled only *Artificiose eloquentiae*. (XV 3/4. Mbr., 22×17 cm., pages of varying size, undecorated. Frequent notes.)†

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- 23. **Madrid,** Biblioteca Nacional de España. Ms. 2885. (Ca. 1460. Mbr., 27×20.5 cm., illuminations, rubricated. Followed by *Concordantiae T. Lucrecíi Cari aliorumque Poetarum*, fols. 154–163. One note at 3.476.)†
- 24. **Modena,** Biblioteca Estense. Est. Lat. 97 (α .P. 9.30). (XV 2/2. Paper, 22×15 cm., no decoration, partly rubricated. Bound with Tibullus in same hand. Frequent notes in multiple hands.)†
- 25. **Munich**, Bayerische Staatsbibliothek. Cod. lat. mon. 816a. (XV 3/4. Mbr., 22.5×15 cm., white vine, *lettera corsiva corrente*. Belonged to Piero Vettori, 1499–1585. Frequent notes, likely in the same hand that annotated #6 above.)
- 26. Naples, Biblioteca Nazionale Vittorio Emanuele III. IV E 51. (1458. Mbr., 22×14 cm., white vine. Emended in Rome by Pomponio Leto. Very frequent notes.)†
- 27. **New York**, Pierpont Morgan. MS 482. (Ca. 1440–1450. Mbr., 23×13 cm., rough early *formata*. Palimpsest over fourteenth-century deeds. Milanese arms. One note, scattered marked lines.)
- 28. **Oxford,** Bodleian Library. Auct. F.1.13. (Ca. 1458–1461. Mbr., 32×18 cm., white vine, *lettera formata* but somewhat Gothic. Arms of John Tiptoft Earl of Worcester. No notes.)
- 29. —, Canon class. lat. 32. (After 1458. Mbr., 21×13 cm., no decoration, lettera formata. Scattered notes.)
- 30. **Padua**, Biblioteca Capitolare. C.75. (XV. Paper, 25×17 cm., undecorated. Copied by Petrus Barocius, Bishop of Padua. Few notes.)†
- 31. ——, C.76. (XV. Paper, 25×17 cm., green vine, coat of arms of Jacopo Zeno, Bishop of Padua. Frequent notes.)†
- 32. **Paris**, Bibliothèque Nationale. Lat. 10306. (Previously: Supplément Latin 999) (XV 2/3. Paper, 29.5×20.5 cm., undecorated, several hands. Owned by Francesco Marescalchi of Ferrara. Frequent notes.)
- 33. Piacenza, Biblioteca Comunale Passerini-Landi. Manoscritti Landiani (Fondo Landi) Cod. 33. (1507. Mbr., 29 × 22 cm., undecorated, with geometric and astronomical diagrams. Written by Bernardinus Cipellarius Buxetanus, with an epigram by him to the reader. Occasional brief notes.)†
- 34. **Rome,** Biblioteca Nazionale Centrale Vittorio Emanuele II. O. 85. (S. Onofrio 85; XV 3/4. Paper, 20×11.5 cm., undecorated. From Sant'Onofrio, Rome. Very frequent notes.)
- 35. Savignano sul Rubicone, Biblioteca dell'Accademia Rubiconia dei Filopatridi. Ms. 68. (XV, "versus campani ad lucullum" on final fol. of bk. VI, dated 1468. Paper, 28×21 cm. Bound with Manilius's poems, letters to and from Platyna, and other short humanist verses. Corrections and a few notes by the copyist and two notes in another hand.)†
- 36. **Città del Vaticano,** Biblioteca Apostolica Vaticana. Fondo Barberini Latino. Barb. lat. 154, 1 (IX. 23). (XV. Mbr., 33×18 cm., illuminations, humanist script. Arms of Andrea Matteo III Aquaviva of Aragon. Few notes.)
- 37. —, Fondo Ottoboniano. Ottob. lat. 1136, 2. (XV. Paper, 28×15 cm., remnants of gilding on initial A. Few notes.)

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- 38. ——, Ottob. lat. 1954, 1. (Approx. 1466. Mbr., 22×14 cm., white vine, crest. Copied by Giovanni Sulpizio Verolano [Verulanus]. Frequent notes and brackets; see also #1 above.)
- 39. ——, Ottob. lat. 2834, 1. (XV. Mbr., 29 × 20 cm., white vine, Italian humanistic script characteristic of Pomponio Leto and his circle. Frequent notes primarily on fols. 1^{r-v}, likely Pomponio Leto's.)†
- 40. ——,——, Fondo Vaticano Latino. Vat. lat. 1569. (1483. Mbr., 27.5×16 cm., illuminations, arms of Sixtus IV. No notes.)
- 41. ——,—, Vat. lat. 3275. (XV. Paper, 22×14 cm., undecorated. Belonged to Fulvio Orsini. Few notes.)
- 42. ——, Vat. lat. 3276. (1442. Paper, 20×14 cm., monochrome vine work, rubricated. Notes of Antonius Panormita [Beccadelli], frequent; other notes formerly ascribed to Johannes Aurispa, but that attribution has been challenged. 4)
- 43. —, Fondo Reginense. Vat. Reg. lat. 1706. (XV 2/3. Mbr., 26×15 cm., illuminations. Few notes.)
- 44. ——, Fondo Urbinate. Vat. Urb. lat. 640. (XV 3/4. Mbr., 26×15 cm., white vine. Few notes.)
- 45. ——, Fondo Rossiano. Ross. Lat. 502 (XV 2/3. Mbr., 23×15 cm., white vine. Very few notes.)
- 46. ——, Ross. lat. 884 (XI 37). (XV ca. 1497. Paper, 14×11 cm., undecorated. Lucretius and Terence [Eunuchus], copied by N. Machiavelli. Scattered notes.)
- 47. ——, Fondo Patetta. Patetta 312. (XV 2/3. Paper, 22×14 cm., illuminations, round humanist script. Notes and corrections in several hands. Includes quotation from Eusebius-Jerome.)†
- 48. Venice, Marciana. Cl. XII 69 (3949). (Formerly Ss. Giovanni e Paolo 683. XV. Paper, 29 × 20 cm., no decoration, rubrication in IV-VI. Notes of copyist and second annotator; many in Greek. Bound with Manilius's Astronomicon and several short poems, including Versus Tranquilli Phisici de Duodecim Ventis on 110-111.)†
- 49. ——,——, Cl. XII 166 (4175). (XV. Paper, 22×15 cm. rubrication, no decoration. Few notes.)†
- 50. Vienna, Österreichische Nationalbibliothek. Codex Vindobonensis Palatinus 170. (Circa 1460–1470. Mbr., 25×16 cm., Florentine white vine, round humanist script, rubricated. Belonged to Matthias Corvinus, Johannes Alexander Brassicanus, and Johannes Fabri bishop of Vienna. Very occasional corrections in neat scribal hand; no other notes.)†
- 51. València, Universitat de València. Univ. 733 (XV 3/3. Mbr., 34 × 27 cm., white vine with animals and cherubs, coat of arms, portrait of a man with a book wearing a laurel crown. Written at Naples for Ferdinand I of Aragon. One insertion by scribe, no other notes.)†
- 52. **Zaragoza, Biblioteca Capitolar.** Ms. 11–36 (Caesaraugustanus). (XV. Paper, 22×25 cm., undecorated, lettera corsiva humanistica. Very few notes.)⁵†

- 53. Unknown Location. Formerly Redlynch House, near Salisbury, Wiltshire, collection of Major J. R. Abbey, 3236. (Between 1478 and 1517. Mbr., 16.5×10.5 cm., white vine, lettera formata, arms of the Pazzi family. No notes on fols. 2–8. See Alexander and de la Mare, The Italian Manuscripts in the Library of Major J. R. Abbey (London, 1969), 65–66 and plate 29.)
- 54. Unknown Location. Bishop mss. 43. de Ricci, Medieval Mss. in the U.S. and Canada. (Probably XVI. Paper, 21×14 cm.)

Medieval Latin Manuscripts and Manuscript Fragments of Lucretius

- 1. Codex Oblongus (O), University of Leiden, Voss. Lat. F 30.6 31×20 cm.
- 2. Codex Quadratus (Q), University of Leiden, Voss. Lat. Q 94. 21.5 × 22.5 cm.
- 3. Two fragments likely from one codex:
 - a. Fragmentum Gottorpiense (G), Copenhagen, Royal Library, Copenhagen Gl. Kg. S. 211 2° . (I 1–II 456). 19×26 cm.
 - b. Schedae Vindobonenses (V, U), Vienna, National Library, Lat. 107 Phil 128.⁷ (V contains fols. 9–1^r: II 642–III 621; U contains fols.15–18^r(1): V I 743–1286, II 757–805, V 928–979, I 734–785, II 253–304). 18×26.5 cm.

Incorrectly Listed Manuscripts and Manuscripts with Recently Changed Collocations

- Milan, Biblioteca Ambrosiana, ms. F 29. This shelf mark, listed by Smith (p. 113, #25), lacks the Ambrosiana's "inf" or "sup" suffixes, and Smith marks it as a manuscript he did not personally examine. No corresponding manuscript can be found. The reference likely derives from Ambrosiana ms. I 29 Sup. (#22 above), or from ms. F. 29 Sup., which contains Federico Borromeo's De primis rerum nominibus.
- Munich. Bayerische Staatsbibliothek. Clm. 816. Incompletely listed by Gordon, full collocation Clm. 816a (#25 above).
- Ss. Giovanni e Paolo 683. New collocation: Venice. Marciana, Cl. XII 69 (#48 above).

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Capitula

The most ubiquitous Lucretian paratext by far is the set of descriptive capitula that subdivide the six books of the *De rerum natura* into smaller sections. These topical headings are not original to the poem but were added in the first or second century A.D. By labeling topics of interest, capitula offered readers a prefabricated framework suggesting the poem's most important themes and guiding interpretation.

The capitula likely originated as marginal notations that were later copied into the text. They appear in the *Godex Oblongus*, and from that source in the majority of Renaissance manuscripts, though with frequent variation. They were reproduced in the first three print editions and persist in many later editions. Annotators working on copies that lack the capitula often inserted a few of them by hand. Some manuscripts contain tables listing capitula; these traveled along with the text and resemble but do not match the capitula as they appear in-line. The Greek capitula often appeared in transliterated form, though sometimes in Greek, and sometimes in Latin translations. Manuscripts often assigned roman numerals to some capitula but not all. Here numerals appear beside those capitula that are commonly numbered in the manuscripts, but numbering was always incomplete and often inconsistent.²

Capitula absent from the *Codex Oblongus* are marked with an asterisk. The Renaissance forms of some capitula have alternate or additional phrases, listed here in parentheses—these are absent from the *Oblongus* unless otherwise noted.

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Book I

Τὸ μακάριον καὶ ἄφθαρτον ³	The blessed and incorruptible	44
(Beatum & infinitum)		
Laus inventoris	Praise for the discoverer	62
Exemplum religionis	Example of religion	84
iv. Finis doloris	The limit of suffering	107
v. De anima	On the soul	112
vi. Nihil de nihilo gigni	That nothing arises from nothing	150
vii. Nihil ad nihilum interire	That nothing returns to nothing	193 (215)
viii. Corpora quae non videantur	Bodies that cannot be seen	269
ix. De vento	On wind	276 (277)
x. De odore, calore, frigore, voce	On scent, heat, cold, sound	298
xi. Vestes uvesci et aresci	That cloths become wet and dry	304 (322)
xi/xii. De anulo in digito et ceteris	On a ring on a finger and similar things	311
xii. De inani (De vacuo)	On vacuum	334 (346)
xiv. De piscibus in aqua (Pisces quomodo natent)	On fish in water (how fish swim)	370 ⁴
xv. Corpus et inane (vacuum)	That the nature of things is matter and	419
esse naturam rerum	vacuum	
xvi. Tertiam naturam nullam	That there is no third nature of things	429 (430)
esse rerum (non esse a corpore, et vacuo)	(there exists nothing but matter and vacuum)	
xvii. Solidum esse (De tempore)	That it is solid (On time)	498
xviii. Contra είς ἄπειρον τὴν	Against subdivision continuing	551
τομήν ⁵ (infinitum &	infinitely (infinite and indivisible)	33-
indivisibile) xix. De molli natura aqua aere et	On the nature of soft things, water, air,	-6-
ceteris	etc.	565
xx. Contra Heraclitum	Against Heraclitus	60=
Neque ignem neque aera neque	That neither fire nor air nor water is	635
umorem principia esse*6	primary	705
xxi. Contra Empedoclem	Against Empedocles	716
xxii. Contra Anaxagoram ⁷	Against Anaxagoras	830
xxiii. Τὸ πᾶν ἄπειρον τὸ γὰρ	The sum is infinite, for the finite has an	951
πεπερασμένον ἄκρον ἔχει $^8({ m De}$	endpoint (On the limit of solid	
fine corporum solidorum)	bodies)	
xxiv. Εἰς τὸ μέσον ἡ φορά (Dilatio	Motion toward the center (Interval of	1052
temporis)	time)	

Book II

i. Σαρκός ευσταθές κατάστημα ¹⁰	The state of a healthy body	14^{11}
iii. De motu principiorum (et	On the motion of fundamental elements	62
infinita esse ¹²)	elements (and that it is infinite)	
iv. Imum nihil esse	That there is no bottom	89^{13}
v. Quae in solis radiis appareant	Things that appear in sunbeams	112
vi. De celeritate motus	On the speed of motion	142
vii. Nihil sursum ferri corpuscu-	That no tiny body raises itself aloft, but	183
lorum sed pressa a radicibus	bodies rise pushed from below	
exurgere corpora		
viii. De declinatione motus	On motion's swerve	221
ix. De figura atomorum	On the shapes of atoms	333
x. De lumine	On light	387 (8)
xi. De oleo	On oil	391 (2)
xii. De melle	On honey	397 (8)
xiii. De absinthio	On absinthe	399 (400)
xiv. De serrae stridore	On the screeching of a saw	407 (8)
xv. De adamante ferro silice aere	On diamond, iron, flint, air	447
xvi. De sudore salso	On salt sweat	464
xvii. De aqua marina	On sea water	471
xviii. Figuras esse multas	That the shapes [of atoms] are many	477^{14}
xix. Inter se similia infinita esse ¹⁵	[That infinite things are similar among themselves]	522
In terra semina insunt	There are seeds in the Earth	589
De matre magna	On the great mother	598
Τὸ μακάριον καὶ ἄφθαρτον 16	The blessed and incorruptible	646^{17}
(Beatum & incorruptibile)		
Non necessario alba ex albis	That white things do not necessarily	729
principiis fieri	derive from white elements	
Colores non esse	That there are no colors	755
De colore columbarum	On the color of doves	801
De cauda pavonis	On the tail of a peacock	806^{18}
Atomos nec colorem nec odorem	That atoms have neither color nor scent	842
nec sucum nec frigus nec	nor moisture nor coldness nor heat	
calorem habere		
De insensili sensile gigni	That sensation arises from insensible things	865 ¹⁹
Omne infinitum in omnis partis	Everything is infinite in all directions	1048
Apiros mundos (id est infinitos	The worlds (that is, the infinite worlds)	1057 (8)
mundos)	are without boundaries	
Mundum natum et multos	The world, and many similar, were	1105^{20}
similis	born	

Iam senem mundum et omnia pusilla nasci	The world is already old and all tiny bodies have been born.	1147
	Book III	
Homines mortem maxime timere	That people greatly fear death	41
De animi et animae natura sensuque	On the nature of mind and soul, and sensation	94
Animum et animam coniuncta esse	That mind and soul are conjoined	136
De mobilitate animi	On the mobility of the soul	164 (182)
Tertiam animam esse mentem	That the third part of the soul is the mind	228
Quartam sine nomine animam	That the fourth part of the soul has no name	241
Coniunctio animi et animarum	Union of mind and souls	262
De varietate animi	On variation among souls	288
De sensu corporis et animi	On sensation of body and soul	350
De sensu oculorum* ²¹	On sensation of the eyes	359
Contra Democritum de animo et anima	Against Democritus on mind and soul	370
Corpus non sentire per se sine animi motu	That the body does not sense by itself without the motion of the mind	379
Animam nativam et mortalem esse	The soul is born and mortal	417
Animum et corpus simul nasci et crescere et simul interire	Soul and body are born, grow, and perish simultaneously	445
De sensibus animae et animi	On the sensations of the soul and mind	624
Interisse et quae nunc est nunc esse creatam ²²	Things have perished, and what is now was created now	673
Die natali animam non esse privatam	The soul is not without its birth day	711 ²³
Quae ad inferos dicantur ea vitae vitia esse	Those things that are said to exist in the underworld are in fact the wickedness of life	978
	Book IV	
Sibi iucundissimum esse quod claram lucem mortalibus ostendat (proemium)	That that is most pleasant to him that he shows clear light to mortals (his reward)	1
i. De simulacris	On impressions	29

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ii. De imaginibus	On images	94 (98)
iii. Quam parva sint animalia	How small animals are (likewise how	116
(esse item maiora)	large)	
iv. De nubibus (et simulacra gigni)	On clouds (and the formation of images)	131
v. De celeritate (simulacrorum; tactu videri)	On speed (of images; and that they are known by touch)	176
vi. Ultra speculum cur videatur	Why a thing is seen through a mirror	269
vii. Plures imagines cur fiant	Why multiple images occur	325 (6)
viii. Ex tenebris in luce quae sint	Why it is possible to see out of darkness	337
videri (et rusum ex luce quae	things in the light (and why not the	337
sunt in tenebris videri non	reverse)	
posse)	,	
ix. De turribus	On towers	353
x. De umbra hominis	On the shadow of a person	364
xi. De visu	On sight	387
xii. De vero sensu, quare	On true perception (how it is	476
cognoscatur	recognized)	
xiii. De falso sensu	On false perception	513
xiv. De auditis	On things heard	524
xv. Corpoream esse vocem	That a sound is corporeal	526
xvi. De vocis imaginibus	On echoing voices	572
xvii. Qua visus non tranet,	That sounds penetrate things sight	595
vocem tranare	cannot	
xviii. De sapore	On flavor	615
xix. Quare alia aliis contraria sint	Why some things are contrary to others	633
xx. De odore	On smell	673
xxi. De animi motu	On the motion of the mind	722
xxii. Quare quod libuerit statim cogitemus	Why we immediately think of whatever we please	779
xxiii. Prius oculos linguam auris esse nata quam eorum usum	That the eyes, tongue, and ears arose before their functions	836
xxiv. De (motu membrorum hoc est de) ambulando	On (the motion of limbs, i.e.) walking	877
xxv. De somno (quemadmodum fiat)	On sleep (how it comes about)	907
xxvi. De somniis	On dreams	962
xxvii. De rebus Veneriis ²⁴	On matters of Venus	1030

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$Book\ V^{25}$

Plus hominibus profuisse qui	The one who discovered wisdom has	1
sapientiam invenerit quam	profited the human race more than	
cererem liberum Herculem	Ceres, Bacchus or Hercules	
Animam nativam esse	That the soul is born	59
De mundo (mundum et natum et	On the world (that the world is created	64
mortalem esse)	and mortal)	
De solis et lunae cursu (de lune	On the orbits of the Sun and Moon (on	76
lumine)	moonlight)	
Mare caelum terram interitura	Sea, sky, and earth are destined to perish	92
Animum et animam non posse esse sine corpore	That soul and mind cannot exist without body	132
Mundum non esse ab dis	That the world was not made by the	146
constitutum	gods	•
Divisio terrae vel vitium	The division of the Earth or its	200
	imperfection	
Cui pars nativa est, totum	When part of a thing is created, the	240
nativum esse	whole is	
De terra	On earth	251
De aqua	On water	259 (261)
De aere sive anima	On air or spirit	273
De igni et sole	On fire and the sun	281
De lampade et lucerna	On lanterns and lamps	294
De aedificiis quemadmodum intereant	How structures fall to ruin	306
Quare nativa omnia dicat	Why it is said that all things are born	324
Quare aeternitas esse possit	How permanence can exist	351
Et nativa esse (cum sint mortalia)	These are created (because they are perishable)	376
De Phaetonte solis filio	On Phaëton, son of the Sun	396
Origo mundi et omnium	The origin of the world and everything	419
De solis et lunae magnitudine (et	On the size of the Sun and Moon (and	471
motu eorum et quemadmo-	their motion and how they were	
dum nascuntur)	born)	
De solis magnitudine (de luna)	On the size of the Sun (on the Moon)	564
De calore solis	On the heat of the Sun	592 (590)
Democriti de sole	The words of Democritus on the Sun	622
De lunae cursu	On the Moon's orbit	630
Ex Ida visio solis	How the Sun appears from Mount Ida	663
De die longo et brevi nocte (De inequitalitate dierum et	On the long day and short night (On the inequality of day and night)	680
noctium) De lunae lumine	On moonlight	705

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De anni temporibus (De eclipsi)*	On times of year (on the eclipse)	737
De solis et lunae offectione	On obstructions of the Sun and Moon	774
De novitate mundi et disposi-	On the infancy of the world and the	780
tione rerum quae in eo sunt	order of things that exist in it	•
De centauris	On centaurs	878
De scylla (De scyllis & monstris	On scylla (and sea monsters)	892
imbribus)	,	Ü
De chimera (& huiusmodi)	On chimeras (and their ilk)	901
Non potuisse chimeram et	That it is impossible for chimeras,	916
scyllam et similia eorum	scyllas, etc. to arise (On the	Ü
gigni (De simplicitate	simplicity of the ancients)	
priscorum) ²⁶	1 /	
Quomodo hominibus innata sit	How belief in gods arose in man	1161
deorum opinio	0	
Quemadmodum aurum	How gold, silver, and lead were found	1241
argentum plumbum repertum		-
sit		
Quemadmodum ferrum	How iron was discovered	1281
inventum sit		
	Book VI	
Qui procurationem dis attribuit	He who attributes responsibility for the	,
Qui procurationem dis attribuit mundi, sibi ipsum de dis	He who attributes responsibility for the world to the gods, creates for	1
immortalibus sollicitudines	himself anxieties about the	
constituere	immortal gods	
i. De tonitru	On thunder	96
ii. De fulgure	On lightning	160
iii. In nubibus semina ignita	There are seeds of fire in clouds	204
inesse	There are seeds of fire in clouds	404
iv. De fulmine	On lightning bolts	219
v. Ignis ex fulmine natura	Fire is born from lightning bolts	225
vi. Fulmina in crassioribus	Lightning is born on high in thicker	246
nubibus et alte gigni	clouds	1
vii. De tonitribus et terrae motu	On thunder and earthquakes	285
viii. Autumno magis fulmina et	Thunder and lightning increase in	357
tonitrua fieri	autumn	
ix. De nubibus (quomodo	On clouds (how they gather)	451
concrescunt)	, , ,	
x. Spiracula mundi	Breathing vents of the earth	493
xi. De imbribus	On rain	495
xii. De arquo (arcu)	On rainbows	526
viii De terrae motu	On earthquakes	E9E

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xiv. Quare mare maius non fiat	Why the sea does not become larger	608
xv. De Aetna	On Mount Etna	639
xvi. De Nilo fluvio	On the Nile river	712
xvii. De lacu Averni	On Lake Avernus	738
xviii. Cornices Athenis ad aedem	That crows in Athens avoid Athena's	749
Minervae non esse	temple	
xix. In Syria quadripedes	Quadrupeds in Syria	756
xx. Cur aqua in puteis frigidior	Why well water is colder in summer	840
sit aestate		
xxi. De fonte ad hammonis	On the spring by Hammon's shrine	848
xxii. In aqua taedam ardere	That torches burn in water	879
xxiii. De fonte aradi in mare	On the spring of Aradus in the sea	888
xxiv. De (lapide) magnete	On magnets (magnet stone)	906
xxv. Fluere ab omnibus rebus	That emanations derive from all things	921
xxvii. Pestilentia unde creatur	Whence plague is created	1090
xxvii. De pestilentia	On the Athenian plague	1138
Atheniensium		

APPENDIX C

Lucretius Editions

Surviving Editions, 1471–1600

1471/73	Brescia Fº Tommaso Ferrando	Editio princeps; final editor's note
1486	Verona F° (Paulus Fridenperger)	Carmen "Non te animus"
1495	Venice 4° (Theodorus de	"Non te animus"; carmen C.
	Ragazonibus)	Lyncinii
1500	Venice 4° Hieronymus Avancius	Corrected text, two letters,
	(Aldine)	quotation list
1511	Bologna F° J. Baptista Pius	Annotated, with letters and expositio
	(H. B. de Benedictis)	
1512	Florence 8° Petrus Candidus	Candidus vita; Marullo's corrections
	(Juntine)	
1514	Paris F ^o J. Baptista Pius (Ascensius	Annotated, with letters, based
	and Parvus)	on 1511
1515	Venice 8º Andrea Navagero	Aldus letter to Albertus Pius
	(Aldine)	(no vita)
1531	Basel 8º Andrea Navagero	Crinitus vita
	(Heinrich Petri)	
1534	Lyons 8º Andrea Navagero	Crinitus vita; glosses; Aldus letter
	(Seb. Gryphius)	
1539	Paris 4º Andrea Navagero	Crinitus vita; Aldus letter
	(Prigent Calvarin)	
1540	Paris 8º Andrea Navagero	Matches 1534; Crinitus vita, glosses,
	(Seb. Gryphius)	and Aldus letter
1542	Louvain 4° (R. Rescius)	Crinitus vita
1543	Paris 4° (M. Vascosan)	Books I and II only
1546	Lyons 16° Andrea Navagero	Similar to 1534; vita and
	(Seb. Gryphius)	Aldus letter, no glosses

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1548	Lyons 16° Andrea Navagero	Matches 1546; Crinitus vita,
	(Seb. Gryphius)	Aldus letter
1558	Lyons 16° Andrea Navagero	Matches 1546; Crinitus vita,
	(Seb. Gryphius)	Aldus letter
1561	Paris 4° (Jean Foucher)	Books I–III only
1563	Paris 4° Denys Lambin	Annotated, with letters etc.
	(P. G. Rovillius)	
1564	Paris 16° Marnef	Crinitus vita
1565	Paris 16° Denys Lambin	Crinitus vita, multiple letters
	(P. G. Rovillius)	
1565-66	Antwerp 8° Obertus Gifanius	Annotated, Gifanius vita, several
	(Plantin)	other supplements.
1567	Paris 16° Marnef	Matches 1564; Crinitus vita
1570	Paris 4° Lambin and Turnebus	Annotated, Lambin vita, similar
	(Jean Bienné)	to 1563
1576	Lyons 16° Lambin and Turnebus	Limited annotations, Giraldi vita
	(A. Gryphius)	
1583	Frankfurt 8° Denys Lambin	Annotated, Lambin vita, similar
	(A. Wecheli)	to 1570
1589a	Antwerp 16° (Christophorus	Contains a carmen and an explicatio
	Plantinus)	
1589b	Leiden 16° (Christophorus	Matches 1589a
	Plantinus)	
1595	Leiden 8° Obertus Gifanius	Matches 1567; Crinitus vita
	(F. Raphelengius)	
1597	Leiden 16° (Christophorus	Matches 1589a
	Plantinus)	

Possible Lost Editions

1496 Brescia 4° Impressit Brixiae Bernardinus Misinta Two sales records exist, dated 1853 and 1900, both in London, of what is likely the same copy. See Martin Ferguson Smith and David Butterfield, "Not a Ghost: The 1496 Brescia Edition of Lucretius." Aevum (Milan) 84 (2010): 683–693.

Ghosts

1596 Lyons Lambinus (Frellon)
A 1596 edition is attested in Baudrier V.283, who bases his claim on a single copy in the Biblioteca St. Geneviève in Paris (former collocation Y 273, now 8 Y 273 1377).
Baudrier was followed by Gordon, who describes the edition on p. 135. The St.
Geneviève copy is in fact the 1606 Lambin 16°, which duplicates the contents of the 1576. Gordon lists the 1606 Frellon Lyons 16° as a ghost, p. 275, but copies are listed

in the catalogs of the Württembergische Landesbibliothek and Bayerische Staatsbibliothek.

For other ghosts, see Gordon, A Bibliography of Lucretius, chap. 7, 273–278.

Table of Individual Copies Inspected

Volumes marked with an asterisk have no marginal or interlinear annotation, though many have owners' marks on front leaves.

1471-1473; Brescia F°

Laurenziana D'Elci 335

1486; Verona Fo

Bergamo Civica Biblioteca Angelo Mai INC. 4.176

(bound with Ovid)*

BL C.3.c.1* BL G.9737* BL IB.30763 BL IB.30764*

Bodleian Auct. L.2.17

Houghton Deposit Ka L96.1F 1486

Houghton Inc. 6923 Laurenziana D'Elci 336*

Utrecht Universiteitsbibliotheek Litt. Lat. X fol. 82 (Rariora—notes and vita of Pomponio

Leto)

1495; Venice 4º

Ambrosiana INC.186

BL C.3.a.1* BL G.9473*

BL IA.23564 (notes and vita of Girolamo Borgia)

Bodleian Auct. O inf. 1.23*

Bodleian Inc.e.14.1495.1 (2) (bound with Opera

Claudiani)

Cambridge Univ. Keynes.H.3.10

Houghton Inc. 5271 (notes attributed to Avancius

and Pius)

Marciana Incun. Ven .702 Marciana Incun. Ven .743* Paris BN M-YC-397 V95

1500; Venice, Aldine 4°

BL C.3.a.2 BL G.9474

BL 1A.24507

BL IA.24508 (gilt and illuminated title page)*

Bodleian Auct. 2.r 46*

Bodleian Auct. 2 R 4.50 (connected with Donato

Giannotti)

Houghton Inc. 5576* Laurenziana D'Elci 419

Walters 91.752

1511; Bologna, Pius Fº

BAV Chigi II 617 BAV R.I.II 1991 Bodleian L.2.21 Art. Houghton OLC L964 511 Marciana Rari 224* Marciana Rari 283 Paris BN M-YC-1078 Rome Naz. 37. 44.d.19

Rome Naz. II 6. 9.n.25

1512; Florence Candidus 8°

Ambrosiana S.Q#.O.IV.8 BAV Barb. K.II.24 (bound with Cicero's *Tusculan*

Disputations)

BAV Ferraioli V.6350 (2) (bound with Tibullus,

Catullus, and Horace) BAV R.I.V. 1641 BAV Rossiana 5979

BL 1068.h.8 BL 237.a.3* BL G.9443* BL11375.aa.20

Bodleian Bywater P 6.11 Bodleian Mason O 6 Bodleian Toynbee 403* Houghton OLC L964 512* Naples Naz. XXI.E.79 Paris BN PYC 338* Paris BN PYC 339 Paris BN Y-C 502h

1514; Paris Pius Fº

1515; Venice, Navagero 8°

BL 840.m.36*

Cambridge Univ. Keynes.S.6.5*

Cambridge Univ. L.9.14

Cambridge Univ. Norton.a.9 (bound with Seneca)*

Houghton OLC L964 514 Rome Naz. II 6. 18.N.9 Ambrosiana S.L.X.VIII.86*

Ambrosiana S.L.X.VIII.86* Ambrosiana S.Q#.E.IV.35* Ambrosiana S.Q#.E.V.4/1* Ambrosiana S.Q#.I.IV.25* Ambrosiana S.Q#.I.VI.16 Ambrosiana S.Q#.L.VIII.10*

Ambrosiana V.P. 18563 BAV Barberini CCC.II.34* BAV Chigi V. 2218* BAV Ferraioli V.6550 BAV Rossiana 6471*

BL 1068.h.9.(1) (bound with a copy of the 1531 ed.)

BL 684.b.13* BL C.4.f.12*

Houghton OLC L964 515* (rubricated)

Paris BN RES PYC-340 Paris BN RES PYC-341* Paris BN RES PYC-342 Rome Naz.II 68. 8.C.9*

1531; Basel Navagero 8° BL 1068.h.g.(2.) (bound with a copy of the 1515 ed.)

Munich, Staatsbibliothek, A.lat.a.819 Munich, Staatsbibliothek, Rern.IV 85

Paris BN RES-P-YC-1849

Paris BN YC-5025

1534; Lyons Navagero 8° Basel, Öffentliche Bibliothek der Universität, CE I 5:

1 (bound with Palearius)* Cambridge Univ. Hhh.209

Savignano sul Rubicone, R.V.B.15*

1539; Paris Navagero 4° BL 681.c.11

Cambridge Univ. Hhh.664

1540; Paris Navagero 8° BAV Barberini K. VI. 6 †

BL G.17228.(1.)*

Bodleian 40 Rawl. 53

1542; Rescius 4° BL C.141.bb.25*

Cambridge Univ. Rel.c.54.2

1543; Paris Vascosan 4° BL999.d.36*

1546; Lyons Navagero 16° BAV Barberini K. I.6

BL 685.a.16*

Houghton OLC L964 546* Paris BN PYC-1810*

1548; Lyons Navagero 16° BL166.k.8*

Bodleian Crynes 138

1558; Lyons Navagero 16° Marciana 165.C.126*

Rome Naz. II 204. 18.A.30* Bodleian Byw. Q 2.5 (2)*

1561; Paris (I–III only) 4° 1563; Paris Lambin 4°

Basel, Öffentliche Bibliothek der Universität, CE I 6

BL 834.k.3*

BL C.19.d.6,7 (printed on vellum, bound in 2 vols.)*

Cambridge Univ. L.10.11 (1564)* Houghton OLC.L964.563

Laurenziana Stampati after 1500 22. 4. 62

Private collection* Rome Naz. II 37. 5.c.17

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Rome Naz. II 6.15.E.4 Cambridge Univ.

Montaigne. 1.4.4 (digitized online); cf.

Screech, Montaigne's Annotated Copy of Lucretius

(Geneva, 1998)

1564; Paris Marnef 16° Cambridge Univ. Kkk.621 1565; Paris Lambin 16° BAV Barberini K.VI.8

BL1000.a.1

Bodleian 80 L 34 Art. Seld. Cambridge Univ. Kkk.607

1565–1566; Antwerp Gifanius 8° Basel, Öffentliche Bibliothek der Universität CE I 7

Bergamo Cinq 2,1201

BL 684.b.14 BL C.69.b.7(1.) BL G.9445

Bodleian Byw. P 6.13

Bodleian Byw. P 6.14 (notes of Gifanius)

Bodleian Radcl. F.11*

Cambridge Univ. Hhh.208* Cambridge Univ. Keynes.H.3.8* Houghton OLC.L964.595 Houghton *ZHC5 Sa444 Y566&

Naples Naz. B. Branc. 082k 27

1567; Paris Marnef 16° BAV Barberini K. I. 7*

BL C.65.aa.20*

Cambridge Univ. Kkk.180*

1570; Paris Lambin 4° Basel, Öffentliche Bibliothek der Universität CE I 8

BAV Barberini K.VII.39* BAV Chigi IV.568*

BAV R.I.IV.561 (notes attributed to Aldus Manutius

the younger)

Bergamo Cinq 6,275*

BL 56.c.7* BL C.79.b.7* BL G.9501*

Bodleian Antiq.d.F.1570 Bodleian Byw. G 1.22 Cambridge Univ. L.10.12* Houghton OLC L964 570*

Napoli BNVE III B. Branc. 081E 51 Paris BN YC-547 (mfiche YC-547)*

Private Collection*

Savignano sul Rubicone, R.V.B.15

1576; Lyons Lambin 16° Basel, Öffentliche Bibliothek der Universität CE I 27*

BL1001.a.13(3.)

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Cambridge Univ. Kkk.181*

Houghton OLC L964 576 (bound with Lucan)*

1583; Frankfurt Lambin 8° BAV Barberini K.VI.7*

BAV Ferraioli V.6503* Bergamo Cinq 1,1586* Bodleian 80 L 22 Art* Houghton OLC.L964.583*

Private Collection

1589a Antwerp Plantin 16° BAV Chigi VII 43*

Paris BN YC-11302*

1589b Leiden Plantin 16° 1595; Leiden Gifanius 8°

Paris BN YC-11301* BAV Barberini K.II.23*

Bodleian 80 L 25(2) Art. (bound with Lucan)*

Bodleian Broxb.27.4* Bodleian Bywater P 6.15* Houghton OLC.L964.595*

Marciana 107.D.202 Private Collection

1597; Leiden 16° listed as 1596; Lyons 16° Rome Biblioteca Casanatense VOL.MISC.2410.1* Paris St. Geniviève 8 Y 273 1377 (actually dated

1606)

Notes

1. Religion Trampled Underfoot

- 1. For the best compilations of such lists, see Alan Charles Kors, Atheism in France, 1650–1729, Volume 1: The Orthodox Sources of Disbelief (Princeton, 1990), esp. 29–30 and chaps. 6–7; and Nicholas Davidson's "Unbelief and Atheism in Italy, 1500–1700," in Atheism from the Reformation to the Enlightenment, ed. Michael Hunter and David Wootton (Oxford, 1992), 55–86, esp. 56 n. 7, which treats Johannes Miraelius's 1699 list "Famous Italian Atheists." See also C. J. Betts, Early Deism in France: From the So-Called "Déistes" of Lyon (1564) to Voltaire's "Lettres philosophiques" (1734) (The Hague, 1984), esp. 263–265.
- 2. On the development of Epicureanism after the Renaissance, see Catherine Wilson, *Epicureanism at the Origins of Modernity* (Oxford, 2008).
- 3. On Lucretius's impact on modern skepticism, see later in this chapter and Chapter 5. Mersenne's central place in the history of modern skepticism is treated in Richard H. Popkin, *The History of Skepticism from Savonarola to Bayle* (Oxford, 2003) chap. 7, 112–127.
- 4. Epicurus's letters and maxims are preserved in Diogenes Laertius, bk. X, brought from Constantinople in 1416 and translated into Latin by Traversari in 1433.
- 5. Principally De natura deorum, De finibus, and Tusculanae quaestiones.
- 6. For general treatments of Lucretius, see Sedley, Lucretius and the Transformation of Greek Wisdom (Cambridge, 1998); also The Cambridge Companion to Lucretius, ed. Stuart Gillespie and Philip Hardie (Cambridge, 2007); Hadzsits, Lucretius and His Influence (New York, 1935); Highet, The Classical Tradition (Oxford, 1949), 188–189. For more and older treatments, see Alexander Dalzell, "A Bibliography of Work on Lucretius, 1945–1972," Classical World 67, no. 2 (November 1973): 65–112.
- 7. On this claim by Lucretius, see Chapter 2. The similarity to Empedocles is frequently cited by sixteenth-century editors of Lucretius as a validation of the

- work. For examples, see the letter of Nicolaus Beraldus to "Francisco Deliono Regio Consiliario" in the 1514 edition annotated by Johannes Baptista Pius, Denys Lambin's letter to Charles IX in the 1563 edition (esp. fols. ã2r-ã3v), and the 1505 vita of Lucretius by Pietro Del Riccio Baldi (Petrus Crinitus), reproduced in a subtly altered version in the 1512 edition and in its original form in eleven more editions from 1531 to 156; for the full text, see Giuseppe Solaro, *Lucrezio: Biografie umanistiche* (Bari, 2000), 37-41.
- 8. For a lively and broad-reaching narrative treatment of the manuscript's rediscovery, see Stephen Greenblatt, *The Swerve* (New York, 2011).
- 9. We have seventeen years' worth of letters from Poggio to Niccolò requesting the book's return in terms that gradually degenerate from pleading to irate to despairing. Poggio's letters are collected in *Two Renaissance Book Hunters* (New York, 1974).
- 10. On access to Poggio's copy and its descendants, see Alison Brown, The Return of Lucretius to Renaissance Florence (Cambridge, Mass., 2010), 6-7. On other copies, see Michael Reeve's arguments that the majority of Italian exemplars are not descendants of Niccolò's copy of Poggio's discovery (Laur. 35.30), as was once believed, in "The Italian Tradition of Lucretius," Italia Medioevale e Umanistica 23 (1980): 27-48.
- 11. On Virgil and Lucretius, see Sacré, "Nannius' Somnia," in La satire humaniste: Actes du Colloque international des 31 mars, 1er et 2 avril 1993, ed. Rudolf De Smet (Louvain, 1994), 80–84; Joseph Farrell, Vergil's Georgics and the Traditions of Ancient Epic (Oxford, 1991); Richard Jenkyns, Virgil's Experience: Nature and History, Times, Names, and Places (Oxford, 1998), esp. chaps. 5–6. Even the editio princeps of Lucretius advertised the fact that Virgil imitated lines from the poem: "eum ita suis in descriptionibus imitentur & Virgilius praesertim poetarum princeps ut ipsis cum verbis tria interdum & amplius metra suscipiant" (Brescia, 1473/1471), fol. 106. On humanist discussions of Virgil's imitation of Lucretius, see Chapters 2 and 4; and on editions and surviving manuscripts, see Appendixes A and C.
- 12. See later in this chapter.
- 13. See Chapter 4.
- 14. On Lucretius's artistic and literary influence, see in particular Valentina Prosperi, Di soavi licor gli orli del vaso: La fortuna di Lucrezio dall'Umanesimo alla Controriforma (Turin, 2004), treated later in this chapter. See also Prosperi, "Lucretius in the Italian Renaissance," in Gillespie and Hardie, The Cambridge Companion to Lucretius; Stephen Campbell, "Giorgione's 'Tempest,' 'Studiolo' Culture, and the Renaissance Lucretius," Renaissance Quarterly 56, no. 2 (Summer 2003): 299–332; Charles Dempsey, "Mercurius Ver: The Sources of Botticelli's Primavera," Journal of the Warburg and Courtauld Institutes 31 (1968): 251–273.
- 15. Recent studies have uncovered evidence that Lucretian atomism penetrated small intellectual communities of Florence, Naples, Rome, and Bologna in this period, but I am concerned with broader circulation. See Brown, Return of Lucretius; also Brown, "Lucretius and the Epicureans in the Social and Political Context of

Renaissance Florence," I Tatti Studies 9 (2007): 11–62. On the classics and Renaissance science, see Gianna Pomata and Nancy Siraisi, eds., Historia: Empiricism and Erudition in Early Modern Europe (Cambridge, Mass., 2005); William R. Newman and Anthony Grafton, ed., Secrets of Nature: Astrology and Alchemy in Early Modern Europe (Cambridge, Mass., 2001); Nancy Siraisi, Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice (Chicago, 1990), 1–16, 123–133; John Shirley and David Hoeniger, eds., Science and the Arts in the Renaissance (Washington, D.C., 1985), esp. the title chapter by Alistair Crombie, 15–26; George Sarton, The Appreciation of Ancient and Medieval Science during the Renaissance (1450–1600) (Philadelphia, 1955); Nancy Siraisi, "Life Sciences and Medicine in the Renaissance World," in Rome Reborn: The Vatican Library and Renaissance Culture, ed. Anthony Grafton (Washington D.C., 1993), 169–198.

- 16. On Bruno, see Paul Henri Michel, The Cosmology of Giordano Bruno (Ithaca, N.Y., 1973); Robert Kargon, Atomism in England from Hariot to Newton (Oxford, 1966); Antonio Clericuzio, La macchina del mondo: Teorie e pratiche scientifiche dal Rinascimento a Newton (Rome, 2005); Clericuzio, Elements, Principles, and Corpuscles: A Study of Atomism and Chemistry in the Seventeenth Century (Dordrecht, 2000); Hilary Gatti, Giordano Bruno and Renaissance Science (Ithaca, N.Y., 2002), esp. chap. 8; Gatti, Essays on Giordano Bruno (Princeton, 2011), chap. 3; also Carlo Monti's introduction to Giordano Bruno, Opere Latine (Turin, 1980). On Fracastoro, see Concetta Pennuto, Simpatia, Fantasia e Contagio: Il pensiero medico e il pensiero filosofico di Girolamo Fracastoro (Rome, 2008); Alessandro Roccasalva, Girolamo Fracastoro: Astronomo, medico e poeta nella cultura del Cinquecento italiano (Genoa, 2008); Vivian Nutton, "The Reception of Fracastoro's Theory of Contagion: The Seed That Fell among Thorns?," Osiris, 2nd ser., vol. 6, Renaissance Medical Learning: Evolution of a Tradition (1990): 196–234.
- 17. A detailed examination of Gassendi falls outside the scope of this study, but his connections to Montaigne, Mersenne, and philosophical skepticism are treated in Chapter 5.
- 18. This explains why Lucretian poetic influences, admirably explored by Valentina Prosperi, left so many more conspicuous traces than the atomism painstakingly excavated by Alison Brown. See Prosperi, Di soavi licor gli orli del vaso.
- 19. For general information on Epicureanism, see Cyril Bailey, The Greek Atomists and Epicurus: A Study (New York, 1964); Howard Jones, The Epicurean Tradition (London, 1989); James Hankins and Ada Palmer, The Recovery of Ancient Philosophy in the Renaissance: A Brief Guide (Florence, 2008), 34-35.
- On the lifestyles of Hellenistic sects, see Pierre Hadot, Philosophy as a Way of Life (Oxford, 1995).
- 21. Inferno X 13-15. "Suo cimitero da questa parte hanno/ con Epicuro tutti suoi seguaci,/ che l'anima col corpo morta fanno."
- 22. Cicero, *De natura deorum* I 44.123 and III 1.3. See the commentary by Arthur Stanley Pease, ed., *De Natura Deorum: Libri III* (Cambridge, Mass., 1955).
- 23. De rerum natura (hereafter, DRN) I 80. Line numbers given for the De rerum natura match Bailey and Loeb.

- 24. See Chapter 5.
- 25. See, for example, the entry on Cardinal Polignac's *Anti-Lucretius* in Voltaire's *Philosophical Dictionary*.
- 26. De Natura Deorum I 33.93.
- 27. DRN II 478-580.
- 28. Ibid., 216–293. Both Stephen Greenblatt (*The Swerve*) and Alison Brown (*Return of Lucretius*) have explored the enormous influence of this concept. See also Gerard Passannante, *The Lucretian Renaissance* (Chicago, 2011), epilogue.
- 29. DRN II 333-477.
- 30. Ibid., IV 722-817.
- 31. See Bernard Frischer, The Sculpted Word: Epicureanism and Philosophical Recruitment in Ancient Greece (Berkeley, 1982).
- 32. Traversari's 1433 translation of Diogenes Laertius was reprinted at least twenty-two times before 1600, not quite a match for Lucretius's thirty editions, whereas the Greek original was not published in its entirety until 1533, though the lives of Aristotle and Theophrastus had appeared excerpted in the 1497 Aldine Aristotle, and of Xenophon in the 1527 Juntine Xenophon; Hankins and Palmer, *Recovery of Ancient Philosophy*, 34-36, 62-63.
- 33. Ibid., 41-42.
- 34. Epistulae II xxi, 10: "Cum adieris eius hortulos et inscriptum hortulis 'HOSPES HIC BENE MANEBIS, HIC SVMMVM BONVM VOLVPTAS EST' paratus erit istius domicilii custos hospitalis, humanus, et te polenta excipiet et aquam quoque large ministrabit et dicet, 'ecquid bene acceptus es?' 'Non irritant' inquit 'hi hortuli famem sed exstinguunt, nec maiorem ipsis potionibus sitim faciunt, sed naturali et gratuito remedio sedant; in hac voluptate consenui.'"
- 35. Hankins and Palmer, Recovery of Ancient Philosophy, 37-39.
- 36. The 1565 edition of Lucretius even included selections from Cicero's dialogues, as well as Diogenes Laertius, as supplements to the text of the *De rerum natura*.
- 37. Bk. V, lines 837-877.
- 38. Discussed at greater length in Chapter 3.
- 39. Epistle IV, line 16.
- 40. Epistulae Familiares I 1.
- 41. The passage in question is Seneca, *Epistulae* II xxi, 10, and is a favorite of Lucretius's rescuer Poggio Bracciolini, who cites it repeatedly in his letters. See *Two Renaissance Book Hunters*, letter 3, 29; letter 38, 97; and letter 58, 127.
- 42. Translation taken from Ernst Cassirer, Paul Oscar Kristeller, and John Herman Randall Jr., eds., *The Renaissance Philosophy of Man: Selections in Translation* (Chicago, 1948). The references are Cicero, *De natura deorum*, I 33.93, 26.73, 43.120.
- 43. Renaissance Philosophy of Man, 98-99.
- 44. This last image of the ancient sage failing to reach the truth because humanity does not yet have access to the light of Christianity will be used frequently to describe Plato, Pythagoras, and other figures by Ficino, Pico, and other humanists, who will scour pre-Christian and non-Christian philosophical and theological writings in search of a deeper and more universal understanding of Christianity itself.

- 45. See Baranski, "Boccaccio and Epicurus," in *Caro Vitto: Essays in Memory of Vittore Branca*, ed. Nicola Jones, Jill Kraye, and Laura Lepschy (London, 2007), 10–27; cf. Brown, *Return of Lucretius*, chap. 1.
- 46. See Don Cameron Allen, "The Rehabilitation of Epicurus and His Theory of Pleasure in the Early Renaissance," Studies in Philology 41 (1944): 1-15. For more on the medieval and Renaissance reception of Epicureanism, see Eugenio Garin, "Ricerche sull'epicureanismo del Quattrocento," in Epicurea in memoriam Hectoris Bignone (Genoa, 1959); Christophe Grellard and Aurélien Robert, eds., Atomism in Late Medieval Philosophy and Theology (Leiden, 2009); Pagnoni, "Prime note sulla tradizione medievale ed umanistica di Epicuro," Annali della Scuola Normale Superiore di Pisa, Classe di lettere e filosofia 3, no. 4 (1974): 1443-1477; Radetti, "L'Epicuranismo italiano negli ultimi secoli del medioevo," Revista di filosofia scientifica 8 (1889): 552-563.
- 47. Although no one would now disagree that the Renaissance saw a rebirth of attention to Epicurus, scholars differ on whether the early attention paid to Epicureanism before the recovery of Lucretius and Diogenes Laertius can be fairly called a systematic effort to rehabilitate Epicurus, or whether it was simply a humanist impulse to defend all intellectual figures from the ancient pagan world. For a cross section of the last fifty years' debates over Christian Epicureanism, see Norman De Witt, Epicureanism and Christianity (University of Toronto Quarterly 14, no. 3, April 1945); Richard P. Jungkuntz, "Christian Approval of Epicureanism," in Church History 31 (1962): 279-293; Wolfgang Schmid, Epicuro e l'epicureismo cristiano (Brescia, 1984). On the broader influence of Epicureanism in early modern Europe, see C. D. Harrison, "Bacon, Hobbes, Boyle, and the Ancient Atomists," Harvard Studies and Notes in Philology and Literature 15 (1933); Kargon, Atomism in England, esp. 65-69; Margaret Osler, Atoms, Pneuma and Tranquility: Epicurean and Stoic Themes in European Thought (Cambridge, 1991); Wilson, Epicureanism; James Warren, ed., The Cambridge Companion to Epicureanism (Cambridge, 2009). Even the contemporary treatment of Epicureanism in Bruni's *Isagogicon* takes a similar line; see Andrea Zinato's critical edition (Lucca, 2004).
- 48. Lucretian quotations, one in the *De Voluptate* itself and one in a poem on grammar composed after 1449, have led to the suggestion that Valla did, in fact, have access to the *De rerum natura*, but given the scarcity of these references and the preponderance of claims made by the Epicurean interlocutor that manifestly contradict Lucretius, I believe these lines reflect access to an excerpt, not the full poem; see Reeve, "The Italian Tradition of Lucretius Revisited," *Aevum* 79 (2005): 163.
- 49. See the facing-page edition translated by Kent Hieatt and Maristella Lorch, published under the double title *On Pleasure: De Voluptate* (New York, 1977). This edition reproduces the 1533 text, the second version of the dialogue, after Valla changed the setting from Rome to Pavia and changed the identity of the Epicurean interlocutor to Maffeo Vegio, though it had originally been Panormita. Panormita, who was himself very interested in Epicureanism and would later leave his notes in a Lucretius manuscript (BAV Lat. 3276), had had a falling out with

- Valla and also been publicly accused of immorality shortly before the revision. For more on Valla's reasons for the revisions, see the volume's introduction, esp. 21–24.
- 50. For example, at I.8 of the *De Voluptate* Valla uses Lucretius's discussion of lightning in *DRN* II 1102–1104 as excerpted by Lactantius in *Divinae institutiones* III xvii (0400a).
- 51. The line in question is II 172, "Ipsaque deducit dux vitae dia voluptas"; cf. Hadzsits, *Lucretius and His Influence*, 257. Reeve discusses the quotation in his chapter, "Lucretius in the Middle Ages and Early Renaissance: Transmission and Scholarship," in Gillespie and Hardie, *Cambridge Companion to Lucretius*, 205–214.
- 52. Valla, *On Pleasure: De Voluptate*, trans. A. K. Hieatt and M. Lorch (New York, 1977), 102–107, 96–99.
- 53. Ibid., 102-103; Juvenal, Satires 6.2-10; contrast with DRNV 772-1104.
- 54. Valla, On Pleasure: De Voluptate, 142-149.
- 55. *DRN* I, esp. 82-84. Lucretius's argument that the world is not made for human-kind was marked by several Renaissance manuscript annotators; for example, BL Harl. 2694 (fol. 90°).
- "Dii immortales nec volunt obesse nec possunt." Valla, On Pleasure: De Voluptate, 82–83; Seneca, De ira II, 27.
- 57. Lucretius argues specifically that the world was not designed for man in V 207-212.
- 58. Valla, On Pleasure: De Voluptate, 84-85.
- 59. See Lucretius's arguments against intentional creation and care by the gods; for example, at II.165 and II.657, both of which were remarked upon by Machiavelli, see Chapter 2.
- 60. Bayle gives as examples of good atheists Diagoras, Theodorus, Euhemerus, Hippon, Pliny the Elder, Epicurus, Lucretius, Vanini, and others. See, in particular, entries on Démocrite, Epicure, and Lucrèce. For an overview of Bayle's thoughts, see Kors, Atheism in France, vol. 1, 48, 257–261, and, for Bayle's attackers, 241–244. See also Kristeller, "The Myth of Renaissance Atheism and the French Tradition of Free Thought," Journal of the History of Philosophy 6 (1968): 233–243, esp. 240–242.
- 61. See, most conspicuously, Greenblatt, The Swerve.
- 62. Kristeller, "Myth of Renaissance Atheism."
- 63. Nicholas Davidson provides a list of examples of these various claims in "Unbelief and Atheism in Italy," 56 n. 7.
- 64. Wootton, "New Histories of Atheism," in Hunter and Wootton, Atheism, 28.
- 65. Paradise Lost, VI 370.
- 66. It is read this way by Kristeller, who attributes the "myth of Renaissance atheism" to historians' reading uses of the word *atheism* too literally; see "Myth of Renaissance Atheism," esp. 238, 241. These difficulties in attempting to define atheism have also overlapped discussions of secularization; several such treatments are collected in Warren W. Wagar's *The Secular Mind: Transformations of Faith in Modern Europe* (New York, 1982).

- 67. Wootton, "New Histories of Atheism."
- 68. See Allen J. Grieco, "Food and Social Classes in Late Medieval and Renaissance Italy," in *Food: A Culinary History*, ed. Jean-Louis Flandrin and Massimo Montanari, 301–312 (New York, 1999); Grieco, *Uses of Food in Late Medieval Europe* (Oxford, 2006).
- 69. Richard Tuck applied this definition elegantly in his examination of an intriguing moment in which a former supporter, Henry Hammond, accused Thomas Hobbes of promoting "Christian Atheism" in *Leviathan*; see Tuck, "The Christian Atheism of Thomas Hobbes," in Hunter and Wootton, *Atheism*, 111–130, esp. 111–112, 122. For other applications of similar methods, see Nigel Smith, "The Charge of Atheism and the Language of Radical Speculation, 1640–1660," in Hunter and Wootton, *Atheism*, 131–158; Richard Burton, *The Anatomy of Melancholy* (New York, 2001).
- 70. David Wootton characterizes this as the search for "innocent dissimulation" (a term borrowed from Hume), a historical approach that presumes that early modern atheists veiled their atheism with feigned orthodoxy while dropping intentional hints that they hoped like-minded readers would catch; see Hunter and Wootton, Atheism, intro., and 13-55, esp. 17-20. For recent applications of this approach, see David Berman, "Disclaimers as Offence Mechanisms in Charles Blount and John Toland," in Hunter and Wootton, Atheism, 255-273; also Berman, "Deism, Immortality and the Art of Theological Lying," in Deism, Masonry and the Enlightenment, ed. J. A. Leo Lemay (Newark, 1987), esp. 68-70; and Popkin, Shepticism from Savonarola to Bayle, 56.
- 71. Alan Charles Kors has contributed greatly to this approach with his study of how medieval and Renaissance theologians' practice debates with mock atheists resulted in orthodox authors generating sophisticated atheist arguments that would later be used by the "real atheists" of the seventeenth century. Kors thus writes a history of the phantom atheist imagined by Renaissance atheist-hunters, and of how discussions of this phantom's supposed beliefs created the environment necessary for his real successors. Kors, *Atheism in France*, esp. 45–53, 76.
- 72. Lucien Febvre, The Problem of Unbelief in the Sixteenth Century: The Religion of Rabelais (Cambridge, 1982). For developments in this approach, see David Wootton, "Lucien Febvre and the Problem of Unbelief in the Early Modern Period," Journal of Modern History 60, no. 4 (December 1988): 695-730; and Kors, Atheism in France, intro., 7-11. See also Concetta Bianca, "Per la storia del termine 'atheus' nel Cinquecento: Fonti e traduzione greco-latine," Studi Filosofici 3 (1980): 71-104; Popkin, Scepticism from Savonarola to Bayle, esp. 221.
- 73. Carlo Ginzburg, in *The Cheese and the Worms* (New York, 1992), argues for early atheism in the form of unorthodox understandings preexisting within medieval and Renaissance low culture. This technique, taken up by Nicholas Davidson, Margaret Jacob, and Nigel Smith, employs a different source base from those tapped by most historians of atheism. Yet even here the "atheistic" beliefs in question are denials, not of God's existence, but of broader heterodoxy. See Jacob, *The Radical Enlightenment: Pantheists, Freemasons and Republicans* (London,

- 1981); Smith, "The Charge of Atheism"; and Davidson "Unbelief and Atheism in Italy."
- 74. See again Davidson, "Unbelief and Atheism in Italy."
- 75. For example, four chapters in Hunter and Wootton, *Atheism*, apply variations on this method: Davidson's "Unbelief and Atheism in Italy," (55–86); Tullio Gregory's "Pierre Charron's 'Scandalous Book,'" (87–110); Popkin's "Jewish Sources of Irreligion" (159–181); and Silvia Berti's "The First Edition of the *Traité des trois imposteurs*, and Its Debt to Spinoza's *Ethics*" (182–220). For an interesting contrast to these approaches, see Michael Buckley, *At the Origins of Modern Atheism* (New Haven, 1987), esp. 336.
- 76. Stephen Greenblatt neatly borrows the Epicurean term "swerve" to compare the chance progress of atoms to the role chance played in Lucretius's survival, and, through Lucretius, the "swerve" taken by modern thought. See Greenblatt, *The Swerve*.
- 77. See Passannante, The Lucretian Renaissance, 66-69.
- 78. Bk. II, "Of the Religions of the Utopians." David Price translation (London: 1901).
- 79. For a concise discussion of attacks on Erasmus, see Brian P. Copenhaver and Charles B. Schmitt, *Renaissance Philosophy* (Oxford, 1992), 242.
- 80. Monica Barsi, ed., L'Énigme de la chronique de Pierre Belon (Milan, 2001), 264. I am grateful to Amy Houston for helpful suggestions from her work on sieges in French war, culture, and thought in 1560–1630.
- 81. The king's brothers arrived at La Rochelle on February 15th, "avec bon nombre de Seigneurs Catholiques, de courtizans, d'Atheistes, d'Epicuriens, de blasphemateurs, de Sodomites, & d'autres tels officiers, que le tyran avoit chasse d'aupres de luy & de sa cour, non qu'il fust marry de voir tels galans pres de sa personne: ce sont ses mignons favoris, ce sont ses appuis & soustien & les delices de sa Mere: ains tout despit, tout enragé, blasphemant tousiours de cholere, de ce qu'un chacun n'alloit pas comme il commandoit, en l'armee." Le Reveille-Matin des Francois (1574), 130.
- 82. Davidson, "Unbelief and Atheism in Italy," 57.
- 83. Wootton has argued, along the same vein, that the Reformation itself, and its multiplication of beliefs, caused Europe to suddenly need to differentiate between various doctrines that in the Middle Ages had fit comfortably under the broad heading of "heresy"; Wootton, "New Histories of Atheism," 25.
- 84. C.J. Betts's studies have found phrases such as "déiste ou Socinien," "déiste ou Epicurien," or "déiste ou Spinoziste" all used by heretic-hunters in their efforts to clarify the specifics of unbelief; Betts, *Early Deism in France*, esp. 263–265.
- 85. The pair are Orationes Duae, una, de Fide ac Religione Magni Illius Athanasii Alexandrini, Iureconsulti & Theologi eximii, altera de Homologia sive Consensu Concentuque Theologiae Lutheri cum Philosophia Epicuri . . . ab Alberto Hungero (Ingolstadt, 1482) and Oratio de Vocatione et Doctrina Martini Lutheri Doctoris Magni & Prophetae Germaniae ultimi, coelesti & divina, recitate publice Islebii in patria S. Lutheri: & Opposita Epicureae Prationi Alberti Hungeri Professoris Theologi & Procancellarii in Academia Ingolstae diensi, de homologia,

- sive consensu doctrinae Lutheri cum Philosophia Epicuri (Ingolstadt, 1483). One set of these is preserved together in the British Library "Collectanea Lutheriana" 3906.bb.77 (a selection of pamphlets dated 1546–1846) and as 4371.e.331.
- 86. So far the most attention has been given to the sixteenth-century cases on which François Berriot in *Athéismes et athéistes au XVIe siècle en France* bases his rejection of Febvre's thesis that atheism did not exist until the seventeenth century. Kors argues that these cases are not evidence of real philosophic atheism, stating that "in all of Berriot's discussion of 'blasphemers and deniers of God,' there is not a single example of anything more 'atheistic' than the taking of God's name in vain" (*Atheism in France*, 11 n. 16). See also Kristeller, "Myth of Renaissance Atheism," 238; and Popkin, *Scepticism from Savonarola to Bayle*, esp. 221.
- 87. See Kors, *Atheism in France*, 11; Berriot, *Athéismes et athéistes*, 1:128-139, esp. 136, 171, and 2:819-845.
- 88. David Derodon, L'atheism convaincu: Trité demonstrant par raisons naturelles qu'il y a un Dieu (Orange, 1659), 148-151; see Kors, Atheism in France, 28.
- 89. Returning for a moment to Richard Tuck's question of how Hobbes can be accused of "Christian Atheism," Hobbes's claim that the State of Nature is a State of Universal War itself seemed somewhat atheist in the period, because only atheists, who did not fear God, were supposed to be psychologically capable of such wild self-interested violence. This implies that Hobbes believed precivilized man was naturally atheist, which denies the possibility of an innate idea of God or the universality of religion, and suggests that Hobbes himself had a fundamentally atheist concept of human psychology, though not necessarily of the universe itself.
- 90. See particularly DRN III 981-1007.
- 91. Dialogues contre la pluralité des religions et l'athéisme (La Rochelle, 1595), 97r. See Kors, Atheism in France, 28.
- 92. "Quare impietatis causa de religione male sentiunt, quoniam vel, ut Diagoras, Deumnmegant; vel, ut Protagoras, sitne an non Deus dubitant; vel, ut Democritus et Epicurus, Dei providentiam negant," from Marsilio Ficino, *The Philebus Commentary*, ed. Michael J. B. Allen (Tempe, Ariz., 2000), I 25, 232.
- 93. Response á deux objections, qu'on oppose de la part de la raison á ce que la voi nous apprend sur l'origine du mal, & sur le mystère de la trinité (Amsterdam, 1707), pref. (30 pp., unpaginated).
- 94. La devinité défendue contre les athées (1641), 290-305. See Kors, Atheism in France, 99.
- 95. On skepticism and its Renaissance recovery, see Popkin, Scepticism from Savonarola to Bayle; Don Cameron Allen, Doubt's Boundless Sea: Skepticism and Faith in the Renaissance (Baltimore, 1964); Franklin Baumer, Religion and the Rise of Scepticism (New York, 1960).
- 96. Charles Schmitt, Cicero Scepticus: A Study of the Influence of the Academica in the Renaissance (The Hague, 1972).
- 97. Mike Brown, How I Killed Pluto and Why It Had It Coming (New York, 2010). The removal of Brontosaurus and Triceratops from the ranks of recognized dinosaurs has been similarly unsettling to a generation that would never have tasted such distress that had not, in childhood, studied dinosaur theories as fact.

- 98. *DRN* II 398-407.
- 99. Ibid., 730-841.
- 100. Ibid., 810-816.
- 101. Ibid., 842-864.
- 102. Ibid., V 691-704.
- 103. The question of skepticism, and Lucretius's influence on such figures as Montaigne and Mersenne, is taken up again in Chapter 5.
- 104. Sources on the Lucretian textual tradition appear in Appendix A. Treatments by Alison Brown and Valentina Prosperi are treated below. Other studies include Charlotte Polly Goddard, "Epicureanism and the Poetry of Lucretius in the Renaissance" (PhD diss., University of Cambridge, 1991); C.A. Fusil, "La Renaissance de Lucrèce au XVIe siècle," Revue du XVIe siècle 15 (1928): 134-150; Max Lehnerdt, Lucretius in der Renaissance (Königsberg, 1904); J. Philippe, Lucrèce dans la théologie chrétienne du IIIe au XIIIe siècle (Paris, 1896); Kirk Summers, "Lucretius and the Epicurean Tradition of Piety," Classical Philology 90, no. 1 (January 1995): 32-57; Wolfgang Fleischmann, Lucretius and English Literature, 1680-1740 (Paris, 1964); Fraisse, L'Influence de Lucrèce en France au seizième siècle (Paris, 1961); Wagenblass, "Lucretius and the Epicurean Tradition in English Poetry" (PhD diss., Harvard University, 1946); G.R. Hocke, Lukrez in Frankreich von der Renaissance zur Revolution (Cologne, 1935); E. Belowski, Lukrez in der französischen Literature der Renaissance (Berlin, 1934). On Lucretius's scientific impact, see William Hine, "Inertia and Scientific Law in Sixteenth-Century Commentaries on Lucretius," Renaissance Quarterly 48, no. 4, (Winter 1995): 728-741; Robert Wardy, "Lucretius on What Atoms Are Not," in Classical Philology 83, no. 2 (April 1988): 112–128; Wolfgang Schmid, "Lukrez und der Wandel seines Bildes," Antike und Abendland 2 (1946): 192ff; Marco Beretta, "The Revival of Lucretian Atomism and Contagious Diseases in the Renaissance," Medicina nei secoli arte e scienza 15/2 (2003): 129-154.
- 105. Suggestions of a date of 1471 for the *editio princeps* are largely discredited. See Appendix C.
- 106. Some give the date as 1516 because the collection of edicts in which it appeared was under way in December 1516, but 1517 is the date associated with the majority of the collection.
- 107. The ban comes in chap. 2 of a section titled Rubrica de magistris, deque haereticis & Christi fidem scandalizantibus, in the subsection Prohibet legi in scholis puerorum opera lascivia, & poemata Lucreti, and reads, "Ut nullus de caetero ludi magister audeat in scholis suis exponere adolescentibus poemata, aut quaecumque
 alia opera lasciva & impia: quale est Lucretii poema, ubi animae mortalitatem
 totis viribus ostendere nititur; contrafacientes excommunicari, & in ducatis decem, carceribus stincharum applicandis, condemnari." The full text is reprinted
 in J.D. Mansi, ed., Sacrorum conciliorum nova et amplissa collectio (Paris, 1901–
 1927), 35:270.
- 108. Letter of June 27, 1557, to Inquisitor General de Gênes: "Col probire Orlando [Innamorato e Furiosi], Orlandino [del Folengo], Cento novelle [Decameron] e simili altri libri faremmo piutosto ridere che altro, perché simili libri non si leggono

come cose a cui si abbia a crede, ma come favole e come si leggono anche molti libri dei gentili come Luciano, Lucrezio ed altri simili." Transcript from P. Paschini, "Letterati ed indice nella Riforma cattolica in Italia," in *Cinquecento romano e riforma cattolica*, *Laternumum*, special ed., 24 (1958): 239. See also Pastor, *Histoire des papes*, 14:223 n. 3; and Jesús Martínez de Bujanda, *Index des Livres Interdits* (Sherbrooke, 2002) 8:32 n. 14. Valentina Prosperi also treats Lucretius and the *Index* in her *Di soavi licor gli orli del vaso*, chap. 2.

- 109. Ficino refers to the burning of the commentariolum in Epistulae XI (1567) I: 993, but there is some debate as to whether it was a commentary or something rougher; see Kristeller, ed., Supplementum Ficinianum (Florence, 1937), II 216-217; also James Hankins, Plato in the Italian Renaissance (Leiden, 1991), 2:457; Charles Schmitt, ed., The Cambridge History of Renaissance Philosophy (Cambridge, 1988), n. 443; Alison Brown, Return of Lucretius, 16-20; Passannante, The Lucretian Renaissance, 69; Passannante, "Burning Lucretius: On Ficino's Lost Commentary," paper presented at the annual meeting of the Renaissance Society of America, Montreal, QC, March 2011. Accessed January 10, 2014 at http://citation.allacademic.com/meta/p482036_index.html. On Lucretius's influence on Ficino, see Garin, "Ricerche sull'epicureanismo"; also Garin, La cultura filosofica del Rinascimento italiano: Ricerche e documenti (Florence, 1979), 72-86; Kristeller, Studies in Renaissance Thought and Letters (Rome, 1969), esp. 1:44-45; also Kristeller, The Philosophy of Marsilio Ficino (New York, 1943), 24n., 296-297; Ferdinando Gabotto, "L'Epicureanismo di Marsilio Ficino," Rivista di filosofia scientifica 10 (1891): 428-442; especially comprehensive is Michael Allen's introduction to his critical edition of Ficino, The Philebus Commentary; James G. Snyder, "Marsilio Ficino's Critique of the Lucretian Alternative," Journal of the History of Ideas 72, no. 2 (2011),:165-181; James Hankins, "Monstrous Melancholy: Ficino and the Psychological Causes of Atheism," in Laus Platonici Philosophi: Marsilio Ficino and His Influence, ed. Stephen Clucas, Peter J. Forshaw, and Valery Rees (Leiden, 2011); and Hankins, "Ficino's Critique of Lucretius: The Rebirth of Platonic Theology in Renaissance Italy," in The Rebirth of Platonic Theology: Proceedings of a Conference held at The Harvard University Center for Italian Renaissance Studies (Villa I Tatti) and the Instituto Nazionale di Studi sul Rinascimento (Florence, 26-27 April 2007) for Michael J. B. Allen, ed. James Hankins and Fabrizio Meroi (Florence: L. S. Olschki, 2013).
- 110. Thomas Philipps added Ficino to his list of famous atheists in 1616; see Davidson, "Unbelief and Atheism in Italy," 56.
- 111. See Hankins, "Monstrous Melancholy."
- 112. Brown, Return of Lucretius, esp. chaps. 2-3.
- 113. Ibid., pref. and chap. 1.
- 114. Ibid., chap. 2. I will treat primitivism, and Adriani, at greater length in Chapter 2.
- 115. Ibid., chap. 3.
- 116. Brown notes in particular a passage where he uses Lucretian descriptions of round and rough atoms to explain sweet and bitter flavors; ibid., chap. 3.
- 117. Ibid., chap. 4. I will treat Machiavelli, particularly his manuscript of Lucretius (BAV Ross. lat. 884; also treated by Alison Brown), at greater length in Chapter 2.

- 118. Goddard, "Epicureanism."
- 119. Prosperi, Di soavi licor gli orli del vaso.
- 120. I 935–950: "Id quoque enim non ab nulla ratione videtur;/ sed veluti pueris absinthia taetra medentes/ Cum dare conantur, prius oras pocula circum/ contingunt mellis dulci flavoque liquore,/ ut puerorum aetas inprovida ludificetur/ labrorum tenus; interea perpotet amarum/ absinthi laticem, deceptaque non capiatur,/ sed potius tali facto recreata valescat:/ sic ego nunc, quoniam haec ratio plerumque videtur/ tristior esse, quibus non est tractata; retroque/ volgus abhorret ab hac; volui tibi suaviloquenti/ carmine Pierio rationem exponere nostram;/ et quasi musaeo, dulci contingere melle:/ si tibi forte animum tali ratione tenere/ versibus in nostris possem: dum perspicis omnem/ naturam rerum, qua constet compta figura." I will treat this passage, and this issue, at greater length in Chapter 2.
- 121. Passannante, The Lucretian Renaissance.

2. Unchristian Opinion

- 1. Bodl. Can. Lat. 32, fol. 54^r.
- 2. The notes are: "primum argumentum," at III 447 (fol. 54°), "secundum argumentum," at III 459 (fol. 55°), and "Alia ratio quaeritur anima sit mortalis," at III 806 (fol. 61°).
- 3. Michael D. Reeve, "The Italian Tradition of Lucretius," *Italia Medioevale e Umanistica* 23 (1980): 27–48. Michael Reeve's guidance in this research was indispensable, as were his several articles on the Lucretian manuscript tradition; see Appendix A.
- 4. See Figure 17, fol. 66^r. According to Reeve, "Italian Tradition of Lucretius," 32–33, Naples Naz. IV E 51 was copied from two different exemplars, and the part used for bk. III descends from BAV Patetta 312 (a descendant of the Poggianus), which does not share the notes found in Bodl. Can. Lat. 32. Reeve identifies five copies taken from Naples after Pomponio Leto corrected it, including this Bodleianus.
- 5. Annotations include "sepulcurae," III 872; "Ergo non est cogitandum nobis de sepulcro," III 878; and "Hyrcini non errant acerbi," referring back to the Hyrcanians of III 750, who let their dead be torn apart by wild dogs (fol. 63°).
- 6. The reader marks III 894-899, 900, and 912 in particular (fol. 63°). This passage was imitated by Virgil, *Georgics* II 523-524.
- 7. "Nihil agit natura sine diis," at II 1092 (fol. 44^r), and "Contra pythagoram qui dicebat animas in corpora iterum reverti," at III 669 (fol. 58^r).
- 8. Berlin, Lat. Fol. 544 (fol. 43°), Basel F. VIII.14 (fol. 48°).
- 9. By their traditional headings these sections are *De Magna Matre* (II 596-645); *De lapide magnete* (VI 906-1089); *Pestilentia unde creatur* and *De pestilentia Atheniensi* (VI 1090-end). On Lucretius's treatment of magnets, see Richard Wallace, "'Amaze Your Friends!': Lucretius on Magnets," *Greece and Rome*, 2nd ser., 43, no. 2 (October 1996): 178-187.

- 10. Laur. Conv. Sopr. 453. At I 124 (fol. 3^r) the annotator writes "Virg" by a passage imitated in *Aen.* ii.279, and at I 212 (fol. 4^r) "Terrai trisyllabum," noting that "terrai" is scanned as three syllables in the line.
- BAV Urb. Lat. 640. At VI 786 the hand inserts "Nota de helicone," and at VI 794 "Castorei natura" (fol. 126^r).
- 12. Cambridge Univ. Montaigne. 1.4.4; cf. Michael Screech, *Montaigne's Annotated Copy of Lucretius* (Geneva, 1998), 41. Montaigne will be treated at length in Chapter 5.
- 13. Ambros. G 67 inf.
- 14. We see this, for example, in a copy of the 1486 edition with notes of Pomponio Leto very similar to those he left on several manuscripts: Universiteitsbibliotheek, Litt. Lat. X fol. 82 rar, reprinted as Pomponio Leto, Lucrezio, ed. Solaro (Palermo, 1993). See also Reeve's more general article, "Manuscripts Copied from Printed Books," in Manuscripts in the Fifty Years after the Invention of Printing: Some Papers Read at a Colloquium at the Warburg Institute on 12–13 March 1982, ed. J. B. Trapp (London, 1983), 12–14.
- 15. In the former camp, see Paul Saenger and Michael Heinlen, who place the critical transition in the second decade of the sixteenth century, in "Incunable Description and Its Implication for the Analysis of Fifteenth-Century Reading Habits," in Printing the Written Word: The Social History of Books, circa 1450–1520, ed. Sandra Hindman (Ithaca, N.Y., 1991), 253–254; in the latter, see William H. Sherman, "What Did Renaissance Readers Write in Their Books?," in Books and Readers in Early Modern England: Material Studies, ed. Jennifer Anderson and Elizabeth Saure (Philadelphia, 2002), 119–137. For a more detailed review of the debate, see Craig Kallendorf, "Marginalia and the Rise of Early Modern Subjectivity," in On Renaissance Commentaries, ed. Marianne Pade (Hildesheim, 2005), 111–113. See also Anthony Grafton and Lisa Jardine, From Humanism to the Humanities: Education and the Liberal Arts in Fifteenth- and Sixteenth-Century Europe (Cambridge, Mass., 1986); and Vincenzo Fera, Giacomo Ferraù, and Silvia Rizzo eds., Talking to the Text: Marginalia from Papyri to Print; Proceedings of a conference held at Erice (Messina, 2002).
- 16. Sherman, "What Did Renaissance Readers Write?," 124.
- 17. This was not possible with some editions, including the extremely rare *editio princeps*. For a complete list of copies examined, see Appendix C.
- 18. The practical limits of my research travels made it necessary to concentrate on major libraries, and on libraries that also contained Lucretius manuscripts, because I could not afford to also travel to smaller libraries, or to libraries in other countries. Thus I have examined print editions in New York, Boston, Baltimore, Rome, Florence, Naples, Milan, Bergamo, Venice, Savignano sul Rubicone, Basel, Paris, London, Cambridge, and Oxford, the online holdings of Utrect, and a few in private hands. For a complete index of copies examined, see Appendix C.
- 19. Of the fifty-four known surviving Renaissance manuscripts, I have complete information about the annotations in fifty-two, of which I have personally examined forty-nine. For information about Valencia Univ. 733 and Madrid BN 2885 I am indebted to Michael Reeve, and for information about Zaragoza Biblioteca Capitolar Ms. 11–36, to Ángel Traver Vera. The two in private collections (the Bishop

- and Abbey manuscripts) remain inaccessible, though I have examined the first eight folios of the Abbey manuscript in photocopy. For a full list, see Appendix A.
- K. Kleve, "Lucretius in Herculaneum," Cronache Ercolanesi 19 (1989): 5-27.
 The identification of these new fragments as Epicurean sources is still widely debated.
- 21. See Reeve, "Italian Tradition of Lucretius."
- 22. Ibid. For more sources on Lucretius's stemma, see Appendix A.
- 23. For the purposes of this study I categorize as quartos the manuscripts measuring at least 26 cm. high, and as octavos those between 20.5 and 25.5 cm. Most of the quarto-sized manuscripts measure around 29 cm. high, and most octavos around 22 cm. Precise sizes of all manuscripts are listed in Appendix A.
- These examples are, in order, BAV Ross. Lat. 502, BAV Vat. Lat. 1569, BL Harl. 2694, Laur.35.26, and BAV Barb. Lat. 154.
- 25. Our very same Bodleian Can.lat.32.
- 26. Piacenza, Landi Cod. 33.
- 27. These manuscripts in order are Laur. 35.27, Laur. 35.32, Pierpont Morgan MS 482, and Ambros. E. 125 Sup. More identified owners are listed in Appendix A.
- 28. See Petrarch's dialogue, "De Librorum Copia (On the Abundance of Books)," from *De Remediis Utriusque Fortune*, in *Four Dialogues for Scholars*, ed. Conrad Rawski (Cleveland, 1967), 30–43; Ficino, *Meditations on the Soul* (Rochester, Vt.: 1996), 47–48.
- 29. Cambridge Univ. Nn.2.40 and Laur. 35.31 have white vine while Padua Capit. C 76 has green vine decoration.
- BAV Lat. 3276 has a vine pattern in the same comparatively inexpensive red ink used for rubrication.
- 31. BAV Ottob. Lat. 1136.
- 32. BAV Vat. Lat. 1569, Bodl. Auct. F.1.13, Cesena Malatest. S.20.4.
- 33. See Appendix A for a full list of known owners.
- 34. For comparison of the corrections, see especially Konrad Müller's 1975 edition of Lucretius, 297–319, and W. A. Merrill, "The Italian Manuscripts of Lucretius. Part II (concluded)," *Classical Philology* 9 (1929): 347.
- 35. One may see this in Pius II's copy, Ambros. E 125 sup. at I 306 (p. 12), where a note in black supplies an alternative correction to an earlier note in red.
- 36. Laur. 35.29. On Poliziano's interest in Lucretius, see Passannante, *The Lucretian Renaissance: Philology and the Afterlife of Tradition* (Chicago, 2011), 58–77; Ubaldo Pizzani, "Angelo Poliziano e il testo di Lucrezio," in Tarugi, ed., *Validità perenne dell' umanesimo* (Florence, 1986), 297–311.
- 37. For example, BL Harl. 2612 concentrates its notes on V 45-156.
- 38. For example, the reader of Laur. 35.31 peppered the initial folios with vocabulary notes but ran out of steam around I 326 (fol. 8^r), whereas the first folio of BAV Ottob. Lat 2834 is covered front and back with historical and philological comments, but annotations dwindle at p. 4.
- 39. Those with the most are Rome BN O. 85 and Cambridge UL Nn.2.40.
- 40. Laur. 35.31 marks this line twice (fol. 7°), ".i. comestibili" above the line, and "per comestibili" in the margin.

- 42. Ambros. E.125 Sup. (fol. 23^r), Baltimore Walters W.383 (fol. 47^r), Basel Univ. F viii 14 (fol. 12^r), Cambridge Univ. Nn.2.40 (fol. 10^r), Laur. 35.25 (fol. 13^r), BAV Ottob. Lat. 2834 (fol. 11^r), Munich Clm 816a (fol. 12^v), Naples Naz. IV E 51 (fol. 22^r), Padua Capit. C 75, Rome Naz. O.85 (fol. 10^r). It is also marked in many print editions, such as a copy of the 1563 Lambin edition, Rome Naz. 37.5.c.17 (p. 205), and by Montaigne (flyleaf b, marking I, 449; cf. Screech, Montaigne's Annotated Copy, 54).
- 43. In today's surviving classical Latin corpus, cluere appears nine times in Lucretius (I 119, 449, 480, 580, II 351, 525, 791, III 207, and IV 4.53), eighteen times in Plautus (Amphitryon 647, Bacchides 925, Captivi 689, Epidicus 188 and 523, Menaechmi 577 and 854, Poenulus 1192, Pseudolus 591 and 918, Rudens 285, Trinummus 309, 312, 471, 496, 620, and 615 twice), three times in Pliny the Elder (XV 120.1, XXXV 13.7 and XXXV 115.6), once each in Cicero (Tusculanae quaestiones II 23), Ennius (in Nonius Marcellus, p. 88, 1), Fronto (Aur. Gaes. IV 3.3.2), Terentianus Maurus (De littera, de syllaba, de pedibus 7), Velius Longus (De orthographia 68.13), in fragments of Lucius Accius, Gaius Lucilius, Marcus Pacuvius, Pompilius, and Marcus Terentius Varro, and in two anonymous fragments; citations found using the Packard Humanities Institute Latin Literature database (PHI5).
- 44. Ambros. P 19 sup. (fol. 4°), Baltimore Walters W.383 (fol. 12°), Basel Univ. F viii 14 (fol. 3°), BAV Patetta 312 (fol. 29°), BL Harl. 2554 (fol. 3°), Cambridge Univ. Nn.2.40 (fol. 2°), Florence Naz. Panciat. 176 (fol. 2°), Laur. 35.25 (fol. 3°), Laur. 35.31 (fol. 4°), Laur. 35.32 (fol. 3°), Modena Est. Lat. 97 (fol. 38°), Munich Clm 816° (fol. 3°), Naples Naz. IV E 51 (fol. 3°), Rome Naz. O.85 (fol. 3°). Another, BM Butl. 11912, does not mark vocabulary very often, but in bk. I line 580 (fol. 14°), "clueant" is corrupted in the text to "queant" and erroneously corrected in the margin as "deliqueant," indicating that this corrector too was unfamiliar enough with *cluere* to fail to recognize the error. See Figure 18, which shows "cluo" in the vocabulary list in the Neapolitanus, and Figure 21, which shows "Cluo" marked in a printed gloss in the margin of a copy of the 1486 print edition containing Leto's notes and vita (Utrecht Universiteitsbibliotheek Lat. X fol. 82, [Raioria)] fol. aiii").
- 45. Cambridge UL Nn.2.40 was marked by two different readers at I 119 (fol. 2°), one of whom copied out "clueret" before the second added "nominat." The first hand adds "cluent" at I 449 (fol. 7°), "cluere .i. splendescere" at II 351 (fol. 22°), and at I 556 (fol. 9°) the list "esse, constare, cluere, existere, exstare," exploring characteristic verbs Lucretius uses to avoid overuse of *esse*. Laur. 35.31 gives "[id est] claveret" at I 119 (fol. 4°). The list "clueo inlustro celebro" appears at I 119 in Laur. 35.32 (fol. 3°).
- 46. The list was duplicated in several later editions, and *cluere* is underlined in Bodleian 8° L 34 Art. Seld. The definition given by Lambin is: "Clueret: nominaretur, esset, excelleret, insignis."
- 47. See Appendix B. David Butterfield has recently and convincingly argued that the capitula descend from marginal annotations dating to the first or second century. See David Butterfield, "The Early Textual History of Lucretius' *De rerum natura*" (PhD Thesis, University of Cambridge, 2010), chap. 3. On the Greek

- capitula, see Michael Herren, "The Graeca in the Tituli of Lucretius: What They Tell Us about the Archetype," *Wiener Studien* 125 (2012): 107–124.
- 48. These include Ambros. P. 19 Sup, Baltimore Walters W383, BAV Ottob. Lat 2834, BAV Ottob. Lat. 1954, BAV Patetta 312, BAV Ross. Lat. 884, Florence Naz. Panciat. 176, Laur. 35.25, Laur. 35.27, Laur. 35.29, Laur. 35.31, Laur. 35.32, Munich Clm 816a, Naples Naz. IV E 51, Walters W.383, Berlin Lat. Fol. 544, Piacenza Landi 33, Pierpont Morgan M.482, and Venice Marc. Cl. xii 69, which contains the most extensive Greek annotation.
- 49. IV 1160–1170, marked in Ambros. P. 19 Sup. (fol. 96^v), BAV Ottob. Lat. 1954 (fols. 97^v–98^r), Laur. 35.25 (fols. 91^{r-v}), Munich Cl. 816a (fol. 89^v), and Venice Marc. Cl. xii 69 (fol. 67^v). Print copies also mark these; for example, (Bologna, 1511) Rome Naz. 6.9.N.25 fols. CXLVII^r–CXLVIII. See Figure 2.
- 50. For example, Laur. 35.32 at I 50 (fol. 1°) has the note, "nominativus pro vocativo more graeco," while BAV Ottob. Lat. 2834 gives the Greek original for *dias* at I 25 (fol. 1°).
- 51. Epistulae 4, XVIII, 1.3; DRN I 136–139; Lucretius repeats the same concept at III 258–261, and Leto mentions Pliny's reference in his notes (Naples Naz. IV E 51 fol. 62°); my thanks to Michael Reeve for this observation.
- 52. Ambros. P. 19 Sup. (fol. 5^r), Baltimore Walters W.383 (fol. 7^v), Basel Univ. F viii 14 (fol. 3^r), Cambridge Univ. Nn.2.40 (fol. 3^r), Laur. 35.25 (fol. 3^v), Munich Cl. 816a (fol. 3^v), Modena Est. Lat. 97 (fol. 38^v), Naples Naz. IV E 51 (fol. 4^r and 62^v), and Rome Naz. O.85 (fol. 3^r).
- 53. The annotator of Laur. 35.27 was clearly concerned by this question. That copy, which otherwise contains only philological corrections and one note of a proper name, marks V 1043–1044, where Lucretius argues that, as substances are formed by random collections of atoms, languages were originally random collections of sounds that meant nothing until they developed gradual meaning. On the Renaissance belief that Latin was an artificial language, see Mirko Tavoni, Latino, grammatica, volgare: Storia di una questione umanistica (Padova, 1984), and Angelo Mazzocco, Linguistic Theories in Dante and the Humanists: Studies of Language and Intellectual History in Late Medieval and Early Renaissance (New York, 1993).
- 54. See, for example, BM Harleian 2554 fol. 34" (II 921).
- 55. Catullus is also commonly mentioned, referenced several times by the annotator of a copy of the Venice 1495 edition (Marciana Incun. Ven.743); the same annotator marks Virgil as well. These notes date no earlier than 1502. Virgil and Ovid are marked by the annotator of a copy of the Venice 1500 edition (Bodleian 1500 Auct. 2 R 4.50).
- 56. II 352–366. See Ovid, Fasti IV 495; Virgil, Eclogues VIII 85, Georgics III 550; Tibullus I 431; and Statius, Thebiad VI 189.
- 57. II 144, marked with a bracket in BAV Ottob. Lat. 1954 (fol. 27^r), "Virg" in BAV Urb. Lat. 640 (fol. 19^r), "hinc Virgilius" in Laur. 35.32 (fol. 35^v), and "aer" by Machiavelli in BAV Ross. lat. 884 (fol. 23^r).
- 58. II 921–934. Doubtless some of the annotators were marking the fact that this passage is duplicated in the beginning of bk. IV, but that alone cannot account for

- nine readers marking the section, several with multiple brackets, notes, or manicula: Cambridge UL Nn.2.40 (fols. 14^{r-v}), Naples IV E.51 (fol. 28^v), Laur. 35.25 (fol. 19^r), Padua BC C.75, Bodleian Can. lat. 32 (fol. 19^r), BAV Ottob. Lat. 2834 (fol. 17^r), BAV Ottob. Lat. 1954 (fol. 20^r), BAV Ross. lat. 884 (17^v).
- 59. I 123 "Sed quaedam simulacra modis pallentia miris." Ennius, Annals I iv; Virgil, Georgics I 477; Ovid, Heroides VII 71-72. Ovid copies Virgil's version and combines it with language from Aeneid I 354 and II 773, intentionally leaving out some of the more Lucretian vocabulary (for example, substituting sanguinolenta for pallentia). On Ennius and Lucretius in this passage, see Skutsch's commentary in The Annals of Q. Ennius (Oxford, 1985), 12, 147-157. Stephen Harrison, "Ennius and the Prologue to Lucretius DRN1 (1.1-148)," Leeds International Classical Studies 1, no. 4 (2002): 1-13.
- 60. See Figures 3 and 4. Lines within III 978-1045 are noted in Ambros. E 125 sup. (120-122), Ambros. P 19 sup. (fols. $70^{v}-71^{v}$), Basel Univ. F viii 14 (fol. 59^{v}), Berlin Lat. Fol. 544 (fols. $51^{r}-52^{v}$, marked in a hand different from that which made most of the annotations in the volume), BAV Lat. 3276 (fol. 94^{v}), Bodl. Can. Lat. 32 (fols. $48^{v}-49^{v}$), Cambridge Univ. Nn.2.40 (fols. $48^{v}-49^{v}$), Laur. 35.25 (fols. 66^{v}), Laur. 35.28 (fols. $62^{v}-63^{r}$), Munich Clm 816a (fols. $68^{v}-69^{v}$), Naples Naz. IV E 51 (fols. $78^{r}-79^{r}$), Padua Capit. C 75, and Rome Naz. O.85 (fols. $51^{r}-52^{r}$).
- 61. Fol. 62^v; these interpretations partly match Munich Clm. 816a fol. 65^{r-v}.
- 62. II 596-645. Separate from the usual *De Magna Matre* subheading, this passage is bracketed in BAV Ottob. Lat. 2834 (fols. 29^v–30^r), noted "De genitrice deorum" by Machiavelli in BAV Ross. lat. 884 (fol.31^v) and "De cibele" in Naples IV E.51 (fol. 45^r). Munich Cl. 816a (fol. 34^{r-v}) has frequent marginal notes in this passage indicating the specific elements of the rite described in each line, in stark contrast with the surrounding sections of bk. II, whose discussions of atomistic physics have very few notes, none topical.
- 63. See Figure 20. The weakness of handwriting analysis as a tool for attribution is demonstrated by the fact that different experts have told me with equal confidence that this must be Leto's hand and that it cannot possibly be Leto's hand, but all agree that if the notes are not Leto's, they belong to a member of his academy. This manuscript is part of what Reeve calls the Roman Family, independent of Niccolò's. This family also includes BAV Patetta 312, Rome Naz. O.85, Ambros. E.125 Sup., Ambros. I.29 Sup., and the second half of Naples Naz. IV E.51. See Reeve, "Italian Tradition of Lucretius," 36.
- 64. "A. Graeco [dicimus] διασ διος ab quo dixere antiqui Dius dia dium posterior aetas ut Pedianus meminit, elimatius dixit ab genitivo utputa huius Dii, huic dii, hoc dium ab dio." (fol. 1"). Pseudo-Asconius Pedianus's grammatical and historical works were another Poggio recovery. The note is difficult to parse; possibly the abbreviation "dms" intends not "dicimus" but "dm. s."; i.e., "dictum scilicet." My thanks to Michael Reeve for this suggestion.
- 65. At I 20, the unusual use of secla is explained, "secla domicilia brutorum" (fol. 1").
- 66. "veluti sol alter emicat ante matutinum" (fol. 1^r).
- 67. "Pangere est ordine palos sive harundines figere sive quasvis furculas vel vallos inde methaphoricos componere versus & in ordinem redigere dicimus pangere:

- ut apud Horatium ego mira poemata pango; dempto [enim] ut pago pro eo quod est paciscor xii tabule pronuntiarunt unde est in specie perfecta pepigi ab illo superiore est de pangere" (fol. 1^r).
- 68. "Neque pro consuetudine veteri alterum requirit ut neque hoc neque illud primus Cicero usus est sine altero" (fol. 1^r).
- 69. "Lucretius scribit ad Q. Memmium. L. Memmii fratrem in cuius familia Memmius quidam primus ultra columnas extendit tignos, quo amplior esset pars domus; inde luxuriantur urbe ingentia subposita saxa. itaque huius formae aedificia Memiana dicuntur; adhuc nomen durat" (fol. 1'). On Memmius's biography, see Duane W. Roller, "Gaius Memmius: Patron of Lucretius," Classical Philology 65, no. 4 (October 1970): 246–248.
- 70. "proprium veneris epitheton ab omnibus dicitur alma ab nutrimento illa vero hebrayca scribuntur cum Dasia ut halma: et est virgo corpore animoque" (fol. 1^r).
- 71. "Si in deo non est nec gratia nec ira, cur invocas ad venerem, quae tua sententia surda est? hoc non tibi sed iis convenit qui deos moveri praecibus mortalium aiunt. Forte si coepisset ab eo a quo abhorrebant ceteri mortales, nemo eum legisset; solent scriptores principiis lectorem erigere & incitare, sed hic loquitur ut homo poeta ut furiosus, si concedimus venerem esse causam generationis; rationabilius est benedicendo gratias illi habere quam ingratitudinis accusari, et profecto credibile est eam posse ut profuit nocere. Ἡδονὴ καὶ τὸ Ἦδος ἐοσ" (fol. 1^r, accent absent from final Greek word in original). See also Michael D. Reeve, "The Italian Tradition of Lucretius Revisited," *Italia Medioevale e Umanistica* 23 (2005): 149 n. 95.
- 72. On the sources on Lucretius and Epicureanism available in the Renaissance, see Chapter 3.
- 73. This is Cambridge Univ. Nn.2.40, which marks I 489-497 (fol. 8°), VI 195-203 (fol. 93°), VI 239-245 (fol. 94°), and VI 594-596 (fol. 99°). The Cambridge manuscript is an interesting example. It contains hundreds of corrections and vocabulary notes, but brackets very few passages, among them three Virgilian poetic passages, three passages of moral philosophy, one epistemological passage, one on vacuum, and four on storm.
- 74. The passage is most distinctly marked in Laur. 35.28, which marks VI 909 and 911 (fol. 136°). The discussions of magnets are also marked in Munich Cl. 816a (fol. 139°) and Pierpont Morgan Ms. 482 (fol. 130°), and the unusual term *permananter* in VI 916 is duplicated in the margin by Machiavelli in BAV Ross. lat. 884 (fol. 127°); it also appears in Cambridge Univ. Nn.2.40 (fol. 104°).
- 75. Munich Cl. 618a marks "venti" by I 271 and "aquae" by I 281 (fol. 6^{r-v}).
- 76. Rome Naz. II O.85, II 112 (fol. 19°). Similarly Ambros. P. 19. sup. fol. 89° discusses the difference between Aristotle's and Epicurus's explanations of vision at IV 823 (fol. 89°).
- 77. See Appendix B.
- 78. Bodleian 1500 Auct. 2 R 4.50. The notes continue throughout the text, but particularly notable are those on fol. 6°, and 14–15 (discussing I 483). Though the volume was printed in 1500, these notes may be late sixteenth century.
- 79. On plague literature, see Erik Heinrichs, "The Plague Cures of Caspar Kegler: Print, Alchemy and Medical Marketing in Sixteenth-Century Germany," Six-

- teenth Century Journal 43, no. 2 (2012): 417-440; Samuel Cohn, Cultures of Plague: Medical Thinking at the End of the Renaissance (Oxford, 2010).
- 80. Ambros. G.67.inf. Marginal annotations in Pinelli's transcription cite Lambin's edition of 1565.
- 81. DRN III, 476–486: examples of annotation in this passage include BAV Urb. Lat. 640 (fol. 51^r); BAV Ott. lat. 1954, 1 (fol. 60^r); Rome Naz. O85 (fol. 43^r); and Naples Naz. IV E 51 (fols. 67^r–69^r). The preceding discussions of the connections between disease, pain, and death are marked with "morbus leti fabricator" copied into the margin of III 472 in Munich Cl. 816a (fol. 55^r).
- 82. DRN III 487-494: marked in Piacenza Land. Cod. 33 (71^r); BAV Ott. lat. 1954, 1 (60^r); Padua Capit. C 75; Naples Naz. IV E 51 (fols. 68^r-69^v).
- 83. For other treatments of primitivism, evolution, and progress in Lucretius, see Gordon Campbell, Lucretius on Creation and Evolution: A Commentary on De rerum natura, Book 5, Lines 772-1104 (Oxford, 2003); Monica Gale, "Man and Beast in Lucretius and the Georgics," Classical Quarterly, n.s., 41, no. 2 (1991): 414-426; Daniel Blickman, "Lucretius, Epicurus, and Prehistory," in Harvard Studies in Classical Philology 92 (1989): 157-191; Charles Beye, "Lucretius and Progress," Classical Journal 58, no. 4 (January 1963): 160-169; Abraham Keller, "Lucretius and the Idea of Progress," Classical Journal 46, no. 4 (January 1951): 185-188; Philip Merlan, "Lucretius: Primitivist or Progressivist?," Journal of the History of Ideas 11, no. 3 (June 1950): 364-368; Edward Clodd, Pioneers of Evolution from Thales to Huxley (London, 1907); John Masson, The Atomic Theory of Lucretius Contrasted with Modern Doctrines of Atoms and Evolution (London, 1884).
- 84. DRNV 772-924 and 925-1104.
- 85. A heading by V 816 is the only nonphilological note in BL Harl. 2612. Bracketing is common in both of the copies transcribed by Verolano (BAV Ott. lat. 1954, 1 and Baltimore Walters W.383), and some passages here are bracketed in both, including V 830–831, Lucretius's statement that all things change with time. Padua Capit. C.75 includes the note "Quod post dilluvium factum narrat Ovidius his dissimile versibus non est" by the discussion of monsters and hermaphrodites in V 837–847. Naples Naz. IV E 51 has Leto's notes on every folio, and marks or brackets many passages in this section, including a longer section around that marked in the Verolano manuscripts. Munich Cl. 816a has original subject reference headings, such as "Terra mater" or "pellacia" in all caps in the margins throughout the second half of bk. V. A number of other manuscripts have philological, vocabulary, or metric notes here, indicating that the passage was frequently read with care, more often than bks. II and III, though less than bk. I.
- 86. Laur. 35.28 brackets V 925–975 (fols. 108^v–109^r). Verolano's copies have scattered brackets here as well.
- 87. Verolano's BAV Ott. lat. 1954 brackets it (fol. 22^r), as does Piacenza Landi Cod. 33 (fol. 152^r). A note in Ambro. P. 19 Sup. on V 1032 reads, "Vide supra libro quarto an sibi contra Lumina ne facias oculorum clara creata propicere ut possimus," (fol. 120^r), while Laur. 35.27 writes "Vocabula no[n] ratione inventa sed casu" (fol. 128^r).

- 88. Manicula appear around V 1117 (which states that true wealth is to live on little but content) in Ambros. P. 19 Sup. (pf. 122"), Walters W.383 (fol. 103"), and BAV Urb. Lat. 640 (fol. 105°), which has very few notes in the whole text. Pierpont Morgan MS 482 (fol. 107^r) and Piacenza Passerini-Landi Cod. 33 (fol. 144^r) mark the same passage in different ways. The next passage, V 1125-1132, is a poetic description of how the ambitious are cast down and made wretched, and is marked in Piacenza and Pierpont Morgan, as well as Verolano's BAV Ott. lat. 1954 (fol. 1031) and BAV Barb. Lat. 154 (fol. 103^r). Machiavelli's copy, BAV Ross. Lat. 884, does not mark these sections but makes a vocabulary note on the rare word *metutus* at V 1140 (fol. 105^r); it is very unusual for Machiavelli to mark vocabulary, and this is one of fewer than five notes in the whole of bk. V, though it is hard to say whether its presence immediately after Lucretius's discussion of the misfortunes of the ambitious is coincidental. Metutus is also marked in Cambridge Nn.2.40 (fol. 86°). Leto (Naples Naz. IV E 51, fol. 132°) mentions that this word was unknown to Priscian, "Metutus hoc priscianus dicit se non invenisse"; I am indebted to Michael Reeve for this observation.
- 89. Piacenza Landi 33.
- 90. According to Reeve's stemma, the 1486 is descended from Niccolo's copy via Marciana Lat. XII 69. See Reeve, "Italian Tradition of Lucretius," 31. See Marcus Deufert, "Die Lukrezemendationen des Francesco Bernardino Cipelli," *Hermes* 126, no. 3 (1998): 370–379.
- 91. See J. H. Rose, "Lucretius ii. 778-83," *Classical Review*, n.s., 6, no. 1 (March 1956): 6-7.
- 92. II 778-783; Passerini-Landi Cod. 33 fol. 51^r. See Figure 5.
- 93. IV 647-672; Passerini-Landi Cod. 33 fol. 100°. See Figure 6.
- 94. IV 652-654: "Esse minora igitur quaedam maioraque debent,/ esse triquetra aliis, aliis quadrata necessest,/ multa rutunda, modis multis multangula quaedam."
- 95. V 691-704.
- 96. Piacenza Landi Cod. 33, fols. 131^{r-v}. The first illustration is labeled "Figura totius mundi et ostensio orbite coelestium planetarum," the second "Demonstratio inequalitatis dierum et noctium propter varium solis cursum." See Figures 7 and 8.
- 97. Passerini-Landi Cod. 33 fol. 132r; see Figure 17.
- 98. Cippellarius does depict in the diagram the different zones of the earth (frigid, torrid, etc.), which correspond to zodiac figures and superlunary influences that could in theory affect a superlunary atmosphere, but these zones appear on all his drawings of the Earth, so the diagram seems to me more likely to be a counterargument than support.
- 99. V 700; Passerini-Landi Cod. 33 fols. 132° and 133°. "Demonstratio duodecim ventorum," and "Superior demonstratio octo ventorum est secundum Phavorinum Gelianum." See Figure 5. The attribution to "Phavorinum Gelianum" refers to fragments of Favorinus the skeptic, preserved in Aulus Gellius. For an excellent overview of ancient and medieval opinions on the subject, see Barbara Obrist, "Wind Diagrams and Medieval Cosmology," Speculum 72, no. 1 (January 1997): 33–84. Lucretius's status as an authority on winds is further reinforced by a manuscript, Marciana Cl. XII 69 (3949) that includes Lucretius bound with Manilius's

- Astronomicon and the poem Versus Tranquilli Phisici de Duodecim Ventis (see Appendix A #48).
- 100. Obrist, "Wind Diagrams," 39-40.
- 101. Ibid., 41; DRN VI 865; Isidore 36.1.1-3.
- 102. V 731 and 771; Passerini-Landi Cod. 33 (fols. 134^{r-v} and fol. 136^r). See Figure 18.
- 103. III 670-678; Passerini-Landi Cod. 33 (fol. 75°).
- 104. Bodl. Can. Lat. 32 and Basel Univ. F viii 14 derive from it, and duplicate many of Leto's philosophical notes. Also copied from the Neapolitanus after Leto worked on it are the two copies made by Leto's colleague Giovanni Sulpizio Verolano (Verulanus) in 1466, BAV Ottob. Lat. 1954 and Baltimore Walters W.383; but although these two reflect many of Leto's corrections, they do not duplicate his comments on the "opinio non christiana" or other such analytic comments. See Reeve, "Italian Tradition of Lucretius," 35.
- 105. Leto's Naples Naz. IV E 51 and its copies, Bodl. Cann. Lat. 32 and Basel Univ. F viii 14, as well as Berlin Lat. Fol. 544 and Rome Naz. O.85.
- 106. Laur. 35.32 (associated with Adriani), and Machiavelli's BAV Ross. lat. 884, discussed below. Several annotators reproduced the term *clinamen* (swerve) in the margin, some certainly reproducing it from others, though it is impossible to say whether individual readers singled it out as a notable concept or as one of a thousand interesting vocabulary terms. See Munich Clm. 816a 28°, Laur. 35.25 fol. 28°; Walters W.383 fol. 28°, BAV Ross. Lat. 884 fol. 25°, Rome Naz. O.85 22°.
- 107. Laur. 35.25, I 635 (fol. 13^v), Laur. 35.32, I 159 (fol. 4^r), Cambridge Univ. Nn.2.40 (fol. 3^r). Machiavelli's BAV Ross. lat. 884 and to a lesser extent Naples Naz. IV E 51 have such comments scattered throughout bk. II.
- 108. Ambros. E.125 Sup. I 46 (fol. 2) notes "Naturam Divinam non moveri" by the discussion of how gods must dwell in undisturbed peace—this is written in the earlier of the two hands which mark this copy. Laur. 35.32 marks I 159 (fol. 4°), that nothing can come from nothing, with a long note on how this removes the gods from the equation, culminating "opera sine divum." Naples Naz. IV E 51 reads "Hinc quidam deos indigites putant dici ut ait servius" (fol. 10°). Pomponio Leto also marked Lucretius's arguments at V 324–338 that the world is young and still developing, which Lucretius justifies by saying that if the world had existed as it is since eternity then we would have histories from before Troy. Lucretius falls in an interesting position on creation, because he has atoms exist from eternity but the Earth coming into being only recently, so while he opposes creation in time he also has arguments, like this one, usable against the Averroist-Aristotelian thesis of the eternity of the world.
- 109. Laur. 35.25 at VI 526 notes that Lucretius, like Cicero, does not make the gods responsible for rainbows and weather, quoting Cicero: "arci secundae sic & Cicero: cur autem arci species inter deos non reponit[ur]" (fol. 134"); De natura deorum III 51. Pomponio Leto's Naples Naz. IV E 51 and Machiavelli's BAV Ross. Lat. 884 have scattered notes in bk. II.
- 110. Munich Cl. 816°, II 598.
- 111. I 635-638 (fol. 13^{v}); on air, III 442-444 (fol. 55^{r} ; here the annotator duplicates 443 and the last word of 444 in the margin); on weather, VI 527-529 (fol. 134^{r}).

- 112. Wormwood I 921–939 (fol. 73^r), Empedocles I 716 (fol. 69^v), four elements I 820–821 (fol. 71^r), first principles I 556–557 (fol. 67^r).
- 113. Cambridge Univ. Nn.2.40; vacuum, I 328 (5°) and I 417 (7°); sense perception, IV 511 (fol. 58°); weather, I 489–497 (fol. 84), VI 195–203 (fol. 93°), VI 239–245 (fol. 94°) and VI 594–596 (99°); greed, II 34–41 (fol. 17; this note may also be intended to draw attention to omitted lines); fear, VI 3–37 (fol. 91°; also bracketed is the invocation of the Muses VI 92–95, fol. 92°); wormwood, III 488 (fol. 41°); set locations, V 126–131 (fol. 71°); the last is bracketed and labeled "Impossibilia" by the annotator.
- 114. On BAV Patetta 312's position in the Lucretius stemma, see Reeve, "Italian Tradition of Lucretius," 36–37. BAV Patetta 312 IV 379 and 511 (fols. 73^r and 75^v). At 379 the marginal comment cites Cicero, *Tusc.* I, 10, a description of great men in the underworld conspicuously similar to Lucretius's discussion of the same in III 978–1052, but here related only in its use of the word *hilum*, meaning a trifle, something of no consequence.
- 115. BAV Patetta 312; Empedocles, Anaxagoras, and Democritus, I 726–740, III 359 (fols. 15°–16°, 18° and 52°; some of these notes are related to the capitula); the soul dies with the body, III 445–451 (fol. 53°). A mark on Lucretius's discussion of the inappropriateness of old men lamenting death may be a correction: III 884 (fol. 61°; also marked in Leto's Neapolitanus and in the Bodleianus copied from it); weight, II 189 (fol. 26°).
- 116. Modena Est. Lat. 97. Corrections are particularly conspicuous in II 91–433 (fols. 53^v–58^v). That the gods dwell apart is marked at II 646–649 (fol. 61^v), and that Heaven and Earth are our parents at II 991–992 (fol. 66^v).
- 117. Ambros. E 125 sup. II 476 (p. 59).
- 118. Ibid., I 469-470 (p. 141).
- 119. Ibid., III 368 (p. 98).
- 120. Ibid., III 1 (p. 84; the annotator writes "De Pythagora dicit").
- 121. Ibid.; Virgilian images, II 352–367 (fols. 27^v–28^r) and IV 580–594 (fol. 73^{r-v}); epilepsy, III 487 (fol. 51^v); the excellence of philosophers, I 725–740 (fols. 59^v–60^r).
- 122. BL Harl. 2694, V 207-234 (fol. 90°).
- 123. Ibid., II 78-79 (fol. 22") and III 801-806 (fol. 57").
- 124. Ibid., I 101–102 (fol. 3^{r}), III 931–963 (fols. 59^{v} – 60^{r}), and IV 1057, 1067–1071, 1125–1126 and 1283 (fols. 82^{r} – 86^{r}).
- 125. Ambros. E 125 sup., Ambros. P 19 sup., BAV Barb. Lat. 154, BAV Lat. 3276, BAV Ottob. Lat. 1954, BAV Ottob. Lat. 2834, BAV Urb. Lat. 640, BL Harl. 2694, Cambridge Univ. Nn.2.40, Florence Naz. Panciat. 176, Laur. 35.25, Laur. 35.28, Naples Naz. IV E 51, Padua Capit. C.75, Pierpont Morgan MS 482 ("AMOR" labeling fols. 82–85, IV 1041–1049, is the largest note in the text), Rome Naz. O.85, and Venice Marc. Cl. xii 69. Another, Munich Cl. 816a, has marks throughout this passage, including original subject headings inserted in block capitals, but such marks are common throughout the Munich manuscript and so indicate standard, not exceptional, attention. On the Snares of Venus section, see William Fitzgerald, "Lucretius' Cure for Love in the 'De Rerum Natura,'" Classical World 78, no. 2 (November–December 1984): 73–86.

- 126. The passage is also repeated in bk. IV, lines 11–25, but its first appearance, in bk. I, is marked in Ambros. I 29 sup. I 921–939 (fol. 73°), Baltimore Walters W.383 (20°), Basel Univ. F viii 14 (17°), BAV Ottob. Lat. 1954 (fol. 20°), BAV Ottob. Lat. 2834 (fol. 17°), BAV Ross. lat. 884 (17°), Bodl. Can. lat. 32 (fol. 19°), Cambridge Univ. Nn.2.40 (fol. 14°), Naples Naz. IV E 51 (fol. 28°), and Padua Capit. C.75. Several more copies mark the discussion of the Muses immediately preceding the passage. See Figures 6 and 19.
- 127. Plato, Laws ii. 659; Horace, Satires I.i.25; Ausonius, Epistles 17 (407.2). On the fame of this passage in the Renaissance, see Valentina Prosperi, "Lucretius in the Italian Renaissance," in The Cambridge Companion to Lucretius, ed. Gillespie and Hardie (Cambridge, 2007), 218. This passage appears twice in Lucretius, and some annotation is clearly intended to point out the reduplication. My statistics on how frequently it is annotated look only at the first time it appears; the second is marked less often.
- 128. See Figure 26. (Venice, 1495), Houghton Inc. 5271. This copy may also have been used by Pius in preparing his edition of 1511, but the attribution to Pius, and that to Avancius, is in doubt. See Michael D. Reeve, "Lucretius from the 1460s to the 17th Century: Seven Questions of Attribution," Aevum 80 (2006): 171–174; also Ives, "The Exemplar of Two Renaissance Editors of Lucretius," Rare Books: Notes on the History of Old Books and Manuscripts 2 (1942): 3–7; cf. Reeve, "Lucretius Revisited," 120.
- 129. De Ignorantia 22.
- Kahn, Rhetoric, Prudence and Skepticism in the Renaissance (Ithaca, N.Y., 1985), 29–35.
- 131. The editors of the first Lucretius print editions in their introductory epistles argue time and again that Lucretius should be read for the language alone and that the points where the philosophy contradicts Christianity will have no power to persuade the learned reader. See Chapters 4 and 5.
- 132. Laur. 35.30.
- 133. Laur. 35.29. Reeve was the first scholar to discuss two notes among Poliziano's corrections that refer to readings taken from "Pomponi," i.e., Pomponio Leto, whom we know from letters lent Poliziano a Lucretius for four years. See Reeve, "Italian Tradition of Lucretius," 39–40.
- 134. BAV Lat. 3276, dated 1442.
- 135. See Table 2.4 for complete statistics.
- 136. On Poliziano, see Passannante, The Lucretian Renaissance, 58-77, esp. 61. On Panormita, see Eugene O'Connor, "Panormita's Reply to His Critics: The Hermaphroditus and the Literary Defense," Renaissance Quarterly 50, no. 4 (Winter 1997): 985-1010.
- 137. See Sergio Bertelli, "Un Codice Lucreziano dall' officina di Pomponio Leto," La parola del passato, fasc. 100, 28–38; Maurizio Campanelli, "Una praelectio lucreziana di Pomponio Leto," Roma nel Rinascimento (1993): 17–24. See also Figures 1–2 and 11–13.
- 138. BAV Ottob. Lat. 2834 (fol. 1^{r-v}).
- 139. Universiteitsbibliotheek, Litt. Lat. X fol. 82 rar, reprinted as Pomponio Leto, *Lucrezio*, ed. Solaro (Palermo, 1993); see Helen Dixon, "Pomponio Leto's Notes on

- Lucretius (Utrecht, Universiteitsbibliotheek, X Fol. 82 Rariora)," *Aevum* 85 (2011): 191–216. See also Chapter 4.
- 140. Paris BN M YC 397, V95, discussed later in this chapter.
- 141. The earliest firmly documentable non-Laurenzian copy is BAV Lat. 3276, used by Antonio Panormita, dated 1442.
- 142. Basel Univ. F viii 14, discussed further later in this chapter.
- 143. Discussed in Chapter 1.
- 144. Naples Naz. IV E 51 (fol. 71"); see Figures 1 and 12.
- 145. Ibid.; that intelligence weakens, III 445–458 (fol. 66°); grief, III 459–462 (fol. 67°); wine, III 476–483 (fol. 67°); epilepsy, III 487 (fol. 67°); gradual illness, III 526–539 (fol. 68°); fixed location, III 548–557 (fol. 69°); container, III 568–579 (fol. 69°).
- 146. Rome Naz. O.85 (fol. 43^r), label added by the rubricator. This first argument and the second are marked with large manicula in one copy of the 1512 edition, Ferraioli V.6350 (fols. xxxxvi^v and xxxxvii^r).
- 147. III 670-697 and 824-829, Naples Naz. IV E 51 (fols. 71^v and 74^v).
- 148. Ibid.; first motion, II 134–137 (fol. 35^r); the world was not made for humanity, II 177–179 (fol. 36r; this passage is marked in 3 other copies); fear of death, III 59–94 (fol. 58^r); light of philosophy, II 52–61 (fol. 33^r).
- 149. BAV Barb. Lat. 154, fol. 21^v, Ambros. E.125 Sup. (fol. 43^r), Pierpont Morgan Ms. 482 (fol. 27^r), Padua C75.
- Naples Naz. IV 51, Acheron III 1024–1075 (fol. 79), Venus IV 1030–end (fols. 102v–107^v).
- 151. The two copies made by Verolano, BAV Ottob. Lat 1954 and Baltimore Walters W.383, contain more disparate annotation, though the extensive bracketing in the Vatican Verolano manuscript does single out some bk. III passages also marked by Leto.
- 152. Bodl. Can. Lat. 32. Some notes and the text of the Bodleianus are reproduced in Parker's edition of 1855.
- 153. Ibid., III 417, 447, 459, 669, 806, 824 and 872 (fols. 54^v-55^r, 58^r, 61^v, 62^r, 63^{r-v}; compare to Naples Naz. IV E 51 fols. 66^r-67^r and 71^v).
- 154. Ibid., III 891 (fols. 65^r; compare to Naples Naz. IV E 51, fols. 78^{r-v}).
- 155. Ibid.; Ennius, I 117 (fol. 3^r); wormwood, 921–931 (fol. 19^r); Nature does nothing without the gods, II 1092, the note reads, "Nihil agit natura sine diis" (fol. 44^r; compare to Naples Naz. IV E 51, fol. 55^r).
- 156. III 824, Naples Naz. IV E 51 (fol. 74^v), Bodl. Can. Lat. 32 (fol. 62^r). "Opinio quod dat poenas non lucretii, sed aliorum: Pyndarici."
- 157. Pindar, Pythian 8, 95-97. See Mary Lefkowitz, "Pindar's Pythian 8," Classical Journal 72, no. 3 (1977): 209-221. Michael Reeve has suggested a possible connection to Pindar's descriptions of rewards and punishments in the afterlife in Olympia 2.
- 158. See Chapters 4 and 5.
- 159. Basel Univ. F viii 14. Amerbach's signature appears on fol. I^r. On this manuscript, see Reeve, "Lucretius from the 1460s," 167–169.
- 160. Basel Univ. F viii 14 cluere, I 119 (fol. 3^r); parvissimum, I 621 (fol. 12^r); wormwood, I 936 (fol. 17^r); Acheron, III 1029–1042 (59^r; contrast with Naples Naz. IV E 51 [fol. 79^r]).

- 161. III 1045-1052, Naples Naz. IV E 51 (fol. 79^r), Basel Univ. F viii 14 (fol. 59^r).
- 162. III 417-466, Basel Univ. F viii 14 (fols. 48^v-50^v).
- 163. Ibid., III 417(fol. 48°).
- 164. Ibid., III 430.
- 165. Ibid., III 487 (fol. 49°).
- 166. Berlin Lat. Fol. 544 (fols. 43^r-49^v).
- 167. Ibid., fols. 39°, 41°, 75°-81°.
- 168. Ibid., fols. 41r-52v.
- 169. On debates over the corrections in 35.32, their relation to Laur. 35.29, Munich 816a, and Paris 10306, and Munro's reading of "Marcellus" here as "Marullus," see Reeve, "Italian Tradition of Lucretius," 45–47.
- 170. Brown, Return of Lucretius, chap. 3.
- 171. Laur. 35.32; nothing comes from nothing, I 159 (fol. 4^r); evaporation, I 304 (fol. 7^r); perishability, I 792 (fol. 16^r). The first of these is of particular interest to Montaigne; see Chapter 5.
- 172. Brown, Return of Lucretius, 46-50.
- 173. Ibid., 50-56.
- 174. Brown accepts 1497 as the date for Machiavelli's transcription of the *De rerum natura*, a year when Adriani's lectures had contained Lucretian content and the last year before Machiavelli's new position in the chancery would deprive him of spare time (Brown, *Return of Lucretius*, chap. 4, 69). We can almost certainly date the transcription to before 1512 and probably to before 1500, because Machiavelli would not have used the highly defective 1495 edition as a source if he had had access to the vastly improved 1500 edition, or even the more corrected 1512 edition printed in Florence. On Machiavelli's sources in preparing the manuscript, see Brown, *Return of Lucretius*, appendix, 113–122.
- 175. Marullo's notes were used by, among others, Machiavelli, Piero Vettori, and the editors of the 1511, 1512, and 1565–1566 editions; see Cosmo Gordon, A Bibliography of Lucretius (London, 1962), 52–53. On Marullo's notes, and evidence for variant copies circulating, see De rerum natura, ed. and trans. H. A. J. Munro (London, 1905), intro., esp. 13; also Passannante, The Lucretian Renaissance, 94–103. On Marullo himself, see Benedetto Croce, Michele Marullo Tarcaniota, le elegie per la patria perduta ed altri suoi carmi (Bari, 1938), and Masson, "Marullus's Text of Lucretius," Classical Review11, no. 6 (July 1897): 307. On Marullo's corrections, see Marcus Deufert, "Lukrez und Marullus: Ein Blick in die Werkstatt eines humanistischen Interpolators," Rheinisches Museum 142 (1999): 210–223. For more on Marullo, see Chapter 4.
- 176. See Appendix B.
- 177. BAV Ross. Lat. 884 fols. 20^v-32^r. Because we retain several sources clearly close to those used by Machiavelli that contain no comparable marginal labels, I do not believe it plausible that these labels are copied from some lost intermediary source. See also Brown, *Return of Lucretius*, 74-75 and n. 15.
- 178. See Figure 20; also Brown, *Return of Lucretius*, 74–76; Brown, "Philosophy and Religion in Machiavelli," in John Najemy, ed., *The Cambridge Companion to Machiavelli* (Cambridge, 2010), 170 nn. 17–18.

- 179. The meaning is unclear. He may be suggesting "recti" as a substitute for "vitae" in II.10: "errare atque viam palantis quaerere vitae."
- 180. Here Lucretius describes motes visible in a sunbeam as a model of how atoms move.
- 181. This matches one of the capitula; see Appendix B.
- 182. This is a single, very short, very smudged word, possibly *aer* for a discussion of air.
- 183. Here Lucretius begins his attack on the idea that the gods designed the Earth for the sake of humankind.
- 184. This is a variation on the beginning of the capitulum: "Nihil sursum ferri corpusculorum sed pressa a radicibus exurgere corpora."
- 185. The usual capitulum reads "de declinatione motus." The selection of "declinare" (both by Machiavelli and the original author of the capitula) may reflect the fact that this line is a rather abrupt transition from a discussion of upward and downward motion to a discussion of the swerve. Because Lucretius has just argued that atoms cannot move up under their own power, the sense of descent or "downward swerve" communicated by "de" + "clinare" suggests that the annotator may, at this point, believe that Lucretius is saying that atoms inherently swerve downward, and that the swerve is intended to explain, not chance or free will, but gravity.
- 186. This is a standard capitulum.
- 187. Lucretius intends his argument that temperature has a finite maximum and minimum as a proof that the properties of atoms are also finite, but Machiavelli comments on the more basic physical suggestion that the sources of heat and cold can coexist in one substance.
- 188. The usual capitulum is "De matre magna," but Machiavelli chooses the less anthropomorphic "genetrice."
- 189. This is likely a note of an unusual vocabulary term. It is also duplicated in the margin in Cambridge Nn.2.40 fol. 26°, Marciana Lat. XII 69 fol. 27°, Rome, BN O. 85 27v, and two incunables, Paris M YC 397, V95 fol. dviii°, and Oxford 1500 Auct. 2 R 4.50.
- 190. Aeneid I.462; my thanks to Irina Greenman for this observation.
- 191. BAV Ott. Lat. 1954 "de divinis" fol. 38°; BAV Ott. Lat. 2834 "divinia" fol. 30°.
- 192. Magnets 127^r-128^v, the wormwood simile fol. 17^v. See Figure 19.
- 193. Brown, Return of Lucretius, 71-76.
- 194. For another interpretation of the question, see Brown, *Return of Lucretius*, chap. 4; also Brown, "Philosophy and Religion."
- 195. On this question, see Paul Rahe, "In the Shadow of Lucretius: The Epicurean Foundations of Machiavelli's Political Thought," *History of Political Thought* 28, no. 1 (2007): 30–55; Rahe, *Against Throne and Altar: Machiavelli and Political Theory under the English Republic* (Cambridge, 2009).
- 196. This signature Epicurean technique of providing multiple alternative explanations without committing to one is criticized by Montaigne in his marginalia; see Screech, *Montaigne's Annotated Copy*, 368–370.
- 197. See his famous letter to Francesco Vettori of December 10, 1513.

- 198. Machiavelli's transcription of the *Eunuchus* occupies fols. 124^r –154^v. It contains only one marginal annotation, at II.iii.310, fol. 138^v.
- 199. In the many other cases where ancient comedy shows rape leading to marriage, the rape is a past event already over before the play begins and treated mainly as a crime to be investigated, in contrast with this one where the rapist's glee and the victim's trauma are described in detail. See Sharon L. James, "Gender and Sexuality in Terence," in *A Companion to Terence*, ed. Antony Augoustakis and Ariana Traill (Chichester, West Sussex, UK, 2013), 175–194.
- 200. Munich Clm. 816a fol. 27^r (Figure 22) and Paris BN M YC 397, V95 (henceforth, PV95) fol. div. Many thanks to Alison Brown for urging me to examine the Paris volume in detail.
- 201. Brown, Return of Lucretius, 118. On Lambin and Montaigne, see Chapter 5.
- 202. DRN I 419-429; Munich fol. 9r; PV95 fol. bir.
- 203. Reeve, "Italian Tradition of Lucretius," 46, 147; Reeve, "Lucretius from the 1460s," 169–171; Brown, *Return of Lucretius*, 118.
- 204. See Reeve, "Italian Tradition of Lucretius," 46.
- 205. Reeve, "Lucretius from the 1460s," 169.
- 206. Laur. 35.25 fol. 39^r; Munich Clm. 816a fol. 38v; PV95 fol. 3e^r; Catullus 63.56. Catullus's *pupulla* can be read as "poplars" or "pupils," and the text of Lucretius in these volumes had "pupula" in II.830 where the modern reading is *purpura*, purple, for a discussion of color and sensation.
- 207. For example, Laur. 35.25 and Ambros. P. 19 Sup. share notes at I 349, I 648, I 754, and II 98.
- 208. Cluere, 3^r, 12^r, and 43^r; parvissima, 12^v; Ennius, 3^r; Empedocles, 14^v-15^r; "Virg.," 137^r, DRN 6.783, Ecl. X.76; Acheron, 65^{r-v}; Greek girls' nicknames, 89^v.
- 209. DRN II 598, fols. $34^{\text{r-v}}$.
- 210. Heraclitus: *DRN* I.635, Munich 13^r; Laur. 35.25 fol. 13^v, Ambros. p. 19 Sup. fol. 16^v, and Munich Cod. lat. mon. 816a 13v (634), two notes in PB9f fols. biiii^v-bv^r do not match this, but one is cut off by the binding; *tenuis bisyllabam*, II 232 Munich 27r (see Figure 23), PV95 fol. d1^r, Laur. 35.25 27v, Ambros. P. 19 Sup. fol. 30^r.
- 211. Magnets: DRNVI 909, fol. 139°; "Calliope": DRNVI 94, Munich fol. 123°.
- 212. Paris BN M YC 397. Virgil's name appears several times, including II 720 on fol. e1^v and II.859 on fol. e3^v; Homer (*Iliad* bk. I quoted in Greek), VI357, fol. p2^r; on fol. c6^v at II83 one annotator writes "Ovid" and the other "Nasonem"; Horace ("sic in Hor.") at I.383 on fol. a8v; Catullus at VI.1242, fol. q8^v.
- 213. DRN IV 1160-1170, fol. k8^{r-v}.
- 214. These are listed by Reeve "Lucretius Revisited," 147.
- 215. DRN I 653, fol. B5^r.
- 216. Ibid., II 1006, fol. e6^r.
- 217. Ibid., III 745, fol. g6^r.
- 218. Ibid., V 710, fol. m7^v.
- 219. Ibid., VI 1025, fol. q5°.
- 220. Ibid., IV 660, fol. i8^r.
- 221. Ibid., V 789, fol. e4^r.
- 222. Ibid., II 75, fol. h5°.

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223. Ibid., IV 14, fol. h5<sup>r</sup>.
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- 231. A good example of how annotation of a signature piece of Lucretian radicalism does not necessarily indicate interest in its radical implications is demonstrated in the bracket by I 44–49 (f. a2°), in which Lucretius argues that the gods dwell apart from the world. This seems to suggest interest in Lucretius's proto-atheist denial of divine action and the efficacy of prayer, but an accompanying marginal note points out that the passage recurs at II 646–651, and it is common for philologists to mark such reduplicated sections as they search for errors.
- 232. II 753-754, e2^r, also bracketed in BAV Ottobrandini 2834, fol. 32^r.
- 233. I 577-583, fol. b4^r.
- 234. IV 710–720. This is fol. i8° in this Paris copy, and marked in eight manuscripts: fol. 74° in Machiavelli's BAV Ross. Lat. 884; fol. 64° in Rome Naz. O.85; fol. 88° in Verolano's BAV Ott. Lat 1954; fol. 87° in Ambros. P 19 sup.; fol. 61° in Marciana Cl. XII 69; fol. 61° in Cambridge Univ. Nn.2.40; fol. 76v in Pierpont Morgan MS 482; and on fol. 91° "leones galles timere" is the only note present in the entirety of Ross. Lat 502.
- 235. Laur. D'Elci 335, III 544-547 (fol. 41°).
- 236. Ambros. INC.186, II 646–651 (fol. 32'), V 419–420 (fol. 90'), and III 59–1094 (fols. 32'–60', esp. 42', 49', 54', and 55'). Some of the same proofs labeled by Leto are also bracketed.
- 237. Marciana Incun. Ven.702. A note on the flyleaf discusses the readings of Pontano, as well as Aulus Gellius, Cicero, and Vitruvius, repeating popular claims about Lucretius's connection to Cicero. Under the heading *Contra Heraclitum* (I 635) the annotator adds "Ignem non esse primum," while Democritus is discussed at I 1051 and Pliny at II 865. Epicurus receives only "Epicur[u] dicit," by the opening lines of bk. III. At *De varitatem animi* (III 288) the annotator lists different types of emotions discussed, "Ira, fervor, formido, horror."
- 238. Marciana Incun. Ven.702, DRN III 978-1094 (fols. 50r-60r).
- 239. BL IB.30763. See fols. b1^v, c1^r, c2^v, c7^v, d4^v, d6^v–d7^r. Two annotators worked on the volume; Reeve observes that the main annotator supplies line II 1169, absent in the descendants of Poggio's manuscript and generally unavailable before Avancius's corrected edition, suggesting a sixteenth-century date for the annotation.
- 240. Bodl. Auct. 2 R 4.50, pp. 14-15. See Figure 23.
- 241. Ibid., p. 6.
- 242. Many thanks to Michael Reeve and Helene Soldini for their efforts helping me investigate the provenance of the volume.
- 243. Reeve suggests the date of no later than 1540 if the notes are Giannotti's, based on comparison to his surviving letters to Piero Vettori (who, at the time, owned the

^{224.} Ibid., VI 35, fol. 04°.

^{225.} Ibid., II 598-622, fol. d7°.

^{226.} Ibid., II 352, fol. d3r.

^{227.} Ibid., I. 921-950, fols. c1^{v-r}.

^{228.} Ibid., I 390-418, fol. b1^r.

^{229.} Ibid., IV 259, fol. i1^r.

^{230.} Ibid., IV 398, fol. i3°.

Lucretius manuscript now in Munich). Helene Soldini's research on Giannotti, still under way, has uncovered evidence from these letters and elsewhere that Giannotti both owned and worked on correcting Lucretius. She reports that the notes in the Bodleian incunable do not resemble the samples of Gianotti's hand she has worked with in Florence.

- 244. See Passannante, The Lucretian Renaissance, 58-77, esp. 61.
- 245. Kallendorf, "Marginalia," 114: see also Kallendorf, Virgil and the Myth of Venice: Books and Readers in the Italian Renaissance (Oxford, 1999), 31–90.
- 246. On Virgil in humanist education, see Craig Kallendorf, The Virgilian Tradition: Book History and the History of Reading in Early Modern Europe (Aldershot, 2007); Kallendorf, A Bibliography of Renaissance Italian Translations of Virgil (Florence, 1994); David Scott Wilson-Okamura, Virgil in the Renaissance (Cambridge, 2010).
- 247. On the classics and Renaissance science, see Gianna Pomata and Nancy Siraisi, eds., Historia: Empiricism and Erudition in Early Modern Europe (Cambridge, Mass.: 2005); William R. Newman and Anthony Grafton, eds., Secrets of Nature: Astrology and Alchemy in Early Modern Europe (Cambridge, Mass., 2001); Nancy Siraisi, Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice (Chicago, 1990), 1–16, 123–133; John Shirley and David Hoeniger, eds., Science and the Arts in the Renaissance (Washington, D.C., 1985), especially the title chapter by Alistair Crombie, 15–26; George Sarton, The Appreciation of Ancient and Medieval Science during the Renaissance (1450–1600) (Philadelphia: 1955); Nancy Siraisi, "Life Sciences and Medicine in the Renaissance World," in Rome Reborn: The Vatican Library and Renaissance Culture, ed. Anthony Grafton (Washington, D.C., 1993), 169–198.

3. Between Fits of Madness

- 1. That he was Roman and well born is conjectured from his level of education and his verifiable associates. The date generally accepted for his death is based on a reference in Cicero's letter to Quintus of February 54 B.C., treated later in this chapter. A strong case for a birth date of 95/94 was made by Giovanni D'Anna, "Sulla genesi del sincronismo donatiano fra la morte di Lucrezio e l'assunzione della toga virile di Virgilio," in Arma Virumque . . . Studi di poesia e storiografia in onore di Luca Canali, ed. Emanuele Lelli (Pisa, 2002), 189–197.
- Memmius was also a patron of Catullus. See the discussion of DRN III 57 in the Munro 1905 edition; also Titi Lucreti Cari De rerum natura libri sex, 3 vols., ed. Cyril Bailey (Oxford, 1986), addenda 1753–1754.
- Both of these claims come from Jerome's translation of Eusebius's Chronicon, treated below.
- 4. For other overviews of problems in the Lucretian biographical tradition, see John Masson, *Lucretius, Epicurean and Poet* (New York, 1907), chap. 2, 34–65; Alexander Dalzell, "A Bibliography of Work on Lucretius, 1945–1972," *Classical World* 66, no. 7 (April 1973), esp. 402–406; and Leofranc Holford-Strevens,

- "Horror vacui in Lucretian Biography," Leeds International Classical Studies 1, no. 1 (2002): 1-23.
- 5. Vitae appear in the editions of 1512, 1514, 1531, 1534, 1539, 1540, 1542, 1546, 1548, 1558, 1564, 1565, 1565–1566, 1567, 1570, 1576, 1583, and 1595.
- 6. The editions of 1531, 1534, 1539, 1540, 1542, 1546, 1548, 1558, 1564, and 1567 contain the vita by Petrus Crinitus as their only introduction; though printed by different houses, the majority of these effectively duplicate the 1534 edition. The 1576 edition also has no introductory letters, only Giraldi's abridged vita, though there the text is followed by some philological notes.
- 7. On the *accessus* form, see Fausto Ghisalberti, "Medieval Biographies of Ovid," *Journal of the Warburg and Courtland Institutes* 9 (1946), esp. 14–16; A.J. Minnis, *Medieval Theory of Authorship* (Aldershot, UK, 1988).
- 8. For comprehensive reviews, see *Titi Lucreti Cari*, addenda 1753–1754, vol. 1, 19–28; Fleischmann, "Lucretius Carus, Titus," in *Catalogus Translationum et Commentariorum*, ed. P.O. Kristeller and F.E. Cranz (Washington, D.C., 1960), 2:349–351; L.D. Reynolds, *Texts and Transmission* (Oxford, 1983), 218–222.
- 9. The circulation of individual authors is treated in more detail later in this chapter. On the importance of Macrobius in making Lucretius's ideas available before the return of the *De rerum natura*, see Gerard Paul Passannante, *The Lucretian Renaissance: Philology and the Afterlife of Tradition* (Chicago, 2011), 36–58.
- 10. The debate over other potential sources is ongoing: see Solaro, Lucrezio: Biografie umanistiche (Bari, 2000), 98–100; Pierre de Nolhac, Pétrarque et l'humanisme (Paris, 1907), 160; D. Canfora, "Una presenza lucreziana in Petrarca?," Annali della Facoltà di Lettere e Filosofia (Università degli Studi di Bari) 37–38 (1994–1995): 319–329; Giovanni Gasparotto, "Lucrezio fonte diretta del Boccaccio?," Atti e memorie dell'Accademia patavina di scienze, lettere ed arti, 81 (1968–1969): 5–34.
- 11. Historia naturalis XXXVI 37.
- 12. In some senses, the introduction (pp. 1-3) of Girolamo Frachetta's commentary *Breve Spositione di Tutta l'Opera di Lucretio* (Venice, 1589) should be considered a ninth vita, because it uses the same formula and sources as its Latin predecessors, but because it is a vernacular work, it never accompanied a Lucretius edition and was never excerpted as a complete work by itself. See Chapter 6.
- 13. Universiteitsbibliotheek, Litt. Lat. X fol. 82 rar, reprinted as Giulio Pomponio Leto, Lucrezio, ed. Solaro (Palermo, 1993); see Helen Dixon, "Pomponio Leto's Notes on Lucretius (Utrecht, Universiteitsbibliotheek, X Fol. 82 Rariora)" Aevum 85 (2011): 191–216. The volume contains annotations by Leto, Sebastiano Priuli, Francesco Cerreto, and at least one other, but Dixon does not believe that the notes provide sufficient evidence to support a claim that it was used in conjunction with a set of Lucretian lectures by Leto.
- 14. See Solaro's article "'Venere doma Marte' A proposito di uno sconosciuto corso universitario su Lucrezio di Pomponio Leto," in Acta Conventus Neo-Latini Bariensis, Proceedings of the Ninth International Congress of Neo-Latin Studies, Bari, 29 August to 3 September 1994 (Tempe, Ariz., 1998), 557-564.
- 15. The volume is BL I.A. 23564; see Solaro, *Lucrezio*, 5–6; R. Fabbri, "La 'vita borgiana' di Lucrezio nel quadro delle biografie umanistiche," *Lettere Italiane* 36

- (1984): 349–366; also Masson, "New Details from Suetonius's Life of Lucretius," *Journal of Philology* 23, no. 46 (1895), esp. 220–221.
- 16. See Solaro, *Lucrezio*, 5-10; Holford-Strevens, "*Horror vacui*," 2 n. 3; Masson, *Lucretius, Epicurean and Poet*, 38-39, 41-43, 57-58.
- 17. (Bologna, 1511), fols. Air-v; Solaro, Lucrezio, 44-48.
- For more on Marullo's contribution to the Lucretian tradition, see Chapter 4; see also Titi Lucreti Cari, 1:5-6.
- 19. Candidus's vita (Florence, 1512) appears on fols. Aiiiiv-Avr; Solaro, Lucrezio, 49-51.
- 20. On Lambin's editions, see Tatiana Tsakiropoula-Summers, "Lambin's Edition of Lucretius: Using Plato and Aristotle in Defense of *De Rerum Natura*," *Classical and Modern Literature* 21, no. 2 (2001): 45–70; Linton Stevens, "Denis Lambin: Humanist, Courtier, Philologist, and Lecteur Royal," *Studies in the Renaissance* 9 (1962): 234–241; Passannante, *The Lucretian Renaissance*, 81–114; John O'Brien, "Le Lucrèce de Denys Lambin: Entre revendication et prudence," and Élodie Argaud, "'L'autre moitié du projet': Enjeux philosophiques de l'édition du *De rerum natura*: Lambin et la dissensio sur le corps et l'âme," both in *La renaissance de Lucrèce* (Paris, 2010).
- 21. Historiae Poetarum tam Graecorum quam Latinorum Dialogi Decem (Basel, 1545), vol. 1, dialogo IV, 429–433; abridgment reprinted in Operum quae extant omnium (Basel, 1580), 2:143–144; complete text, Solaro, Lucrezio, 54–56; abridgement printed with DRN (Lyons, 1576), fols. a2^{r-v}.
- 22. Transcription taken from Houghton Inc. 5576 fol. 6°.
- 23. Its three predecessors are the 1471/1473 Brescia *editio princeps*, the 1486 Verona edition of Paulus Fridenperger, and the 1495 edition by Theodor de Ragazonibus, printed in Venice. All three were bare text editions with no dedicatory letters, introductions, or vitae, though the 1486 and 1495 contain a poem on the recovery of the work. For evidence of a possible 1496 edition, see Appendix C.
- 24. See Appendix C.
- 25. Jerome, *Chronicon*, a. Abr. 1923–1924, 149 Helm. Most sixteenth-century versions of the quotation give "Olympiade CLXXI anno secundo" at the beginning and "aetatis suae xliiii" instead of "anno aetatisquadragesimo tertio" at the end.
- 26. This is a paraphrase of *Vita Virgilii* 6, which gives, "Initia aetatis Cremonae egit usque ad virilem togam, quam XVII anno natali suo accepit isdem illis consulibus iterum, quibus erat natus, evenitque ut eo ipso die Lucretius poeta decederet," the consuls' names having been specified in line 2.
- 27. Amores I, xv, 23-24.
- 28. Institutio oratoria X, 1, 87.
- 29. Institutio oratoria I, 4, 4-5.
- 30. Silvae II, 7, 76.
- 31. Later Renaissance biographers will also use a reference to Lucretius in Jerome's *Contra Rufinum*, and a third in a pseudo-Jerome letter (Walter Map, *De nugis curialium* IV, 3), discussed later in this chapter.
- 32. In Solaro, *Lucrezio*, see Pomponio Leto, 26 lines 22–25; Borgia, 33 lines 36–45; Crinitus, 38–39 lines 8–10, 18–20, 40–42 (Florence, 1505, fol. B2^v); Pius, 45 lines

- 28–32 (Bologna, 1511, fol. Ai^r); Candidus, 50–51 lines 9–10, 20–23, 45–49 (Florence, 1512, fol. Aiiii^{r-v}); Giraldi, 54 lines 7–13 (Lyons, 1576, fol. a2^r); Gifanius, 60 lines 68–70 (Antwerp, 1565–1566, fol. **5^v); Lambin, 73 line 109, 80 line 301, and 81–82 lines 340–355 (Paris, 1563, fols. d2^r, d3^v, and d4^r).
- 33. Although manuscripts of the chronicle are inconsistent about the date of this entry, giving it as either 94, 93, or 96 B.C., the quotation as it appears in Renaissance print editions of Lucretius does not deviate from the standard "Olympiad CLXXI anno secundo," i.e., 94 B.C. See M. Ferguson Smith, intro. to the Loeb Classical Library edition of *De rerum natura* (Cambridge, Mass., 1997), x.
- 34. Petrus Crinitus is the first biographer to state his doubts about Jerome's chronology, though Pomponio Leto earlier omitted the date when treating the passage.
- 35. My discussion of biographers' treatments of the suicide will follow. For the modern debate over the love potion and Lucretius's suicide, see *Titi Lucreti Cari*, I 8–12; Solaro, *Lucrezio*, 12–22; E. Stampini, *Il suicidio di Lucrezio* (Messina, 1896); Konrat Zeigler "Der Tod des Lucretius," *Hermes* 71 (1936): 420–440; L.P. Wilkinson, "Lucretius and the Love-Philtre," *Classical Review* 63, no. 2 (1949): 47–48; L. Canfora, *Vita di Lucrezio* (Palermo, 1993), esp. 23–36.
- 36. On the love potion debate, see Masson, *Lucretius, Epicurean and Poet*, 50–53, and Holford-Strevens, "*Horror vacui*," 2–5.
- 37. This is a frequent theme, but it appears most famously in I 102-134.
- 38. IV 1037-1208, the most frequently marked section in Renaissance copies.
- 39. Masson, Lucretius, Epicurean and Poet, 36-45, provides a summary of various scholarly positions on Cicero's involvement. For an old but detailed treatment of the question, see W. A. Merrill, "Lucretius and Cicero," Classical Review 10, no. 1 (February 1896): 19; though the idea of Cicero as an editor of Lucretius has been largely discredited, supporters remain, see A. E. Housman, "The First Editor of Lucretius," Classical Review 42, no. 4 (September 1928): 122-123.
- 40. See Silvia Rizzo, Il lessico filologico degli umanisti (Rome, 1973), 213-215, 249-265.
- 41. "Emendavit praeterea Cicero Lucretii, Romani poetae, libros, quod scripti cum insaniret ille interdum confuse ac minus composite viderentur." Sicconis Polentoni Scriptorum illustrium Latinae linguae libri XVIII, ed. B. L. Ullman (Rome, 1928), 445, 23–25. Cf. Holford-Strevens, "Horror vacui," 6.
- 42. See G. Brugnoli and F. Stok, Vitae Vergilianae antiquae (Rome, 1997); Henry Nettleship, Ancient Lives of Vergil (Oxford, 1879).
- 43. The original reads, "Initia aetatis Cremonae egit usque ad virilem togam, quam [XV] anno natali suo accepit iisdem illis consulibus iterum duobus, quibus erat natus, evenitque ut eo ipso die Lucretius poeta decederet." XV is Reifferscheid's conjecture for the transmitted XVII.
- 44. *Amores* I xv, 23–24. A second reference to Lucretius in *Tristia* II 425–426 will be treated later in this chapter.
- 45. "pascitur in vivis Livor; post fata quiescit,/ cum suus ex merito quemque tuetur honos./ ergo etiam cum me supremus adederit ignis,/ vivam, parsque mei multa superstes erit." *Amores* I xv, 39–42.

- 46. Gifanius includes Ovid in the list of quotations that accompany his vita, though not in the vita itself (Antwerp, 1565–1566, fols. A3^v–4^r).
- 47. See also John Savage, "Quintilian and Lucretius," *Classical Weekly* 46, no. 3 (December 1, 1952): 37.
- 48. Institutio oratoria X 1, 20.
- 49. Ibid., 1, 27-30.
- 50. DRNI 136-145.
- 51. Institutio oratoria X 1, 85-87.
- 52. Ibid., X 1, 87-92.
- 53. Indeed, Quintilian has much kinder words for authors in genres he considers more Roman than Greek, such as the elegiac, satiric, and lyric poets, including Tibullus, Propertius, Lucilius, Persius, Marcus Terentius Varro, Catullus, Bibaculus, Horace, and Caesius Bassus. Ibid., X 1, 93–96.
- 54. See Chapters 4 and 5.
- 55. See, for example, Giraldi in Solaro, *Lucrezio*, 55-56 lines 25-61; or Lambin (Paris, 1570), fol. d4^v in 84-85 lines 421-452.
- 56. "Nor can the tutor be ignorant of philosophy, when in almost every poem so many passages repeat the subtlest of natural questions, and in particular we have Empedocles among the Greeks and Varro and Lucretius among the Latins, who translated the precepts of philosophy into verse." *Institutio oratoria* I 4, 3–5.
- 57. The exception is Giraldi.
- 58. Lucretius does treat Empedocles directly, most notably in I 716–830, a section that in Medieval and Renaissance copies was assigned the subject heading "Contra Empedoclem."
- 59. Reynolds, *Texts and Transmission*, 332-334; G.P. Goold's introduction to the Loeb edition (2001), 19-24.
- 60. Reynolds, Texts and Transmission, 332-334.
- 61. See L. D. Reynolds, "The Textual Tradition of Quintilian 10.1.46f," in *Classical Quarterly*, n.s., 12 (1962): 169–175, esp. 172–173.
- Again, Gifanius puts it in his quotation list, not in the vita: (Antwerp, 1565–1566), fols. A3^v-4^r.
- 63. Varro Atacinus, rather than his more famous contemporary Varro Reatinus, is identifiable as the subject both here and in Ovid's list, because both refer to his Latin translation of Apollonius's Argonautica.
- 64. See Harm-Jan Van Dam, P. Papinius Statius Silvae Book II: A Commentary (Leiden, 1984), 486-487.
- 65. *Silvae* II 76–79. Notably Gifanius includes 76–78, while most include only the one line with Lucretius's name: Gifanius (Antwerp, 1565–1566), fols. A3^v–4^r.
- 66. "Ennius arte carens animosique Accius oris/ casurum nullo tempore nomen habent./ Varronem primamque ratem quae nesciet aetas,/ aureaque Aesonio terga petita duci?/ carmina sublimis tunc sunt peritura Lucreti,/ exitio terras cum dabit una dies." Amores I xv, 19–24.
- 67. "Solebat enim per intervalla temporum ad carmen scribendum accedere, non sine quodam animi furore, ut veteres auctores ostendunt. Hinc illud Statii: Et

- docti furor arduus Lucreti." Crinitus (1505), fol. B2°; Solaro, *Lucrezio*, 39 lines 8–11
- 68. See Brown, *The Return of Lucretius to Renaissance Florence*, I Tatti Studies in Italian Renaissance History (Cambridge, Mass., 2010), 66. Lactantius also calls Lucretius's sanity into question.
- 69. See Passannante, *The Lucretian Renaissance*, 76. Passannante points out that later in the *Platonic Theology* Ficino describes Lucretius's state as melancholy rather than *furor*.
- 70. Pius: "Videtur Papinius potionatum et amatorio delirantem Lucretium significare cum sic inquit in silvis: *Et docti furor Lucreti*." (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 46 lines 68–80. On the scholarly tradition of Lucretius's *furor*, see also Solaro, *Lucrezio*, 16–18.
- 71. "Quod quidam ad insaniam, quidam ad poeticam referunt, untrunque illi certe convenit." (Lyons, 1576), fol. a2^v; Solaro, *Lucrezio*, 56.
- 72. Poggio's copy is Madrid, Bibl. Nat. 3678. On the manuscript tradition of the Silvae, see Shackleton Bailey's introduction to the 2003 Loeb edition (Cambridge, Mass.), 7–8; Reynolds, Texts and Transmission, 397–398; also A. Wasserstein, "The Manuscript Tradition of Statius' Silvae," Classical Quarterly 3 (1953): 69–78, and his second article with the same title in Classical Quarterly 8 (1958): 111–112, in dialogue with Paul Theilscher, "Remarks on the Manuscript Tradition of Statius' Silvae," Classical Quarterly 7 (1957): 47–52.
- 73. Laurentiana 29.32, known as L in contrast with Poggio's Matritensis, M. M and L likely share one source; see Reynolds, *Texts and Transmission*, 398.
- 74. On Poliziano's annotations in a copy in the Biblioteca Corsini in Rome, see E. Courtney's preface to the 1990 Oxford edition of the *Silvae*; also J. M. S. Cotton, "Ex Libris Politiani," *Modern Language Review* 29, no. 3 (July 1934): 329.
- 75. Laur. 35.29, reverse of unnumbered flyleaf.
- 76. See Reeve, "The Italian Tradition of Lucretius," *Italia Medioevale e Umanistica* 23 (1980): 29.
- 77. "Lucretius, ut ex eius prologo coniicio, Romanus fuit, de quo . . ."
- 78. This list is discussed again, along with the paratextual letters that preced it, in Chapter 4.
- 79. Houghton Inc. 5271.
- 80. The volume may also contain notes of M. Musurus, who worked on the 1515 revision of Pius. Reeve makes a strong case against the attribution to Avancius, but Pius remains a more likely possibility; see Reeve, "Lucretius from the 1460s to the 17th Century: Seven Questions of Attribution," Aevum (Milan) 80 (2006): 171–174; also S.A. Ives, "The Exemplar of Two Renaissance Editors of Lucretius," Rare Books: Notes on the History of Old Books and Manuscripts 2 (cat. no. 23) (New York, 1942): 3–7; cf. Reeve, "The Italian Tradition of Lucretius," Italia Medioevale e Umanistica 23 (1980): 120.
- 81. *Epistulae ad Quintum Fratrem*, letter 14 (II 9). A modern translation would read "sed, cum veneris" as a separate fragment, but not the Renaissance punctuation.
- "Lucreti poemata ut scribis ita sunt, multis luminibus ingeni, multae tamen artis." Ibid.

- 83. "Virum te putabo si Sallusti Empedoclea legeris; hominem non putabo." Ibid.
- 84. In Solaro, *Lucrezio*, Pomponio Leto, 27 lines 28–30; Girolamo Borgia, 33 lines 43–45; Crinitus, 38 lines 21–24 (Crinitus [1505], fol. B3r); Pius, 47 lines 82–83 (Bologna, 1511, fol. Ai^r); Candidus, 50 lines 23–25 (Florence, 1512, fol. Aiiii^r); Giraldi, 54 lines 5–6 (Lyons, 1576, fol. a2^r); Gifanius, 60 line 61 (Antwerp, 1565–1566, fol. A3^r [quotation list] and vita fol. **5^r); Lambin, 74 lines 136–138 (Paris, 1570, fol. d2^r).
- 85. Reynolds, Texts and Transmission, 136-137.
- 86. Orator 48, 161.
- 87. See, for example, *DRN* I 186; cf. II 134 in the 1864 Munro edition; see, recently, David Butterfield, "Sigmatic Ecthlipsis in Lucretius," *Hermes* 136 (2008): 188–205.
- 88. Quintilian, *Inst. Or.* III 4 lines 4–5 (emphasis mine); see *DRN* I 936–938. Translation based on Rouse.
- 89. De lingua Latina 5.17.
- Saturnalia 6.43. Lucilius's phrase is borrowed by Virgil, Aeneid V 422. See Alieto Pieri, Lucrezio in Macrobio: Adattamenti al testo virgiliano (Messina, 1977); also Solaro, Lucrezio, 120.
- 91. Institutiones grammaticae VI 20 (2, 211, 20 K), "Lucretius similiter in VI:/ propterea fit, uti, quae semina cumque habet ignis,/ demittat, quia saepe gelum, quod continet in se,/ mittit." (DRN BI 873–875); see Solaro, Lucrezio, 48.
- 92. "Accidit hoc primum imbecillitate ingenii mei, deinde inopia ac potius, ut Lucretius ait, 'egestate patrii sermonis.'" Epistulae 4, XVIII, 1.3. Pliny here refers to DRN I 136-139, "Nec me animi fallit Graiorum obscura reperta/ difficile inlustrare Latinis versibus esse,/ multa novis verbis praesertim cum sit agendum/ propter egestatem linguae et rerum novitatem . . ." The sentiment is repeated at III 258-261, "Nunc ea quo pacto inter sese mixta quibusque/ compta modis vigeant rationem reddere aventem/ abstrahit invitum patrii sermonis egestas;/ sed tamen, ut potero summatim attingere, tangam." Leto cites Pliny beside the latter, Naples Naz. IV E 51, fol. 62^v. This passage of Lucretius is marked in five manuscript copies and frequently referred to by biographers and commentators, so it would have been easy to fit in. Its absence is particularly peculiar in Giraldi's biography, because Giraldi includes Pliny on his index of authors who mention the Memmius family, referring to a letter in bk. V. On the circulation of Pliny in the Renaissance, see Reynolds, Texts and Transmission, 316-322. Other references to Lucretius known to modern scholars but not Renaissance biographers include passages in Seneca, Fronto, St. Ambrose, Isidore of Seville, and Marcus Aurelius. On Isidore, see J. Fontaine, Isidore de Séville et la Culture Classique dans l'Espagne Wisigothique (Paris, 1959). On Fronto, see Reynolds, Texts and Transmission, 173-174.
- 93. Fulgentius, Expositio sermonum antiquorum, 62.
- 94. See Holford-Strevens, "Horror vacui," 11.
- 95. Crinitus, *De Poetis Latinis* (Florence, 1505), fol. B3^r; Solaro, *Lucrezio*, 39 lines 44-46. Giraldi: (Lyons, 1576), fol. a2^r; Solaro, *Lucrezio*, 56 lines 59-61.
- 96. "... et Virgilius presertim poetarum princeps ut ipsis cum verbis tria interdum et amplius metra suscipiat." Brescia (1471/1473), fol. 106.

- 97. Georgics II 490–492; Pius prefaces this with "In hoc opere intendit mentem nebulis inscitiae circumfusam liberare, et ad illam felicitatem inducere, quam Maro pollicetur ita canens:" (Bologna, 1511), fol. Ai^r; Solaro, Lucrezio, 47.
- 98. "Hos versus ego vel de Lucretio vel de Epicuro fecisse poetam existimo." (Antwerp, 1565–1566), fol. A3^v.
- 99. Crinitus writes, "Pub. Virgilius non modo verba aliquot sumsit ex poematis Lucretii, sed locos pene integros ab eo transtulit, quod et Grammatici veteres accurate notarunt." Crinitus, De Poetis Latinis, fol. B3^r; Solaro, Lucrezio, 39 lines 35–37. Candidus's plagiarized version paraphrases the passage as "P. sane Vergilius nonmodo verba desumpsit aliquot ex poemate Lucretii, verum locos etiam ab eo pene integros (ut a veteribus est grammaticis relatum) transtulit." (Florence, 1512), fol. A4^v; Solaro, Lucrezio, 51 lines 39–41. Aulus Gellius gives, "Non enim primus finxit hoc verbum Vergilius insolenter, sed in carminibus Lucreti iuvento usus est non aspernatus auctoritatem poetae ingenio et facundia praecellentis.' Verba ex IV Lucreti haec sunt:/ dilutaque contra/ cum tuimur misceri absinthia, tangit amaror./' Non verba autem sola, sed versus prope totos et locos quoque Lucreti plurimos sectatum esse Vergilium videmus." Noctes Atticae I 21, 5–7. Other references to the DRN in the Noctes Atticae appear in I 21, 5–7; X 26, 9; XII 10, 8; XIII 21, 21, and XVI 5, 7; though none are used by our biographers.
- 100. "Pub. Vergilius non modo verba aliquot accepit ex poematis Lucretii, sed locos pene integros ab eo transtulit. Quod et grammatici veteres accurate notarunt." Crinitus, De Poetis Latinis, fol. B3^r; Solaro, Lucrezio, 39 lines 35–37. Candidus's vita paraphrases the passage as "P. sane Vergilius nonmodo verba desumpsit aliquot ex poemate Lucretii, verum locos etiam ab eo pene integros (ut a veteribus est grammaticis relatum) transtulit." (Florence, 1512), fol. A4^v; Solaro, Lucrezio, 51 lines 39–41.
- 101. "Virgilius lectione Lucretii saepius repetita maiestatem carminis in compositione adsecutus est: ubi enim adsurgere licet materia non repugnante, ita sublimis est ut heroicam dignitatem impleat." Solaro, *Lucrezio*, 29 lines 40–42. *Saturnalia* VI iii, 9 reads: "Nemo ex hoc viles putet veteres poetas, quod versus eorum scabri nobis videntur. Ille enim stilus Enniani seculi auribus solus placebat: et diu laboravit aetas secuta, ut magis huic molliore filo adquiesceretur. Sed ulterius non moror Caecinam, quin et ipse prodat quae meminit Maronem ex antiquitate transtulisse."
- 102. II 421-428.
- 103. Loeb edition, trans. Arthur Leslie Wheeler (Cambridge, Mass., 1965).
- 104. Ibid., II 429-470.
- 105. In Solaro, *Lucrezio*, Pius, 45 lines 42–44 (Bologna, 1511, fol. Ai^r); Giraldi, 55–56 lines 46–48 (absent from 1576 abridgment); Lambin, 76 lines 188–190 (Paris, 1570, fol. d2^v); Gifanius quotation list only (Antwerp, 1565–1566, fols. A3^v–4^r).
- 106. "Cum vero neque moribus neque institutis scriptorum praestantibus tribuantur honores, ipsae autem per se mentes aeris altiora prospicientes memoriarum gradibus ad caelum elatae aevo inmortali non modo sententias sed etiam figuras eorum posteris cogunt esse notas. Itaque, qui litterarum iucunditatibus instinctas habent mentes, non possunt non in suis pectoribus dedicatum habere, sicuti deo-

rum, sic Enni poetae simulacrum; Acci autem carminibus qui studios delectantur, non modo verborum virtutes sed etiam figuram eius videntur secum habere praesentem esse. Item plures post nostram memoriam nascentes cum Lucretio videbuntur velut coram de rerum naturam disputare, de arte vero rhetorica cum Cicerone, multi posterorum cum Varrone conferent sermonem de lingua latina, non minus etiam plures philologi cum Graecorum sapientibus multa deliberantes secretos cum his videbuntur habere sermones, et ad summam sapientium scriptorum sententiae corporibus absentibus vetustate florentes cum insunt inter consilia et disputationes, maiores habent, quam praesentium sunt, auctoritates omnes." IX 16–17.

- 107. Reynolds, *Texts and Transmission*, 443-444. Vitruvius had independent manuscript circulation in England.
- 108. (Antwerp, 1565-1566), fols. A3v-4r.
- 109. *Dialogus* 23, 2. "sed vobis utique versantur ante oculos isti qui Lucilium pro Horatio et Lucretium pro Vergilio legunt. . . ."
- 110. Reynolds, Texts and Transmission, 410-411.
- 111. See my individual discussions of their treatments of Tacitus later in this chapter.
- 112. (Bologna, 1511), fol. Air; Solaro, Lucrezio, 47 lines 83-84.
- 113. Carmen IX 265.
- 114. Astronomia III 39–42: "ornari res ipsa negat contenta doceri./ et, siqua externa referentur nomina lingua,/ hoc operis, non vatis erit: non omnia flecti/ possunt, et propria melius sub voce notantur." Pius introduces this with "Danda Lucretio ea venia, quam sibi libro secundo Manlius deprecatur ita canens." (Bologna, 1511), fol. Ai^r lines 59–60; Solaro, Lucrezio, 46 lines 60–63.
- 115. DRN I 136 and I 921-950, respectively.
- 116. Reynolds, *Texts and Transmission*, 235–236; George Goold introduction to *M. Manilii Astronomica* (Leipzig, 1985), v–xxvi, esp. xxiv–xxvi.
- 117. One of the surviving Lucretius manuscripts, Venice, Marciana. Cl. XII 69, is bound with a copy of Manilius.
- 118. "Puto quod puer legeris Aspri in Virgilium et Sallustium Commentarios, Vulcatii in Orationes Ciceronis, Victorini in Dialogos eius et in Terentii Comoedias, praeceptoris mei Donati aeque in Virgilium, et aliorum in alios: Plautum videlicet, Lucretium, Flaccum, Persium atque Lucanum. Argue interpretes eorum, quare non unam explanationem secuti sint: et in eadem re quid vel sibi, vel aliis videatur, enumerent." Contra Rufinum I 16.
- 119. "Hieronymus Libro contra Rufinum primo scribit se vidisse commentarios in Lucretium et Plautum. Nemo me igitur temeritatis arguat, qui et Plautum iampridem sum interpretatus, et nunc cum Lucretio auctorum dificillimo congredior, utpote qui sine circumfusis commentariis vix percipi, immo nullatenus ab ingeniis mediocribus concessum est." (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 44 lines 5–10.
- 120. Solaro, Lucrezio, 35 lines 83–101; Servius, Eclogues VI 31. This passage is quoted at length by Girolamo Borgia, and is the most significant section of philosophical discussion in his vita. Borgia also notes the quotation attributed to Lucretius by Servius in his Georgics commentary which does not appear in the De rerum

- natura, which in Borgia's eyes suggested the existence of other lost Lucretian verses (Solaro, *Lucrezio*, 36 lines 125–128 and note; Virgil, *Georgics* II 42; Servius, *Georgics* II 42).
- 121. A nickname likely first used by Gianfrancesco Pico della Mirandola, though Jerome similarly compared Lactantius to Cicero; see Charles B. Schmitt, Cicero Scepticus: A Study of the Influence of the Academica in the Renaissance (The Hague, 1972), 25 n. 20 and addenda 213, addendum on 25 n. 20. On Lactantius and Renaissance Epicureanism, see Letizia Panizza, "Lorenzo Valla's De Vero Falsoque Bono, Lactantius and Oratorical Scepticism," Journal of the Warburg and Courtauld Institutes 41 (1978): 76–107.
- 122. "Epicuri disciplina multo celebrior semper fuit, quam caeterorum; non quia veri aliquid afferat, sed quia multos populare nomen voluptatis invitat." *Divinae institutiones* III xvii (0398A).
- 123. *DRN* IV 1037-1140, 1233-1287.
- 124. Ibid., 1209-1232.
- 125. Ibid., II 644-660.
- 126. On Lactantius and Epicureanism, see G.D. Hadzsits, *Lucretius and His Influence* (New York, 1935), 216–227; also John Penwill, "Does God Care? Lactantius v. Epicurus in the *De Ira Dei*," *Sophia* 43 (2004): 23–43.
- 127. Lactantius: "Qui nimium parcus est, discit aqua et polenta vitam posse tolerari." Divinae institutiones III xvii; Seneca, Epistulae II xxi, 10.
- 128. Lactantius: "Non est, inquit, providentiae opus; sunt enim semina per inane volitania, quibus inter se temere conglobatis, uniuersa gignuntur atque concrescunt." Divinae institutiones III xvii; DRNI 1021–1051.
- 129. A similar attack on atomism, and with similar detail, appears in bk. X of Lactantius's *De ira dei*, again quoting Lucretius, but here he focuses on the inadequacy of the atomist account of creation, where atoms might have come from, and how substances with varied properties may derive from the same source.
- 130. "... tum fulmina mittat et aedis/ saepe suas disturbet et in deserta recedens/ saeviat exercens telum, quod saepe nocentes/ praeterit exanimatque indignos inque merentes?" DRN II 1101–1104; Divinae institutiones III xvii.
- 131. "Quod si vel exiguam veritatis auram colligere potuisset, numquam diceret, aedes illum suas disturbare; cum ideo disturbet, quod non sunt suae." *Divinae institutiones* III, xvii. One cannot help but wonder what explanation Lactantius would give for lightning striking Christian temples.
- 132. "Ubi enim sunt, aut unde ista corpuscula? . . . Ita, inquit, et haec ipsa primordia; nam sunt aspera, sunt hamata, sunt laeuia. Secari ergo et diuidi possunt, si aliquid inest illis quod emineat." *Divinae institutiones* III xvii.
- 133. "Quos equidem versus numquam sine risu legere possum" *Divinae institutiones* III, xvii; here Lactantius refers specifically to Lucretius's praise of Epicurus as the wisest of all men, quoting *DRN* III 1043–1044, "Qui *genus humanum ingenio* superavit, et omnes/ Perstrinxit stellas exortus ut aetherius sol."
- 134. "Videtur Papinius potionatum et amatorio delirantem Lucretium significare cum sic inquit in silvis: *Et docti furor arduus Lucreti;* cui rei, ut sentio, Lactantius allusit iis in libro de ira dei positis: 'Quis hunc putet habuisse cerebrum cum haec

- diceret'" (Bologna, 1511), fol. Air; Solaro, *Lucrezio*, 46 lines 70–73. In context the Lactantius line in fact refers specifically to Lucretius's arguments that nothing can come from nothing (I 159–160 and 205–206), which Lactantius sees as contradictory, *De ira dei* X.
- 135. "Unus Lactantius inanissimum poetam vocat quod Epicurum ut murem leonis laudibus ornavit" (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 47 lines 70–72; the sentence Pius includes is a close paraphrase of Lactantius's words in *Divinae institutiones* III xvii. Pius also includes Lactantius alongside Cicero, Jerome and Augustine on a list of authors who employed new and strange vocabulary when attempting to elegantly discuss philosophical matters; Solaro, *Lucrezio*, 46.
- 136. "Inrita coniugii sterilis si munera languent/ nec subolis spes est multos iam vana per annos/ (femineo fiat vitio res necne, silebo:/ hoc poterit magni quartus monstrare Lucreti)"; Serenus *De medicina praecepta* 606. Later scholars searching for theories about Lucretius's suicide have sometimes misread the rather nauseating remedies described by Serenus in this section as components of the love potion that drove Lucretius mad; see Holford-Strevens, "Horror vacui," 4; Gifanius (Antwerp, 1565–1566), fol. A4^r.
- 137. "Idem L. Iulium Calidum, quem post Lucretii Catullique mortem multo elegantissimum poetam nostram tulisse aetatem vere videor posse contendere, neque minus virum bonum optimisque artibus eruditum, [quem] post proscriptionem equitum propter magnas eius Africanas possessiones in proscriptorum numerum a P. Volumnio, praefecto fabrum Antonii, absentem relatum expedivit." Atticus 12, 4.
- 138. "quod omnium poetarum suae aetatis esset gravissimus et iudicio Cornel. Nepotis ac M. Ciceronis praestantissimus." (Antwerp, 1565–1566), fol. **5°; Solaro, Lucrezio, 60 lines 60–61. Gifanius repeats the reference at the conclusion of his biography: "de Lucretio nostro quidem Ciceronis ac Nepotis, auctorum minime vulgarium, qui eum non poetam duntaxat, sed praestantissimum etiam poetam laudant . . ." (Antwerp, 1565–1566), fol. A1°; Solaro, Lucrezio, 68 lines 282–284. Gifanius quote list is fols. A3°-4°.
- 139. See Reynolds, Texts and Transmission, 247–248; Hadzsits, Lucretius and His Influence, 58–59; Peter Marshall, introduction to Cornelii Nepotis Vitae Cum Fragmentis (Leipzig, 1977), v-ix; John Rolfe, introduction to the Loeb edition of Cornelius Nepos (Cambridge, Mass., 1960), 356–364.
- 140. (Paris, 1570), fol. d2°; Solaro, Lucrezio, 74 lines 128-135.
- 141. "Iam paene supervacaneum videri potest eminentium ingeniorum notare tempora. Quis enim ignorat diremptos gradibus aetatis floruisse hoc tempore Ciceronem, Hortensium, anteque Crassum, Cottam, Sulpicium, moxque Brutum, Calidium, Caelium, Calvum et proximum Ciceroni Caesarem eorumque velut alumnos Corvinum ac Pollionem Asinium, aemulumque Thucydidis Sallustium, auctoresque carminum Varronem ac Lucretium neque ullo in suscepto carminis sui opere minorem Catullum?" *Historiae Romanae* II 36, 2.
- 142. For the manuscript tradition, see Shipley's introduction to the Loeb, Compendium of Roman History: Res Gestae Divi Augusti (Cambridge, Mass., 2002), viii-ix.

- 143. Notably, Gifanius's biography in the 1565–1566 edition does not use the quotation, but it does seem to reference Velleius's history in its reference to the prosecution of Publius Rutilius in 92 B.C. (Velleius II xiii, 2 [Antwerp, 1565–1566], fol. **5°; Solaro, *Lucrezio*, 59 line 29); Lambin's biography in the 1570 edition reproduces the entirety of the quotation in fn. 36, and when treating the Lucretian family also references Velleius's mention of Ofella Lucretius in II xxvii, 6; (Paris, 1570), fols. d1°–d2°; Solaro, *Lucrezio*, 72 line 80, and 74 lines 119–127. Note that Solaro's collection, *Lucrezio*, reproduces all these early biographies of Lucretius, and the volume's inclusion in Google Books makes it considerably easier to access than the original printings, so for printed biographies I shall list both the folio number in the original edition and the page and line number in the Solaro, *Lucrezio*, reprint, while for the two manuscript biographies I shall include only the Solaro, *Lucrezio*, references. Most of these also appear in the 1725 edition (see Appendix C).
- 144. See Hadzsits, *Lucretius and His Influence*, 229, 232–235; Marcus Deufert, "Zur Datierung des Nonius Marcellus," *Philologus* 145 (2001): 137–149.
- 145. "... multa etiam depravata correximus ex versibus citatis a Prisciano Macrobio, & ante omnes Marcello, apud quem tamen saepius pro Lucretio, Lucillius est suppositus ..." (Venice, 1500), fol. 3^v.
- 146. Gifanius (Antwerp, 1565–1566), fol. **7'; Solaro, *Lucrezio*, 65 lines 212–215; Lambin (Paris, 1570), fol. d4'; Solaro, *Lucrezio*, 85 lines 444–447.
- 147. "Ego nec abortiva dico ac ne amatoria quidem, memor Lucullum imperatorem clarissimum amatorio perisse . . ." Historia naturalis XXV vii, 25. In modern debates, Bailey and Zeigler have used this passage as evidence against Eusebius-Jerome's love potion story, arguing that it is implausible that Pliny, in this catalogue of the ills worked by potions, would not have mentioned Lucretius's death, which came only a year after Lucullus's; Titi Lucreti Cari, 1: 9 n. 11; Zeigler, "Der Tod des Lucretius," 421–440.
- 148. L. P. Wilkinson argues that a scholar like Jerome would not have misread Lucullus as Lucretius; see Wilkinson, "Lucretius and the Love-Philtre," 47–48.
- 149. On humanist theories of historical linguistics, see Mirko Tavoni, Latino, grammatica, volgare: storia di una questione umanistica (Padua, 1984); Angelo Mazzocco, Linguistic Theories in Dante and the Humanists: Studies of Language and Intellectual History in Late Medieval and Early Renaissance Italy (New York, 1993).
- 150. Servius, Aeneid I i, 1–3: "In exponendis auctoribus haec consideranda sunt: poetae vita, titulus operis, qualitas carminis, scribentis intentio, numerus librorum, ordo librorum, explanatio." Pius quotes only the section after the colon; (Bologna, 1511), fol. Air; Solaro, Lucrezio, 44 lines 19–21.
- 151. "Quamvis M. Varro unum et XX fuisse adfirmat, quorum principium non praetermisit . . ." Solaro, *Lucrezio*, 26 lines 18–20. Diogenes Laertius discusses the number of Epicurus's works at X 27.
- 152. Among the more implausible is his argument against the alternate first line given by Varro, which says that Lucretius, who states in bk. I that time has no real existence, would not have taken "tempus" as his subject in the first line of his epic. "Nam quo pacto tempus quaerere proponit, quom nullum tempus per se esse di-

cat? Ut in primo libro: Tempus item per se non est." Solaro, Lucrezio, 34 lines 64-66; DRN I 149. Borgia follows this discussion directly with his overview of the topics covered by the work, which he says are spelled out in a passage of bk. I that he interprets (falsely) as the apparatus of the poem. Because all the topics he spots in his supposed apparatus are covered in the poem, this, he argues, demonstrates the philosophical completeness of the six-book version and the superfluity of a further fifteen. In a separately dated note at the very end of his vita, however, Borgia shows some sympathy with the opposing camp by including a line from Virgil's Georgics that is attributed to Lucretius by Servius despite not appearing in the De rerum natura. On this evidence, Borgia states that it is plausible that there were some works of Lucretius that are now lost, though they are not necessarily parts of the same poem. "Non ego cuncta meis amplecti versibus opto, Non mihi si linguae centum sint oraque centum, Aenea vox: hos versus, quos Vergilius sibi vendicavit, Servius ait esse Lucretii, unde credibile est multa carmina intercidisse quae non extant." Solaro, Lucrezio, 36 lines 125-128. Virgil, Georgics II 42-44; Servius, Georgics II 42. Although the body of the vita is dated "Idibus Aug. Anno domini MDII Neapoli," the final note is dated "Nonis Iulii MDII sub Pontano cursim legente et emendante." If these dates are accurate, we must interpret the final note as an earlier observation made during his work with Pontano, to which the early pro-six-books arguments are an answer.

- 153. "A qua bipertita divisione Lucretius suorum unius & xx librorum initium fecit hoc. Aetheris et terrae genitabile quaerere tempus." (Florence, 1512), fol. Av^r; the original is *De lingua Latina* V iii, 2.
- 154. Pius: "Librorum numerus senarius putatur ab ombinus, nec plura quam volumina sex naturalia comperio a Marcello, Lactantio Macrobioque citari." (Bologna, 1511), fol. Air; Solaro, *Lucrezio*, 47 lines 99–101, though the discussion continues to line 110 on p. 48. Priscian is treated in lines 206–207.
- 155. "Sed et Priscianus in VI, septimum eius librum citat, Macrobius vero XVII, quo argumento imperfectum opus dixi, quod et video placuisse Beroaldo Seniori." (Lyons, 1576), fol. a2^v; Solaro, *Lucrezio*, 54–55 lines 22–24. This is the last line still included in the abridged Gifanius vita printed in the 1567 edition. Most likely Giraldi is referring to conclusions preserved in the print copy corrected by Beroaldo, which was also used by Pius.
- 156. Even Candidus, who copied Crinitus, treats the debate in an introductory letter; all others treat it in the biographies themselves.
- 157. (Antwerp 1565-1566), fols. **6^v-**8^r; Solaro, Lucrezio, 62-66 lines 133-234.
- 158. Gifanius: "Brevi ut praecidam, librum Varronis mendo contaminatum hic esse contendo." (Antwerp, 1565–1566), fol. **7^r; Solaro, *Lucrezio*, 64.
- 159. (Paris, 1570), fols. d4^{r-v}; Solaro, Lucrezio, 82-85 lines 356-452.
- 160. (Paris, 1570), fol. d3v; Solaro, Lucrezio, 83 lines 381-393.
- 161. (Paris, 1570), fol. d4^r; Solaro, Lucrezio, 83-84 lines 406-420.
- 162. "Cuius rei cum sint mihi illa quoque argumenta non imbecilla, primum quod Grammatici veteres, alii scriptores, Festus, Nonius, Diomedes, Priscianus, Probus, Carisius, Donatus, Servius, Tertullianus, Arnobius, Lactantius, nullum Lucretii librum ultra sextum commemorat . . ." (Paris, 1570), fol. d4^r; Solaro, *Lu-*

- *crezio*, 82 lines 361–365. Today we would expect to find Fronto on this list, since he too quoted Lucretius, but his works were not rediscovered until 1815–1819; see Reynolds, *Texts and Transmission*, 173–174.
- 163. Festus's digest of the lost *De Verborum Significatu* of Verrius Flaccus contained Lucretian grammatical examples, and was partly preserved in Paulus Diaconus. See Henry Nettleship's two articles in *The American Journal of Philology:* "Verrius Flaccus I," 1, no. 3 (1880): 253–270, and "Verrius Flaccus II," 2, no. 5 (1881): 1–19.
- 164. See Hadzsits, *Lucretius and His Influence*, 163–164. Probus was particularly fresh in Lambin's mind in 1570 because of the work Lambin did in 1569 proving the real authorship of the sections of Cornelius Nepos once falsely attributed to Probus.
- 165. Ars grammatica; Diogenes draws examples from both Lucretius and Lucilius, and associates Lucretius yet again with Empedocles. He cites Lucretius in the first of two chapters titled *De verbo* at 343 and 371 and in his section *De arte metrica* 482–483 (483 "Didascalice est qua conprehenditur philosophia Empedoclis et Lucreti, item astrologia, ut *phaenomena* Aratus et Ciceronis, et georgica Vergilii et his similia." Lucilius is quoted in *De verbo* 365, 369, 376; *De syllabis* 430; *De uitiis et uirtutibus orationis* 452; and *De arte metrica* 485–486, 8.
- 166. Ars grammaticae; Lucretian quotations appear at 77.16, 114.19, 116.8, 118.2, 119.5, 150.18, 154.28, 265.10, 268.5, 272.6; and notable references to Lucilius at 89.24, 90-92, 98-100, 152.4, 157.15, and 159.30, though others are scattered throughout the text.
- 167. Hadzsits, Lucretius and His Influence, 203.
- 168. On Lucretius in Arnobius, see Hadzsits, Lucretius and His Influence, 203-215.
- 169. A Neapolitan edition; see Charisius, *Ars grammaticae*, ed. Carolus Barwick (Leipzig: Teubner, 1964), xxvii; Reynolds, *Texts and Transmission*, 50–53.
- 170. A Roman edition printed by Faustus Sabaeus; see Arnobius, *Adversus nationes libri VII*, ed Augustus Reifferscheid (Vienna, 1875), xix.
- 171. The *De Anima* references Lucretius most clearly at 5.6 and 19.7. See Tertullian, *Quae supersunt omnia*, ed. Franciscus Oehler (1853–1854), vol. 2; Robert Brown, *Lucretius on Love and Sex* (1987), 39, esp. n. 79.
- 172. On Lucilia, see Leofranc Holford-Strevens, "Horror vacui," 5.
- 173. Borgia: "noxio tandem improbae foeminae poculo in furias actus sibi necem conscivit . . ." Solaro, *Lucrezio*, 33 lines 39–40. Holford-Strevens argues that some of Pomponio Leto's phrasing also suggests a female lover.
- 174. "Livia virum suum interfecit quem nimis/ odit; Lucilia suum quem nimis amavit. Illa sponte miscuit aconiton, hec decepta furorem propinavit pro amoris poculo." W. Map, *De nugis curialium* IV 3 (New York, 1989), 304–305. On Lucilia, see *Titi Lucreti Cari*,1:11–12.
- 175. Crinitus, *De Poetis Latinis*, fol. B3^r; Solaro, *Lucrezio*, 39 lines 48–53; Giraldi: (Lyons, 1576), fol. a2^r; Solaro, *Lucrezio*, 55 lines 13–16. Crinitus ends his biography with the quote, introducing it: "Sunt qui hanc, ex verbis Hieronymi in dissuasoria contra Ruffinum, Luciliam dici contendant. Ne quis vero de Hieronymi verbis scrupulus sit, lubuit hic ea adiicere."

- 176. "Asserunt id ei accidisse ob amatum puerum, quem ab candore et forma egregia appellabat Astericon." Solaro, Lucrezio, 27 lines 25–27. Because this passage does not directly state that Astericon gave Lucretius the potion, it has sometimes been interpreted as suggesting that the potion was administered by a jealous third party, possibly female; see Holford-Strevens, "Horror vacui," 5.
- 177. *Ibis*, 419–420, reads: "Filius et Cereris frustra tibi semper ametur,/ Destituatque tuas usque petitus opes." See Solaro, *Lucrezio*, 13; also Leto, *Lucrezio*, 60–62; Solaro, "Note sulla fortuna di Lucrezio," *Res publica litterarum*, 22 (1999): 153–159.
- 178. IV 1053-1057, "... puer membris muliebribus ..."
- 179. BAV Ross. lat. 884, BAV Patetta 312, Padova BC C.75, Padova C.76, BL Harl. 2554.
- 180. Cambridge UL Nn.2.40 (Ovid quotation in the margin, fol. 71^r by V 95).
- 181. Munich Clm 816a, Naples BN IV E, Laur. 35.25.
- 182. Laur. 35.29 fol. o^v. The note reads, "vergilius autem multa ex hoc opera translabit in suos libros."
- 183. The number of copies printed in a premodern edition was primarily limited by the speed of the press operators. Philip Gaskell's study of the average number of impressions per day in eighteenth-century print shops, whose technology was nearly identical to that of sixteenth-century print shops, suggests an average of 1,566 to 2,834 impressions per day, resulting in an equivalent number of copies at the end of production (*New Introduction to Bibliography* [New Castle, Del., 2000], esp. 139). Earlier editions were sometimes smaller, so 1,000 copies is thus a reasonable estimate for the standard size of a premodern print run, fewer for incunables; my thanks to Todd Samuelson of the Texas A&M University Cushing Library. For significantly more detail, see also Uwe Neddermeyer, *Von der Handschrift zum gedruchten Buch* (Wiesbaden, 1998), esp. 1389–1392.

4. The Lofty Madness of Wise Lucretius

- 1. Lucretius disagrees with both Aristotle and Christianity here. He argues against creation in time, saying that atoms must have existed from eternity because nothing can come from nothing (I 159), much as Aristotle argues, but Lucretius also argues that the world itself is comparatively young, because it is still developing and we have no histories more than a few centuries old (V 324–338); the latter two arguments, like Lucretius's attacks on superstition and pagan ceremonies, could be borrowed and used by Christians if the elements that contradict Christianity were judiciously excised.
- 2. For treatments of these biographies, see Vitae Pomponianae. Biografie di autori antichi nell'Umanesimo romano, Lives of Classical Writers in Fifteenth-Century Roman Humanism, proceedings of a conference hosted by the Danish Academy in Rome and the American Academy in Rome, April 24, 2013, edited by Giancarlo Abbamonte, Marianne Pade, and Fabio Stok, Renæssanceforum 9 (2014), includ-

- ing my chapter, "The Use and Defense of the Classical Canon in Pomponio Leto's Biography of Lucretius." Texts and translations of the lives are included.
- 3. The vita survives in a copy of the 1486 Verona edition, Utrecht, Universiteisbibliothek, Litt. Lat. X fol. 82 (Rariora).
- 4. Leto begins: "M. Varro, Romanae linguae parens, tria observanda rebus omnibus tradit: origo, dignitas et ars." Solaro, *Lucrezio: Biografie umanistiche* (Bari, 2000), 26 lines 2–3; Varro, *De Re Rusticus* II i, 1. This quotation, largely irrelevant to the subsequent treatment of Lucretius, is one of many ornaments Leto adds in order to advertise his Latin skills and access to rare texts.
- 5. Solaro, Lucrezio, 26 lines 17-22; on the twenty-one-books debate, see Chapter 3.
- 6. Ibid., 26-27 lines 22-27; on Astericon, see Chapter 3.
- 7. Ibid., 27 lines 28-43.
- 8. See Solaro, "'Venere doma Marte' A proposito di uno sconosciuto corso universitario su Lucrezio di Pomponio Leto," in Acta Conventus Neo-Latini Bariensis: Proceedings of the Ninth International Congress of Neo-Latin Studies, Bari, 29 August to 3 September 1994 (Tempe, Ariz., 1998), 557-564.
- 9. Petrarch, Triumph of Fame III 140; Horace, Epistulae I iv, 16.
- 10. "Miror Ciceronem, quo modo laudat modo vituperat Epicurum illiusque voluptatem vitiorum incitamenta effingit. Tecum, M. Tulli, contendo, quum in deliciis ciborum et potus et quoiusvis genere libidinis Epicuri voluptatem ponas, et in hanc sententiam alios auctoritate tua traxeris." Solaro, *Lucrezio*, 29 lines 92–96.
- 11. Epistulae Familiares XXIV 3, 4.
- 12. "Video quod summum beatumque et aeternum bonum est in mortalibus, id esse minime putavit, quod vir scientiae plenus multo melius existimasset si et deum optimum maximumve cognovisset et animas non interire concessa optatissima resurrectione intellexisset." Solaro, *Lucrezio*, 29–30 lines 102–106.
- 13. For the complete quotation list, see Chapter 3.
- 14. Aldus had tutored Prince Albertus Pius in his youth and dedicated his second Aristotle volume to him in 1497; see P. S. Allen, "Linacre and Latimer in Italy," *English Historical Review* 18, no. 71 (July 1903): 515.
- 15. (Venice, 1500), fol. 3r.
- 16. "quum praesertim hanc editionem imprimendam curarit Aldus Manitius homo latinis graecisque litteris eruditus, earundem mirifice cultor, & adeo instaurator ut non tam Pisistratus & Nicator Seleucus, aut M. Varro de his promeruerint." Aldus, in turn, describes Avancius as a man of the Latin language: "Qua in re habenda est plurima gratia Hieronymo Avancio Veronensi, viro latinae linguae, ac liberalium disciplinarum non mediocriter perito." Ibid., fol. 1^v.
- 17. Incendium ad Avernum lacum horribile pridie Ka. Octob. 1538, nocte intempesta exortum (Naples, 1538).
- 18. "Hieronimus Borgius Lucanus Elisio Poo iuveni erudito patricio Neapolitano salutem et voluptatem." Solaro, *Lucrezio*, 32 lines 1–3.
- 19. "Non possum aliquando magnopere non admirari, quom tot innumerabilia hominum milia diversa studia sectantium natura genuerit, ut fere tot opiniones totque artes, quot homines sunt, inveniantur, cur relicta ac penitus posthabita meliore sui parte, omnes admodum aevo nostro ad corporis cultum atque usum

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labores, operam et cogitationes denique omnis impendant, tanquam ad hoc unum nati videantur, ut tunc secum bene actum censeant, quom corporis voluptatibus sensus omnes copiose expleverint." Ibid., 32 lines 4–12.

- 20. Ibid., 32 lines 22-25; De Finibus II, 40.
- 21. Solaro, Lucrezio, 32-33 lines 25-33.
- 22. (Venice, 1495), Ven. Marciana Incun. Ven.743.
- 23. Solaro, Lucrezio, 33-45 lines 39-54.
- 24. On Atticus's status as an Epicurean, see Robert Leslie, *The Epicureanism of Titus Pomponius Atticus* (Philadelphia, 1950).
- 25. On this debate, see ibid., 5-10. The Vita Borgiana was first identified by John Masson in a letter published in June 1894. His case for the Suetonius source is elaborated in Lucretius, Epicurean and Poet (New York, 1907), 5-6, 38-39, 41-43, and 57-58. For a more recent treatment, see Holford-Strevens, "Horror vacui in Lucretian Biography," Leeds International Classical Studies1, no. 1 (2002): 2 n. 3. Another early figure important in the debate is Carl Radinger; see Radinger, "Reste der Lucretiusbiographie des Sueton," Berliner philologische Wochenschrift 39 (September 22, 1894): 1244-1248. This theoretical section of De viris illustribus, presumably discovered by Pontano, who found many critical manuscripts, has also been suggested as a possible source for sections of Sicco Polenton's Scriptorum illustrium Latinae linguae libri XVIII.
- 26. The phrase "Neptuni lacunas" does not appear in the *DRN*, but it does appear in the anonymous *Rhetorica ad Herennium* (IV 15), then attributed to Cicero. "Coeli cavernas" does appear at *DRN* IV 171 and "aetheriis cavernis" at VI 391. On the plausibility of these as genuine Cicero additions, see Merrill, "Lucretius and Cicero," *Classical Review* 10, no. 1 (February 1896): 19; also Masson, *Lucretius, Epicurean and Poet*, 36–44.
- 27. Serenus xxxii; see also Chapter 3.
- 28. Christopher Wood, Forgery, Replica, Fiction: Temporalities of German Renaissance Art (Chicago, 2008).
- 29. Wood connects this change in mindset to the advent of mass production granting special status to the original; see ibid.
- 30. Masson's analysis of the figures on the list is still quite relevant; Masson, "New Details from Suetonius's Life of Lucretius," *Journal of Philology* 23, no. 46 (1895): 224–225, 234–235.
- 31. Piso's family nickname "Frugi" could also be conflated with Epicurean dietary moderation. On the family tree of the Calpurnii, see Chance W. Cook, "The Calpurnii and Roman Family History: An Analysis of the Piso Frugi Coin in the Joel Handshu Collection at the College of Charleston," *Chrestomathy* 1 (2002): 1–10, esp. 10.
- 32. Another C. Velleius is known from a north African milestone (C.I.L. VIII 10, 311); the cognomen Gallus is inexplicable. See Masson, Lucretius, Epicurean and Poet, 9.
- 33. Cicero, In Pisonem 68; see Masson, Lucretius, Epicurean and Poet, 6.
- 34. Pollius Felix's villa at Naples might account for the nickname Parthenopeus. The name Pollius Parthenopeus appears in *Corpus Inscriptionum Latinarum* (vi, 3360.) in an inscription of uncertain origin; see Masson, "New Details," 235.

- 35. Borgia includes the favorite fun fact that Virgil places the Memmii on the list of those who came from Troy. Solaro, *Lucrezio*, 34 lines 54–60.
- 36. At the end of the page, a separate note includes the line from Servius that supports the twenty-one-books theory, dated July 1502, before the August date given for the main text. Solaro, *Lucrezio*, 36 lines 125–128 and note; Virgil, *Georgics* II 42; Servius, *Georgics* II 42.
- 37. Solaro, Lucrezio, 34 lines 60-79.
- 38. "Cuius quidem poetae arduum difficillimumque propositum eo tendit, ut relligiones funditus corruant atque homines perturbationibus liberentur. Questionem pervagatissimam agreditur, nihil posse ex nihilo gigni, statuitque duo rerum naturae primordia, inane et solidum." Solaro, *Lucrezio*, 34–35 lines 79–83.
- 39. Ibid., 35 lines 83-101; Servius, Eclogues VI, 31.
- 40. "Alma Venus: duplicem respexit Veneris potestatem; altera est qua res in lucem producuntur, quae dicitur vis, altera qua veluti in materiae gremio res concipiuntur, quae dicitur natura. Initum id est coitum, ab eo quod est ineo, inis, ut apud Ovidium, de Venere: Illa quidem totum dignissima temperat annum, Illa tenet nullo regna minora deo Iuraque dat caelo, terrae et natalibus undis Perque suos initus continent omne genus." Solaro, Lucrezio, 35–36 lines 102–108; Ovid, Fasti IV, 91–94.
- 41. Bk. II, chap. XIX, fols. B2^v-B3^r. See Houghton *IC5 C8685 505 ℓ , or BL 1068 h 9 [2]; cf. Solaro, *Lucrezio*, 37-41.
- 42. "In hoc libro eos relaturi sumus qui plura indies ac meliora scripserunt apud latinos accedemusque ad aetatem Pub. Vergilii." Crinitus, *De Poetis Latinis*, fol. B2°.
- 43. Ibid.
- 44. Ibid., fol. AA4^r.
- 45. "Non me praeterit alios in hoc dissentire: sed hi quidem, dum parum diligenter temporum rationem observant, facile refelli possunt Publius Vergilius non modo verba aliquot accepit ex poematis Lucretii, sed locos pene integros ab eo transtulit, quod & Grammatici veteres accurate notarunt." Crinitus, De Poetis Latinis, fol. B3r; Solaro, Lucrezio, 39 lines 33–37. The reference is clearly Aulus Gellius, "Non enim primus finxit hoc verbum Vergilius insolenter, sed in carminibus Lucreti iuvento usus est non aspernatus auctoritatem poetae ingenio et facundia praecellentis. Verba ex IV Lucreti haec sunt:/ dilutaque contra/ cum tuimur misceri absinthia, tangit amaror./ Non verba autem sola, sed versus prope totos et locos quoque Lucreti plurimos sectatum esse Vergilium videmus." Noctes Atticae I 21, 5–7.
- 46. "Paulo antiquior fuit Terentio Varrone et M. Tullio, ut quidam scripserunt, quod est observatum diligenter, quoniam in his Annalibus (quos a graecis habemus) complura falso exposita sunt contraque rationem temporum perverse signata." Crinitus, De Poetis Latinis, fol. B2*; Solaro, Lucrezio, 38 lines 2–7.
- 47. "Eusebius tradit tanto eum furore percitum fuisse assumpto amatorio poculo, ut propria manu se interfecerit . . ." Crinitus, *De Poetis Latinis*, fol. B3^r; Solaro, *Lucrezio*, 39 lines 40-42.
- 48. "... paucos annos supra XL..." Solaro, *Lucrezio*,39 line 40; Donatus is quoted at lines 42-44.

- 49. "... neque mirari oportere, si Lucretii versus duriores interdum videntur, & quasi orationi solutae similes." Crinitus, *De Poetis Latinis*, fol. B3^r; Solaro, *Lucrezio*, 38 lines 22-24.
- 50. Crinitus writes, "Fuit hoc proprium illis temporibus, ut optime testatur apud Macrobium Furius Albinus, cuius verba haec sunt: Nemo debet antiquiores poetas ea ratione viliores putare, quod eorum versus nobis scabri videntur." Crinitus, De Poetis Latinis, fol. B3^r; Solaro, Lucrezio, 38–39 lines 24–27. The Macrobius quote is from Saturnalia VI iii, 9, and although Furius Albinus is mentioned in the beginning of Saturnalia VI, he is not the subject of that particular line.
- 51. "Quae res non modo propter ipsam materiam illi contigit, sed etiam propter egestatem linguae, & rerum novitatem, ut ille inquit." Crinitus, *De Poetis Latinis*, fol. B2°; Solaro, *Lucrezio*, 38 lines 13–15; *DRN* I 136–139.
- 52. Fleischmann, "Lucretius Carus, Titus," in Catalogus Translationum et Commentariorum: Medieval and Renaissance Latin Translations and Commentaries, Annotated Lists and Guides, ed. P.O. Kristeller, and F. Edward Cranz, vol. 2 (Washington, D.C., 1960), 353.
- 53. "Scripsit libros sex de Natura rerum in quibus doctrinam Epicuri, & Empedoclem poëtam secutus est, cuius carmen atque ingenium admiratur." Crinitus, *De Poetis Latinis*, fol. B3^r.
- 54. Navagero 8°, Lyons 1534; Navagero 4°, Paris 1539; Navagero 8°, Paris 1540; Rescius 4°, Louvain 1542; Navagero 16°, 1546; Navagero 16°, 1548; Navagero 16°, 1558; Marnef 16°, Paris 1564; Lambin 16°, Paris 1565 (with some textual variations); Marnef 16°, Paris 1567. The Crinitus vita also appears in the 1606 Lambin Lyons pocket edition, which the 1596 edition attested in Baudrier (V 283) is supposed to match, but the copy cited by Baudrier (Bibliotheque St. Genevieve, Paris, formerly Y 273, now 8 Y 273 1377) is, in fact, the 1606; I have found no other evidence of the existence of a 1596 edition, and thus believe it to be a ghost.
- 55. On Pius see Solaro, Lucrezio, 43-45.
- 56. "Hieronymus Libro contra Rufinum primo scribit se vidisse commentarios in Lucretium et Plautum. Nemo me igitur temeritatis arguat, qui et Plautum iampridem sum interpretatus, et nunc cum Lucretio auctorum difficillimo congredior, utpote qui sine circumfusis commentariis vix percepi, immo nullatenus ab ingeniis mediocribus concessum est." (Bologna, 1511), fol. Air; Solaro, Lucrezio, 44 lines 5–10.
- 57. So confident was Pius that a customer sufficiently interested in archaic Latin to purchase Lucretius would also want his Plautus that he printed corrections to the Plautus in the back of his Lucretius, along with some for his Seneca. See (Bologna, 1511), fol. NN6°, Ioannes Baptista Pius Ludovico Gesilardo... Plautinae retractiones; fols. 2O1-6, Annotata Nonnulla... ex Commentariis Pii in Plautum; fols. OO6°-7 Ad lectorem (regarding Seneca edition).
- 58. Ibid., fol. A1^v; Solaro, *Lucrezio*, 44 lines 13–18. Pius includes Hermogenes I 198 and Aurispa's translation of Cassius Dio XXXVIII 28, 2.
- 59. Servius, *Aenead* I i, 1–3: "In exponendis auctoribus haec consideranda sunt: poetae vita, titulus operis, qualitas carminis, scribentis intentio, numerus librorum,

- ordo librorum, explanatio." Pius quotes only the section after the colon; (Bologna, 1511), fol. Air; Solaro, *Lucrezio*, 44 lines 19–21.
- 60. (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 44 lines 23–27. The lines quoted are *DRN* I 41–42.
- 61. (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 45 lines 33–53; Democritus fragments 17–18 D–K.
- 62. "Post Lucilium nasi primum conditorem Sidonius Lucretium nominavit." (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 47 lines 83–84. Sidonius's comparison of Lucretius to Lucilius reminds us that that Pius does not side with those who would read the two names as one.
- 63. (Bologna, 1511), fol. Air; Solaro, Lucrezio, 46 lines 68-73.
- 64. (Bologna, 1511), fol. Ai^r; Solaro, *Lucrezio*, 45 lines 46–49. Pius uses Ficino's translation of *Sophist* 254: "vulgarium animarum oculi divinitatis radios sustinere non possunt."
- 65. (Bologna, 1511), fol. Air; Solaro, Lucrezio, 45-46 lines 50-52.
- 66. (Bologna, 1511), fol. Air; Solaro, *Lucrezio*, 46 lines 52-63. Manilius, *Astronomia* III 39-42.
- 67. (Bologna, 1511), fols. Ai^{r-v}; Solaro, *Lucrezio*, 47 lines 91–95. "In hoc opere intendit mentem nebulis inscitiae circumfusam liberare, et ad illam felicitatem inducere, quam Maro pollicetur ita canens: *Felix qui potuit*... *Acherontis avari*."
- 68. The presence of this division in the deist movement, particularly in the works of Rousseau, is another link between Lucretius and the Enlightenment.
- 69. "Nititur pro viribus religionum hoc est superstitionum nodis animos exsolvere, ut nihil timeant, cupiant nihil, quod sit citra decorum." (Bologna, 1511), fol. Ai^v; Solaro, Lucrezio,47 lines 95-97. On distinctions between terms like religio and superstitio, see Bamborough's commentary on Burton's Anatomy of Melancholy (Oxford, 1989); James Hankins, "Monstrous Melancholy: Ficino and the Physiological Causes of Atheism," in Laus Platonici Philosophi: Marsilio Ficino and His Influence, ed. Stephen Clucas, Peter J. Forshaw, and Valery Rees (Leiden, 2011).
- 70. "Intentio sane vatis est communis utilitas . . ." (Bologna, 1511), fol. Ai^v; Solaro, *Lucrezio*, 47 line 97.
- 71. (Bologna, 1511), fol. Ai^v; Solaro, *Lucrezio*, 47–48 lines 99–107. The letters of Lucius Anneus Floris are also invoked by Pius (Solaro, *Lucrezio*, 49 line 110) and by Giraldi (Solaro, *Lucrezio*, 55 lines 34–35) on the debate and on Memmius's genealogy, though neither use is particularly relevant to Lucretius.
- 72. (Bologna, 1511), fol. Ai^v; Solaro, *Lucrezio*, 48 lines 110–124. Although Pius may have accessed Marullo's copy, the majority of Marullo's corrections were not assimilated into the Lucretius tradition until later printings.
- 73. See the Munro 1905 edition, 4-5.
- 74. "quippe verum est id Thucydidis in secundo loquente Pericle: qui novit neque id quod sentit explicat perinde est ac si nesciret." (Bologna, 1511), fol. Ai^v; Solaro, *Lucrezio* 48 lines 127–129; Thucydides II lx, 6.
- 75. (Bologna, 1511), fols. Aiv-iiv; (Paris, 1514), fols. Aixv-xv.
- 76. "Amplius arduum esse & forsitan impossibile sententias Epicureas recte tradere: quem modo Stoicum, modo voluptarium conspicio: modo Catonem modo Sar-

- danapalum: modo hispidum & macilentum, modo coronatum & comessatorem." (Bologna, 1511), fol. Aii^r; (Paris, 1514), fol. Ax^v.
- 77. (Bologna, 1511), fols. π 2^r-4^v; (Paris, 1514), fols. Aii^r-iii^v.
- 78. "Totus Lucretius nodosus, mendosus, impervius & uti graeco inolevit adagio totus fuit echinus asper. Multi qui ante nos lucretium attentarunt fulgur ex pelui minitantes, echinatam demum doctrinam aversati, canes nilotici facti sunt, & desperatione suborta rhipsaspides." (Paris, 1514), fol. Aiii^r.
- 79. This brief letter collects references (Pliny, Quintilian), makes the standard comparisons to Varro and Empedocles, laments the difficulty of the language imposed by the subject matter, and lists those who contributed to its restoration: Marullo, Pius, and Beroaldo. "Scripsere primum latino carmine res physicas illustres poetae duo Empedoclis exemplum secuti Varro Attacinus Narbonensis gallus, & Carus Lucretius Romanus. Quorum alter Pythagoreum dogma secutus dicitur, sicut hic noster epicureum: quod & Hieronymus in Ruffinum testat & Lactantius in eo libro cui titulus est de opificio dei apertissime comfirmat. Egregius uterque, quodque multo mirabilius, in tam difficilis materiae genere elegans ac purus. Verum de Varrone alieni operis interprete non spernendo quidem, ut Fabius ait, sed ad augendam dicendi facultatem parum idoneo parce dicendum hoc loco, ut cuius scripta aetas adhuc nostra desideret. Lucretii vero libri sex numero ex antiqua illa ac publica literarum clade reliqui, ac velut e naufragio eiecti, obscuri primum mutili luxati & a doctis parum antehac intellecti Merulae primum (ut audio) dein Beroaldi diligentia locis amendati compluribus, mox a Baptista pio vetustatis diligentissimo ac plane antiquario interprete restituti nobis ac illustrati proxime in lucem exeuntes incredibili studiosorum favore ac plausu sunt excepti." (Paris, 1514), fol. Aiv.
- 80. Ibid. "Lucretium porro ipsum, quoque de Atomis /inani/ nihiloque quaedam cum Epicuro suo somniaverit, non modo propter doctae vetustatis quae in eo visuntur vestigia diligentissime legendum puto, sed propter iucundissimam rerum cognitionem dignam homine libero, atque adeo meliorem hominis partem perficientem & ad activas, morales que virtutes sensim perducentem." The slashes setting off "/inani/" are present in the original.
- 81. (Bologna, 1511), fol. π1^v; (Paris, 1514), fol. Aiii^v. "Mitratos inter proceres venerande Georgi/ Mens: oculi: os: aures principis Aemathii:/ Romuleis animum vigilem nunc dede libellis./ Hoc Pius: hoc vates: hoc rogat usque cliens./ Scipiadas imitare precor: Sullamque: Titumque:/ Et quibus in coelum versibus ire libet./ Et famae vates praeco. Tibi nostra camaena/ Serviet in laudes semper itura tuas:/ Tu modo pauperiem remove: tenuique poetae/ Ocia Caesareo tuta favore dato./ Sic meritum redimi triplici diadematis auro/ Cingat adoratum coccina mitra caput./ Sic concors faveat tibi celsus olympus Iulo:/ Iuppiter et faciat sic rata vota Iovis." While many dedicatory poems in Lucretius volumes take their subject as their model, here Pius chooses Horace, likely because of Horace's frequent discussions of patron-client relationships that supply appropriate language for Pius to address Georgius. On patron-client relations in Horace, see Phebe Bowditch, *Horace and the Gift Economy of Patronage* (Berkeley, 2001).
- 82. Tommaso Soderini was already known to Lucretius scholars for his patronage of Raphael Francus's paraphrases published in 1504; see C. A. Gordon, *A Bibliography*

- of Lucretius (London, 1962), 495, 228–229. Older treatments of Lucretius print history doubt the "MDXII" date printed in the volume and speculate that it may have been printed as late as 1514; see the Munro 1905 edition, 5; but Gordon does not agree.
- 83. For example, the first sentence of Candidus's vita reads, "T. Lucretius Carus ex Lucretiorum familia, quae Romae insignis, et pervetusta est habita, natus creditur." (Florence, 1512), fol. Aiiii'; Solaro, *Lucrezio*, 50 lines 2–3. Crinitus begins, "Titus Lucretius Charus ex Lucretiorum familia natus creditur, quae Romae insignis et pervetusta habita est." Crinitus, *De Poetis Latinis*, fol. B2^v; Solaro, *Lucrezio*, 38 lines 2–3. On this edition see also Gordon, *A Bibliography of Lucretius*, 5, 52–53.
- 84. (Florence, 1512), fols. Avv-Aixr.
- 85. "Rubri sinus elenchos,/ Argenetasque conchas,/ Et myrrhinum toreuma,/ Vel cimbium a Corintho,/ Seu facta signa caelo,/ Coloribusque vivas/ Artis catae figuras,/ Donum tibi ferunto/ Thoma, quibus sereno/ Fortuna risit ore,/ Qui purpura fluenti/ Verrunt domos et auro/ Bibunt, eburque sellis,/ Et proterunt cubili./ Me pauperem peculi/ Castae vident camenae/ Intersitum libellos,/ Et barbito canentem/ Pura salini mica, &/ Holusculis inemptis/ Vitam die parare." (Florence, 1512), fol. Ai^v.
- 86. "AGRIGENTINUM EMPEDOCLEM pythagoreorum omnium longe clarissiumum, qui posteaquam plerasque graciae urbes cum coronis delphicis, aureisque amyclis inuisisset, in Aetnae se crateras, quo famam divinitatis, corpore nullis arbitris e medio sublato, indipisceretur, nocte intempesta praecipitem dedit, luculentissimum de rerum natura posteris suis graecis poema reliquisse memoriae proditum est. Hunc in latio saeculis haud ita multis post aemulatus .T. Lucretius Carus Epicuri dogma litis multa luce carminibus complexus est." (Florence, 1512), fol. Aii^r.
- 87. "Neque illud nobis praetereundum sane est, quod scriptum in libris de lingua latina a .M. Varrone legitur. Unius ac viginti suorum librorum huiusmodi usum initio Lucretium. Aetheris et terrae genitabile quaerere tempus. Sed nihilo profecto minus & huiusce per me rei monitam iuventutem omnem velim." (Florence, 1512), fol. Aiiii^r.
- 88. "collatis exemplaribus, praestantissimorumque aetatis nostrae vatum Pontani, Marullique" (Florence, 1512), fols. Aiii^{r-v}.
- 89. "Marullus sane amicus olim noster iucundissimus, cuius in hoc opere censuram potissimum secuti sumus, lucretianae adeo veneris per omnem aetatem studiosus fuit, ut nospiam fere non eo comite itaret, nunquam cubitum (quod de Archesilao, Homerique rhapsodia traditur) nisi perlectis aliquot, exploratisque Cari carminibus sese reciperet. Quin etiam ex miseranda illa in mediis Cecinae undis latinarum musarum iactura, cladeque insigni, unus est Lucretius receptus." (Florence, 1512), fol. Aiii^v.
- 90. Munro 1905 edition, 13.
- 91. See Sergio Bertelli and Franco Gaeta, "Noterelle Machiavelliane: Un Codice di lucrezio e di Terenzio," *Rivista storica italiana* 73, no. 3 (September 1961): 544–557; Merrill, "The Italian Manuscripts of Lucretius: Part II (concluded)," *Classical Philology* 9 (1929): 347; and Finch, "Machiavelli's Copy of Lucretius," *Classical Journal* 56 (1960–1961): 29–32.

- Piero Vettori also owned a manuscript, Munich, Bayerische Staatsbibliothek. Cod. lat. mon. 816a.
- 93. Discussed in Chapter 2.
- 94. (Basel, 1531), fol. A3^r.
- 95. "Titus Lucretius Charus poeta fuit Romanus, qui, Epicuream sectam secutus, scripsit de rerum natura opus, quod et si imperfectum, ut videtur, multis tamen luminibus ingenii et artis situm esse, docet quadam ad Q. Fratrem epistola M. Cicero." (Lyons, 1576), fol. a2^r; Solaro, *Lucrezio*, 54 lines 3–6.
- 96. "id quod et ante Eusebium observavit Plinius." Pliny gives: "Ego nec abortiva dico ac ne amatoria quidem, memor Lucullum imperatorem clarissimum amatorio perisse." *Historia naturalis* XXV vii, 25.
- 97. "Extant in praesens, et leguntur sex libri eius de rerum natura, multorum eruditissimorum lima castigati, plures tamen libros ipsum scripsisse innuit his verbis Varro, in primo de lingua Latina, qui eodem vixit tempore: 'Lucretius, ait, suorum unius et viginti librorum initium fecit hoc: Aetheris et terrae genitabile quaerere tempus.' Sed et Priscianus in VI, septimum eius librum citat, Macrobius vero XVII, quo argumento imperfectum opus dixi, quod et video placuisse Beroaldo Seniori." (Lyons, 1576), fol. a2"; Solaro, Lucrezio, 54-55 lines 16-24.
- 98. "Quod cum mendose legatur, difficultatis causam plerisque attulit, non enim causarum, sed casurum legendum est, id quod facile ex quinto ipsius Lucretii libro colligitur, qui futurum ignis incendium disputat, quam ecpyrosin Graeci dicunt, qua de re, praeter genitum philosophos, et Christiani quoque scripserunt." Solaro, Lucrezio, 56 lines 48–52. See DRN V 380–410. On this point Giraldi also invokes the pseudo-Ovidian Consolatio ad Livium; see Solaro, Lucrezio, 56n.
- 99. "Quod quidam ad insaniam, quidam ad poeticam referunt, utrunque illi certe convenit. In haec diverti, quae fere sunt praeter institutum, quod huius poetae lectione vos affici cupio." Solaro, *Lucrezio*, 56 lines 55–58.
- 100. See, for example, Munro's criticisms in the 1905 edition, 15-16.
- 101. "Etsi ab aliis quibusdam viris sane doctis de vita Lucretii sit perscriptum: ea tamen re mihi silendum prorsus non putavi, qui cupio omni ratione studiosis adulescentibus patefacere, qualis & quantus sit ac fuerit poeta." (Antwerp, 1565–1566) fol. **5^r; Solaro, *Lucrezio*, 58 lines 2–5.
- 102. "Verbi gratia, Titus noster eo vixit tempore, quo magis nunquam post homines natos floruerunt artes & doctrinae liberales. Praecepta earum percepit in duobus musarum domiciliis, Roma & Athenis. Viros in r. p. clarissimos & doctis. habuit amicos. Maximus ea tempestate, quo ut dixi tempore ad summum venerant Romani, ut ait Horatius, in his artibus, poeta est habitus." (Antwerp, 1565–1566) fol. **5°; Solaro, Lucrezio, 58 lines 11–18.
- 103. "Alia etiam est ratio cur haec susceperim: quod illi alii vel falso vel perturbate neque Romano more ea tractarint. quod equidem non laedendi doctissimos viros, sed mei excusandi caussa dictum esse velim." (Antwerp, 1565–1566); Solaro, *Lucrezio*, 58 lines 20–24.
- 104. (Antwerp, 1565-1566), fol. **1r.
- 105. See Chapter 1.

- 106. "Scio hac tempestate in re publica fuisse Q. Lucretium: verum an frater fuerit, aut quo inter se propinquitatis gradu, ignoro." (Antwerp, 1565–1566), fol. **5^r; Solaro, *Lucrezio*, 59 lines 36–8. Gifanius is probably referring to Quintus Lucretius Vespillo minor, who survived proscription by the triumvirs in 43 B.C. and was made consul in 19 B.C. See Cicero, *Brutus* 48; Valerius Maximus, vi, 7.2.
- 107. (Antwerp, 1565-1566), fols. **5^{r-v}; Solaro, Lucrezio, 59-60.
- 108. "Maximus sine dubio futurus, si ad aetatem maturiorem cum mentis integritate pervenire potuisset, nunc et vigente aetate periit et iuvenili in mentis errorem incidit." (Antwerp, 1565–1566), fol. **5°; Solaro, *Lucrezio*, 60 lines 66–69.
- 109. "Hinc mente loco suisque sedibus permota, parum abfuit quin omnes illi divini in hoc poeta igniculi fuerint extincti. Sed cum morbus ille animi indutias haberet, non passus est poeta eos funditus interire. Quin observatis intervallis philosophiam, in qua adulescens magnam semper operam posuerat, pharmaci loco adhibuit, eamque, ut Latino etiam ore sonaret, efficere instituit initio sumpto a rerum natura: in qua tractione maxime elaborabant omnes Epicuri familiares." (Antwerp, 1565–1566), fols. **5"-6"; Solaro, Lucrezio, 60 lines 70-78.
- 110. "Namque manu sibi adlata, e vita tamquam e theatro exiit." (Antwerp, 1565–1566), fol. **6^r; Solaro, *Lucrezio*, 60 lines 83–84.
- 111. (Antwerp, 1565–1566), fols. **6^{r-v}; Solaro, *Lucrezio*, 61–62 lines 91–121. The *DRN* passage is I 39–43.
- 112. (Antwerp, 1565–1566), fol. **7^r; Solaro, *Lucrezio*, 63 lines 154–157; *DRN* VI 92–95.
- 113. (Antwerp, 1565-1566), fols. **6°-**8°; Solaro, Lucrezio, 63-66.
- 114. (Antwerp, 1565-1566), fols. **6°-8°; Solaro, Lucrezio, 66-67.
- 115. "Sic enim clarissimum fieret, quod saepe soleo dicere, avum esse Q. Ennium, patrem T. Lucretium, P. Virgilium Marronem filium: hi enim ex Epicis poetis Latinis triumviri sunt praestantissimi." (Antwerp, 1565–1566), fol. **8"; Solaro, *Lucrezio*, 67 lines 271–274.
- 116. "Si hoc prius addidero, non probari nobis recentiorum iudicia, qui Lucretium Lucanum, similes rerum gravium scriptores, in poetarum numero non habent: nam et veterum in hac re sententiam iis possum opponere, ac de Lucretio nostro quidem Ciceronis ac Nepotis, auctorum minime vulgarium, qui eum non poetam duntaxat, sed praestantissimum etiam poetam laudant, et hoc addere, si ea est huius artis condicio et ingenium, ut nisi qui fabulas, amores et id genus alia nugatoria tractet, aut vera rebus obscuris falsisque involvat, in poetarum ordine consistere non possit, eam artem insuper habendam potius et abiciendam suaserim, qua praeter spurca, nugatoria et figmenta suavibus leporibus adspersa nihil fere adulescentibus praebeatur." (Antwerp, 1565–1566), fol. **8"; Solaro, Lucrezio, 67–68 lines 278–290.
- 117. "Existimo iam esse perspicuum, candide & erudite Lector, nosque rebus vicisse necessariis; ex hoc scriptore utilitates manare non minimas, voluptates honestissimas." (Antwerp, 1565–1566), fol. *8^v.
- 118. Veterum Quorundam De T. Lucretio Testimonia, ibid., fols. A3^v-4^r.
- 119. Gifanius writes "Hos versus ego vel de Lucretio vel de Epicuro fecisse poetam existimo," and directs his reader to "vide hic pag. 3," referring to bk. I, lines 45-

- 48 and 62–86, where Lucretius discusses the tranquility of the gods and Epicurus liberating men from fear and superstition. Ibid.
- 120. The three line passage as Gifanius presents it reads: "Cedet musa rudis ferocis EnnI,/ Et docti furor arduus LucretI,/ Et qui per freta duxit Argonautas." Ibid.
- 121. "Hoc Quinctiliani iudicium magnam partem uno consensu damnatur a veteribus & recentioribus." Ibid.
- 122. "Ecce autem & hoc erunt qui maxime sint reprehensuri; meque qui in poeta impio tantam posuerim operam, imprimis accusabunt. is est enim Lucretius (inquient) qui & animos esse mortales omnino docere nititur, atque ita omnem salutis nostrae ac beatae vitae spem tollit; & dei providentiam esse negat, in qua nostrae & Christianae pietatis est prora ac puppis constituta. qui denique absurdissimam illam Democriti & Epicuri de corpusculis individiuis, rationem suis versis expressit." (Antwerp, 1565–1566), fol. *3°.
- 123. "Verum re omni diligentius perspecta, deprehendi eam etsi maximi momenti orationem, eo tamen valere non debere, ut praestantis. poetae opus ac labores intereant vel contemnantur. nam eadem ratione M. Tullii scripta conpluria condamnes oportet; ut in quibus eadem, quae in hoc poemate de providentia & animi natura, maxime vero de atomis illis ambigitur, ac saepe acerrime propugnatur. immo necesse erit omnes fere antiquos scriptores reiciamus, in quibus impia multa, crudelia, turpia, & flagitiosa non pauciora; falsa, ridicula & inepta exstent in promptu innumerabilia: & ut verbo dicam, paene omnium aetatum scriptores, poetae, historici, oratores, ac philosophi abiciendi sint omnes; si eorum scripta ad Christi, ac dei nostri praecepta, nostraeque pietatis normam exigantur." Ibid., fols. *3^v-*4^r.
- 124. "Quamobrem Basilii, Ioachimi, aliorumque prudentium virorum sequamur consilia & cautiones, qui in his veluti scopulis cursum ostenderunt tutum, eum, quem vere Christianus tenere possit: ut quae sunt impia, quae dei minuunt maiestatem, nostramque salutem oppugnant; quae denique bonis moribus obsunt, aut res publica illa in quam detestemur ac refellamus, atque etiam in miseris illis hominibus deploremus, aut praetereamus. inepta rideamus licet, ac refellamus. cetera amplectamur; quae ad pietatem in deum hortantur, quaeque ad rem publicam recte constitutendam aut instaurandam, ad bonos mores conformandos, & ad linguam excolendam & expoliendam, illam animi interpretem, pertinebunt." Ibid., fol. *4^r.
- 125. "Unde & Arnobius acerrimus nostrae fidei defensor, a Titi lectione deterritus non fuit, eiusque auditor Firmian." Ibid.
- 126. "immo utilitatem hanc ea res adfert summam, quod dum in falsa ea incidimus de rerum obscuritate & natura decreta, accuratius etiam de vero ipso cognoscendo laboremus, eiusque rationes melius percipiamus, perceptas memoriae infigamus firmius. Certe videant prudentes in r.p. viri, an non sit utilius adulescentes, quo veras de natura & dei operibus perceptiones cognoscant; audire falsa etiam aliorum dogmata, eaque a praeceptoribus refelli; atque in gravissimis simul ac suavissimis versari rebus; quam volutari assidue in spurcissimis illis poetis, quorum ex veteribus supersunt non pauci; ex recentioribus, pro pudor, succreuerunt plurimi. certe in hoc Poeta omnia gravitatis sunt plena: nulla intemperantiae nota, aut vestigium, uti mox dicam." Ibid., fols. *4^{r-v}.

- 127. Ibid., fols. *4v-*5r.
- 128. "illa ac teterrima Atheniensium pestilentia quam egregio & admirabili carmine omnia, quasi in tabella depicta, minoribus nobis exposuit!" Ibid., fol. *5^r.
- 129. "Thucydidis verba e libro II historiarum adiunximus, a poeta copiose extremo libro VI. expressa." Ibid.
- 130. Ibid., fols. Hh1v-Hh5r (pp. 470-473).
- 131. Ibid., fols. Q6^r-S8^v (pp. 235-271).
- 132. Ibid., fols. R8v-S1r (pp. 256-257.)
- 133. Diogenes Laertius, X 31-34.
- 134. (Antwerp, 1565–1566), fols. T1^r-V5^r (pp. 273–997).
- 135. On Valerius, see Henry de Vocht, History of the Foundation and the Rise of the Collegium Trilingue Lovaniense, 1517–1550, vols. 3–4, Humanistica Louvaniensa, 12–13 (Louvain, 1951–1955); also Irving A. Kelter, "Reading the Book of God as the Book of Nature: The Case of the Louvain Humanist Cornelius Valerius (1512–1578)," in The Word and the World: Biblical Exegesis and Early Modern Science, ed. Kevin Killeen and Peter J. Forshaw (Basingstoke, UK, 2007).
- 136. This second Somnium followed his Somnium, sive paralipomena Virgili; see Sacré, "Nannius's Somnia," in La satire humaniste: Actes du Colloque international des 31 mars, 1er et 2 avril 1993, ed. Rudolf De Smet (Louvain, 1994), 77-93.
- 137. "Sciebam quidem huius scriptoris sententiam cum ob alia quaedam, tum quod Epicuri rationem a scholis & usu communi abhorrentem persequatur; non cuius statim obviam fore & promptam: ac propterea siquid in verbis mutandum iudicassem, futuros qui ut locum totum explicassem, requirerent: Sed quia veterem tantummodo scripturam ex fide referre, vellem coniecturas rarissime; essentque viri doctissimi qui me ut quam ingressus eram viam insisterem porro, hortarentur: non putabam fore qui magnopere aut pertinaciter hoc institutum nostrum improbarent: praesertim ubi viderint ita me mea temperasse, ut quod copiosis scholiis multi, nos paucis Notis videamur, consecuti." (Antwerp, 1565–1566), fols. **1^v-**2^r.
- 138. "Ea autem quae ad orationis nitorem & eruditionem ac antiquitatis cognitionem pertinent, quia adulescentes fortasse non ita facile per se ipsi intellecturi videbantur, quaeque eius generis essent observatu digniora." (Antwerp, 1565–1566), fol. **2^r.
- 139. Ibid., fols. V6r-Hh3r (pp. 297-469).
- 140. The entry on atoms is one of the longest in the index: "ATOMI. miror tam studiose vitasse nostrum Titum hoc uti vocabulo: credo quia versus leges non admitterent facile. vocat corpuscula, elementa prima, principia, corpora prima, primordia, semina rerum, figuras, corpora caeca, materiem, materiai corpora, principiorum corpora, &c. Cicero tamen atomorum voce interdum utitur. usus est & Lucilius suo more Graecissans lib. 27. Idola atque atomos Epicuri vincere volim. ita leg. ex v.c. Putant vulgo Atomos ab Epicuro ac philosophis dici puluisculos illos quos in sole volitantes videmus. error est hic gravissimus, quasi ex tali materia res omnes concretae essent. nimis absurde. quin potius certa quaedam corpuscula caeca, 'αόρατα, quae sub adspectum non cadunt, numquam videantur,

simplicia, individua, ex quibus omnis rerum natura consistat, & in quae resolvatur, ut alii aquam, ignem, &c. haec, inquam, illi atomos vocant, easque censent e rerum ex atomis compositarum summo corpore seu extremitate, aut superficie quasi detergeri, defluere: ac postea in inani passim moveri ac volitare; tandemque assiduo motu coherescere; atque ita rursus ex se corpora, resque alias creare. Atomi ergo sunt prima rerum corpora, quae numquam sint visa, sunt tamen; & instar minutissimorum pulvisculorum in sole vagantium in inani iactantur: non vero sunt ramenta illa. Haec ut a vulgo intelligerentur tandem, latius persecuti sumus." Ibid., fol. X2 (p. 307).

- 141. Despite Gifanius's new studies, the 1595 edition shows very few obvious changes from its predecessor, and some copies even reprinted the old date of 1565 on the title page, which has resulted in many catalogues mistakenly identifying copies of the 1595 as the 1565–1566. Gifanius's personal copy, Bodleian Byw. P 6.14, has been examined by myself and David Butterfield, but no one has yet undertaken a thorough study, which would certainly shed new light on this contentious chapter of Lucretius's publication history. Especially because numerous copies of Gifanius's version have been found in England as well as France, several connected to prominent scholars, including seventeenth-century translators of Lucretius, the influence of Gifanius's text is greater than might be suggested by the scholarly focus on Lambin.
- 142. For more discussion of annotation in these editions, see Chapter 5.
- 143. BAV Barberini K.VI.8; Cambridge Univ. Hhh.208; Cambridge Univ. Keynes, J.3.8; Bodl. Radcl. F.11; Houghton *ZHC5 Sa444 Y566la.
- 144. BL C.69.b.7 (1), bound with Carmina of Ursinus.
- 145. BL 864.b.14; most marks, particularly in the front matter, are notabilia, with some typical marks in late bk. IV.
- 146. Napoli B. Branc. 082k 27 has marks only in I 1–275. Bergamo Civica Biblioteca Angelo Mai, Cinq 2 1201 has marks in bks. I and early III only.
- 147. Oxford Bywater P 6.13 is the copy that duplicates all the quotations on the front page. It also has heavy notes in I-II and a handful in III, V, and VI. See Figures 21–22.
- 148. One is Gifanius's own copy, Oxford Bywater P 6.14. A copy of this edition, recorded by Kristeller as Napoli V B.39, is supposed to contain the autograph notes of Gaspar Scioppius, but the call number given by Kristeller did not match when I visited the library; see Iter I, 400, VI 102b. BL G 9445 has summaries of the content inserted after each section break, and in the margins of Epicurus's text the annotator has insterted the Lucretian line numbers that Gifanius's appendix associates with certain sections.
- 149. Vatican Barberini K.II.23; Oxford 8° L 25 (2) Art (bound with Lucan); Oxford Bywater P 6.15; Oxford Broxb. 27.4; Houghton OLC.L964.595.
- 150. See Linton Stevens's concise biography, "Denis Lambin: Humanist, Courtier, Philologist, and Lecteur Royal," Studies in the Renaissance 9 (1962): 234–241; and L. D. Reynolds and N. G. Wilson, Scribes and Scholars: A Guide to the Transmission of Greek and Latin Literature (Oxford, 1968), 174–175.
- 151. Fleischman, "Lucretius Carus, Titus," 352b.

- 152. Lambin boasts five manuscripts but was ignorant of the fact that two, the Memmianus and Bertinianus, were likely the same, the latter being accessed by Lambin only through Turnebus's collation; see Michael D. Reeve, "The Italian Tradition of Lucretius Revisited," *Aevum* (Milan) 79 (2005): 116.
- 153. (Paris, 1570), fols. $c2^r-d1^r$. The 1570 is Lambin's third Lucretius after the 1563 4^o and the 1565 16^o .
- 154. "Cum de T. Lucretio Caro nihil fere litteris mandatum sit a veteribus, aut certe pauca admodum, eaque incerta, atque idcirco, qui eius vitam conscribere antea conati sunt, ii mihi artem quandam divinandi factitasse viderentur, non putaveram olim, cuiusdam arioli potius quam diligentis explicatoris operam desideraret." Ibid., fol. d1^r; Solaro, *Lucrezio*, 70 lines 6–12.
- 155. "Dissimulare equidem non possum me hoc negotium gravate suscepisse, quod tam multi viri ante me confectum ac transactum reddiderunt: P. Crinitus, Baptista Pius, Lilius Gyraldus aliique nonnulli." (Paris, 1570), fol. d1^r; Solaro, *Lucrezio*, 70 lines 23–27.
- 156. "Haec igitur nobis quaerenda et, quo ad eius fieri potest, exponenda sunt: T. Lucretii patria, genus, vitae studium, ingenium, mortis genus, librorum ab eo scriptorum numerus, consilium scriptoris, argumentum et inscriptio operis." (Paris, 1570), fol. d1^r; Solaro, *Lucrezio*, 71 lines 37–40.
- 157. (Paris, 1570), fol. d2^r; Solaro, Lucrezio, 74-75 lines 139-160.
- 158. "Quod ad studium attinet, credibile est poetam nostrum, cum ad poeticam et philosophiam natus est, ingenioque suo indulgens et naturam suam ducem secutus philosophiam Epicuream approbasset, ut solutiore animo et commodius philosophari posset, sese Athenas contulisse, ibique Zenonem illum, Epicureorum coryphaeum, ut eum M. Tullius lib. I de natura deorum appellat, audivisse, atque hoc pacto totam Epicuri disciplinam accurate cognovisse ac perdidicisse." (Paris, 1570), fol. d2°; Solaro, *Lucrezio*, 74–75 lines 139–145.
- 159. (Paris, 1570), fol. d2r; Solaro, Lucrezio, 75 lines 146-160.
- 160. (Paris, 1570), fol. d2v; Solaro, Lucrezio, 75-77 lines 169-204.
- 161. (Paris, 1570), fol. d2°; Solaro, Lucrezio, 76 lines 175-178.
- 162. (Paris, 1570), fols. d2^v-d3^r; Solaro, Lucrezio, 77-78 lines 205-246.
- 163. "Iam, quod idem ait, Lucretium esse difficilem, quid diceret, si his temporis natus esset, quibus a certis hominibus (quorum nominibus parco) ita depravatus est, ut vix eius pristina species agnoscatur, cum et aetati Lucretii paene vicinus, et Lucretii exemplaria integra et emendata, aut certe quam minime corrupta et mendosa habens, haec scripserit tamen?" (Paris, 1570), fol. d3^r; Solaro, *Lucrezio*, 78 lines 247–252.
- 164. "Atqui nihil est in Lucretio magnopere difficile homini tolerabiliter erudito, et in disciplina Epicuri non omnino hospiti. Quin pleraque in eo sunt, quae non debet ignorare homo honesto loco natus, et liberaliter educatus, et bonis artibus eruditus, nedum is, qui est orator aliquando futurus, et apud pontifices, apud imperatores, apud reges, apud populos opulentos ac potenteis magnis de rebus verba facturus." (Paris, 1570), fol. dʒr; Solaro, *Lucrezio*, 78 lines 252–259.
- 165. "Quod autem a quibusdam proditum memoriae est, Lucretii carmen, quasi ab auctore inchoatum, rudeque atque impolitum relictum, a M. Tullio esse emenda-

tum, perfectum ac perpolitum, id ego neque refellere, si velim, possim, quia Eusebii, qui huius opinionis auctor est, auctoritas, ab eo, qui gravioris alicuius auctoritate careat, elevari, aut infirmari non potest, neque si possim, velim, quia hoc ipsum nobis argumento magno debet esse hoc poema, praeclarum M. Tullio esse visum, quid id dignum esse iudicarit, in quo emendando operam suam collocaret." (Paris, 1570), fol. d3°; Solaro, *Lucrezio*, 80 lines 298–306.

- 166. (Paris, 1570), fol. d3v; Solaro, Lucrezio, 80-81 lines 320-339.
- 167. (Paris, 1570), fol. d3^{r-v}; Solaro, Lucrezio, 78-80, lines 260-297.
- 168. "Nolunt autem eum aut sua sponte mortem obiisse aut alicuius morbi vi, ut fit, consumptum esse; sed, ut eius obitum τραγικώτερον faciant, scribunt eum sibi ipsum manus attulisse alii taedio vitae, quod patriam suam ambitione avaritia luxuria discordia et similibus civitatum, quae diu fluoruerunt et iam senescunt, morbis aestuare atque afflictari videret; alii aegritudine animi, quod Memmii sui, qui in exsulium pulsus erat, tristem casum aequo animo ferre non posset; alii furore percitum, in quem Lucilia, sive uxor sive amica, amatorio poculo porrecto eum imprudens adegerat, cum ab eo amari, non ei necem inferre aut bonam mentem adimere, vellet." (Paris, 1570), fol. d4^r; Solaro, *Lucrezio*, 81–82 lines 345–355. The theory that Lucretius was driven to suicide by world-weariness, supported by passages of the *DRN* that have such a tone, has long been a strong thread in the Lucretius biography debate; see Masson, *Lucretius, Epicurean and Poet*, 53–56.
- 169. "Eusebius Pamphili F. eum natum esse tradidit Olympiade CLXXI, hoc est, Cn. Domitio Ahenobarbo, et C. Cassio Longino COSS. anno ab U.C. DCLVII. Alii, Olympiade CLXXI, hoc est L. Licinio Crasso et Q. Mucio Scaevula COSS. anno ab U.C. DCLVIII. Ex quo apparet, eum M. Tullio Cicerone annis XII aut XI natu minorem fuisse." (Paris, 1570), fol. d2^r; Solaro, Lucrezio, 73 lines 109–114.
- 170. "Plerique mortuum esse ferunt anno aetatis XLIII Cn. Pompeio Magno III Q. Caecilio Metello Pio Coss. anno ab U.C. DCLI eodem die, quo die P. Virgilium, Maronem natum esse nonnulli scriptum reliquerunt." (Paris, 1570), fol. d4^r; Solaro, *Lucrezio*, 81 lines 342–345.
- 171. (Paris, 1570), fols. d4^{r-v}; Solaro, *Lucrezio*, 82-85 lines 356-452; see Gifanius **6^v-**8^r; Solaro, *Lucrezio*, 62-66 lines 122-234.
- 172. "Quoniam autem duae res in primis homines sollicitant, et conturbant, ut ille putabat, religio, hoc est, timor deorum inanis, vitaeque beatae inimicus, atque infestus, tum mortis metus, his duobus animorum quasi pestibus, et crucibus, conatur eos liberare, ostendendo, primum nullam esse deorum providentiam, deinde nullum sensum post vitam remanere, animosque esse mortaleis." (Paris, 1570), fols. d4^v-e1^r; Solaro, *Lucrezio*, 85 lines 455-460.
- 173. "In quibus vehementer quidem errat Epicurus, et nos Christiani valde ab eo dissentimus, sed nostri poetae, qui eum ducem sequitur, consilium aperimus. Quoniam igitur neutrum horum facile expedire poterat Lucretius, nisi natura rerum perspecta, et cognita, omnem operam suam in explicanda ratione naturae ponit." (Paris, 1570), fol. e¹'; Solaro, *Lucrezio*, 85 lines 461–465. *DRN* I 62–67 reads, "Humana ante oculos foede cum vita iaceret/ in terris oppressa gravi sub religione,/ quae caput a caeli regionibus ostendebat/ horribili super aspectu mortalibus instans,/

- primum Graius homo mortalis tollere contra/ est oculos ausus primusque obsistere contra."
- 174. "Itaque docet, mundum sine consilio deorum, atomorum concursu fortuito, esse factum, et mundos esse innumerabileis, eodem modo creatos, eosque omneis esse interituros. Ac totum quidem librum tertium in disputatione de anima consumsit, ceteros vero in diversis, ac variis quaestionibus, quas lector ex indice earum rerum, quae in singulis libris tractantur, facile per se cognoscet." (Paris, 1570), fol. e1^r; Solaro, *Lucrezio*, 86 lines 466–472.
- 175. "Atque haec ita se habere, ut dico, licet ex eo intelligere, quod primo libro statim post prooemium, primum per quandam corporis fictionem (σωματοποιίαν nominant Graeci), et per quandam ὑποτύπωσιν, religionis imaginem horribilem describit, eamque facit e caelo cum tali adspectu mortalibus imminentem, vitam hominum autem tali specie perterritam foede iacentem, deinde Epicurum, hominem natione Graecum, adversus tam terribilem personam, oculos contendentem, eique obsistentem. . . . En tibi, naturae species, ratioque necesse est hunc terrorem discutiat, inquit, per naturae speciem, et rationem nihil aliud significans, quam naturae explicationem, sive disputationem de natura rerum, quam physicam, seu physiologiam appellant Graeci." (Paris, 1570), fol. e1^r; Solaro, *Lucrezio*, 86 lines 472–488.
- 176. "Tum vero, si stabilem scientiam rerum tenebimus, servata illa, quae quasi delapsa de caelo est ad cognitionem omnium, regula, ad quam omnia iudicia rerum dirigentur, numquam ullius oratione victi sententia desistemus." (Paris, 1570), fol. e1°; Solar, *Lucrezio*, 88 lines 529–532; *De finibus* I 63.
- 177. (Paris, 1570), fols. f1v-f2r.
- 178. "Omnia fere ad disciplinam Democriti & Epicuri pertinentia, & vel a Platone, vel a Diogene Laertio, vel a Plutarcho, vel a Cleomede, vel a M. Tullio Cicerone, vel ab aliis tractata, quae ad Lucretium explicandum, declarandum atque illustrandum lucem aliquam afferre possunt, ea suis quaeque locis in commentationibus nostris locavimus. Idem de pestilentiae descriptione, quae est apud Thucydidem lib. II faciendum curavimus." Ibid., fol. f2^r.
- 179. "Immortalia si mortalibus ex elementis/ Non est, ut possint ulla ratione creari:/
 Mentis opusque tuae sunt carmina docte Lucreti,/ Quae tu de rerum natura pangere pergis:/ Miror te mortalem animi studuisse probare/ Mentem, talia quae scripta immortalia condat./ Nam si quas maculas iniuria temporibus (ut sit)/ Chartis forte tuis alluerat, ilicet, illas,/ Ut quondam Cicero, sic nuper mente sagaci/ Detergens Lambinus, in antiquumque nitorem/ Carmina restituens, docuit vivacius esse/ Mente nihil, scriptis dare quae sit idonea vitam." Ibid., fol. a1°.
- 180. "Prodiit ante tua, Lambine, Lucretius arte,/ Vulgus iners quem artis obruerat tenebris:/ Quemque etiam indulgens nimium sibi docta caterva,/ Squalentem ex nitido nescia reddiderat." Ibid., fol. f2^v.
- 181. "At Lucretius animorum immortalitatem oppugnat, deorum providentiam negat, religiones omneis tollit, summum bonum in voluptate ponit. Sed haec Epicuri, quem sequitur Lucretius, non Lucretii culpa est. Poema quidem ipsum propter sententias a religione nostra alienas, nihilominus poema est. tantumne? Immo vero poema venustum, poema praeclarum, poema omnibus ingenii luminibus

- distinctum, insignitum, atque illustratum. Hasce autem Epicuri rationes insanas, ac furiosas, ut & illas absurdas de atomorum concursione fortuita, de mundis innumerabilibus, & ceteras, neque difficile nobis est refutare, neque vero necesse est: quippe cum ab ipsa veritatis voce vel tacentibus omnibus facillime refellantur." (Paris, 1563), fol. ã3; (Paris, 1570), fol. a3.
- 182. "Nunc autem cum litteras quidem Graecas ex Homero, & ceteris epicis: ex Sophocle, & ceteris tragicis: ex Aristophane, qui solus ex tot comicis ad nos pervenit incolumis: ex Platone, & Xenophonte, & Aristotele, & Plutarcho: ex Herodoto, & Thucydide, & Polybio, & Dionysio Halicarnasseo Lex Lysia, & Demosthene, & Aeschine, & aliis rhetoribus. Latinas autem ex Plauto, Terentio, Lucretio, Varrone, Caesare, M. Tullio, Catullo, Virgilio, Horatio, Tibullo, Propertio, Plinio, & similibus, qui vel falsam religionem, vel meram impietatem quibusdam locis spirant, acredolent, discere necese habeamus: quid vetat, quo minus hos scriptores ita tractemus, itaque legamus, ut eorum semonis quidem divitias, lepores, ornamenta ab ipsis compilemus: talibusque furtis ac spoliis antiquorum illorum Christianorum exemplo ecclesiam Dei opt. max. locupletemus, amplificemus, exornemus: religionem autem nostram, quam ex litteris sacris, tanquam ex liquidissimo, & sincerissimo fonte hausimus, incorruptam, inviolatam, atque integram conservemus?" (Paris, 1564), fol. \\TNT173\\e2^v.
- 183. "Atqui non ita fuerunt nec inepte religiosi, nec superbe fastidiosi, veteres illi Christiani, sanctissimi viri, Iustinus martyr, Gregorius Nazianzenus, Basilius Magnus, Ioan. Chrysostomus, Clemens Alexandrinus, Athenagoras, Eusebius, Cyprianus, Tertullianus, Arnobius, Firmianus, Augustinus, Hieronymus, ut scriptorem, nisi Christianum, & omni ex parte gravem, castum, ac verum neminem lectione dignum iudicarent. Quin & Empedoclem, & Democritum, & Epicurum, & Lucretium, & ceteros philosophos ac poetas (ut oratores & historicos taceam) tum Graecos, tum Latinos, quamvis profanos, quamvis mendaceis, quamvis impios, studiose legebant." Ibid.
- 184. "At Epicurus & Lucretius impii fuerunt. Quid tum postea? Num iccirco nos quoque, qui eos legimus, impii sumus? Primum quam multa sunt in hoc poemate cum aliorum philosophorum sententiis, ac decretis consentanea? quam multa probabilia? quam multa denique praeclara, ac prope divina? Haec sumamus, haec arripiamus, haec approbemus." Ibid., fol. ã3°.
- 185. "Verum, dicet aliquis, hoc in Homero maxime laudabile est, quod non solum virtute praestantium, fortiumque virorum actiones honestas, & cum virtute coniunctas, sed etiam improborum, ignavorum, amantium, libidinosorum, iratorum, invidentium, metuentium dicta, factaque optime exprimit, atque ob oculos proponit: quod quando neque Empedocles, neque Lucretius facere curarunt, poetarum nomen non merentur. Immo vero hoc ipsum est, quod in Homero reprehendunt cum alii multi, cum philosophorum princeps Plato: eumque hoc nomine, neque in civitatem bene moratam, bonisque legibus temperatam recipit: & ex sua non vi expellit ille quidem, aut ignominiose exturbat, sed certe verecunde deducit, atque honorifice dimittit. Quare non continuo si Empedocles, & Lucretius personarum sic affectarum orationem, atque actionem non imitantur, poetarum nomen eis adimere nos oportet." Ibid., fol. ã3.

- 186. "Epicurus autem dicat deos neque bene meritis capi, neque gratia flecti, neque irasci, neque res mortalium curare, hoc loco tamen Venerem Lucretius imploret, eam sibi in suo poemate scribendo sociam adiungere cupiat: precetur denique, ut illa interea dum ipse rerum naturam explicat, terras & maria tranquillet, bella componat, & pacem constituat." Ibid., fol. A3^r (p. 6), note on *DRN* I 64.
- 187. "Extat hac de re eruditissima P. Victorii Florentini ad Io. Casam Florentinum epistola: in qua huic quaestioni ita putat responderi posse, si dicamus Epicurum, tametsi voluerit Deos nihil neque habere negotii neque aliis exhibere . . . tamen, id est preces non sustulisse, & vota mortalium de suis rebus a diis immortalibus audiri putavisse, aut certe Deos immortaleis propter eorum praestantem & excellentem naturam, ab hominibus venerandos & colendos censuisse." Ibid.
- 188. "... & supra diximus, Epicurum, quamvis negaret, Deos curam habere rerum humanarum, neque preces tamen, neque venerationem, & cultum deorum, tanquam praestantium naturarum sustulisse." Ibid., fol. B2^r (p. 11).
- 189. "Epicuri, qui cognitis rerum causis, inanem deorum metum sustulit, pietatem duntaxat securam, & deorum maiestati consentaneam reliquit: vel qui omnes religiones funditus evertit, & ita terroribus animos himinum liberavit. Sed dicamus Epicurum cum in plerisque aliis rebus tum in hac impium fuisse." Ibid., fol. B2^v (p.12).
- 190. Ibid., fol. N2^r (p. 99).
- 191. Ibid.
- 192. Lambin's argument here is referenced by Montaigne; see *An Apology for Raymond Sebond*, ed. Michael Andrew Screech (London, 1987), 122 n. 312.
- 193. "Cedit item retro, de terra quod fuit ante,/ In terras: & quod missumst ex aetheris oris,/ Id rursum caeli rellatum templa receptant." (Paris, 1564), fol. Aa4^r (p. 191); DRN II 999–1001.
- 194. "Cur igitur & hunc tertium librum, in quo immortalitas atomorum acerrime oppugnatur... non inuiti legimus? quia versus sunt optimi, atque ornatissimi: quia vocabula rerum alia maxime propria, lectissima, significantissima: alia venustissime facta, aptissime novata, illustrissime translata sunt," (Paris, 1564), fol. Aa4^r (p. 191).
- 195. "Accedit huc . . . lectione dignissima: qualia sunt ea, quae ab eo de continentia, ac frugalitate, de morte contemnenda, de amore fugiendo, de speculorum ratione, de morborum causis, de imbribus, grandinibus, fulminibus, & similibus, de magnete, de dissimilibus & variis fontium naturis, & sexcentis aliis rebus cognitu periucundis disputantur." Ibid.
- 196. (Paris, 1570), fol. c2r.
- 197. On Lucretius's use of these thinkers, see Jeffrey Tatum, "The Presocratics in Book One of Lucretius' De Rerum Natura," Transactions of the American Philological Association 114 (1984): 177–189; Lisa Piazzi, Lucrezio e i Presocratici: Un commento a De rerum natura 1, 635–920 (Pisa, 2005); Francesco Montarese, Lucretius and His Sources: A Study of Lucretius, "De rerum natura" I 635–920 (Berlin, 2012).

5. The Poverty of the Language

- 1. This text begins a brief colophon that follows the text of the *De rerum natura* and is the only framing matter in the *editio princeps*. The full text of the letter reads: "LUCRECH Unicum meas in manus cum pervenisset exemplar de eo imprimendo hesitavi: quod erat difficile unico de exemplo quae librarii essent praeterita negligentia illa corrigere: Verum ubi alterum perquisitum exemplar adinvenire non potui—Hac ipsa motus difficultate unico etiam de exemplari volui librum quam maxime rarum communem multis facere. Studiosis siquidem facilius erit pauca loca vel alicunde altero exemplari extricato vel suo studio castigare & diligentia: quam integro carere volumine Presertim cum a fabulis quae vacuas (ut inquit poeta) delectant mentes remotus Lucretius noster de rerum natura questiones tractet acutissimas tanto ingenii acumine tantoque lepore verborum ut omnes qui illum secuti poete sunt: eum ita suis in descriptionibus imitentur & Virgilius praesertim poetarum princeps ut ipsis cum verbis tria interdum & amplius metra suscipiant." (Brescia 1471/3) fol. 106.
- 2. The affectionate "Lucretius noster" is frequently used by our biographers and editors, and may be intended to parallel "Ennius noster" used by Cicero (*Pro Archia* 22.1, *De senectute* X) and by Lucretius himself (I 117).
- 3. My thanks to Nicholas Davidson for this observation.
- 4. (Verona, 1486), fol. m vii (p. 95 by the hand numbering in the Houghton copy.) The author has yet to be identified, but the poem appears on fols. 131^{r-v} of the manuscript Walters W.383 (De Ricci 434), written at Rome by Giovanni Sulpizio Verolano, dated December 20, 1466. Earlier scholarship has usually characterized this poem as a cento, a form created by taking and rearranging half lines from a classical work (usually Virgil). That is likely the form the author had in mind, but this rough assemblage of largely unaltered quotations lacks the grammar and meter of a true cento. For examples of true cento, see the catalogue for the Neo-Latin exhibition assembled by James Hankins in Harvard Library Bulletin, n.s., 1–2 (2001). Among the Lucretius manuscripts, this poem appears on the final folio (131^{r-v}) of Walters W.383 (De Ricci 434), a manuscript transcribed in Rome by Verolano in 1466, though this poem follows the dated page and may be a later insertion; the poem's authorship and its connection to Verolano is a subject of continuing investigation.
- 5. Line 25 derives from Lucretius IV 467–468, "Nam nil aegrius est quam res secernere apertas/ ab dubiis. . . ." The substitution of *egregius* (excellent) for *aegrius*, the comparative of *aeger* (unpleasant), has resulted in a reversal of the original meaning.
- 6. (Venice 1495), fol. q x. The titles given above the poem read, "Ad nicolaum Priolum Hieronymi filium patricium/ Illustrem & bonarum artium cultorem./
 C. Lyncinii versus."
- 7. I 118; III 132; IV 547; VI 786.
- 8. (Bologna, 1511), fol. $\pi 1^{v}$.
- 9. "Not a Ghost: The 1496 Brescia Edition of Lucretius," *Aevum* (Milan) 84 (2010): 683–693. Smith and Butterfield trace the edition through two London records of sale, likely of the same copy.

- 10. "Tu itaque debes, Alberte humanissime, librum hunc benigna fronte in doctissimam academiam tuam admittere, tum quia ipse dignus sua ipsius authoritate & gratia, non quod vera scripserit, & credenda nobis . . . sed quia epicureae sectae dogmata eleganter & docte mandavit carminibus, imitatus Empedoclem, qui primus apud graecos pr[ae]cepta sapientiae versibus tradidit . . ." De rerum natura, Venetiis: Accuratiss. apud Aldu[m], mense Decem[bris] 1500, fol. 1^v.
- 11. For example: "Ut probi viri intelligant, unde corruptissimum Lucretii poema sine antiquo exemplari emendare, ac publicare sim ausus, sciant mihi ad hanc operam Aristotelis problemata, meteora que admodum profuisse multa etiam depravata correximus ex versibus citatis a Prisciano Macrobio, & ante omnes Marcello, apud quem tamen saepius pro Lucretio, Lucillius est suppositus, Verum mihi nil aeque suppetias tulit, quam Lucretius ipse qui non duos modo quatuorve, aut decem versus ide[m] tidem repetit, sed vigintiocto in fine primi libri, & in principio quarti eosdem videbis, quae omnia nemo depraehendet, nisi qui diutina lectione omnia Lucretii carmina edidicerit, retinueritque." From the note to the reader, ibid., fol. 3°.
- 12. "Qua re vir insignis et antiquitatis consultissime cum a doctis tuis & laboriosis historiis, quibus eminentissima venetorum acta immortalitati commendas, [ocium] nactus fueris, Catullum ac Lucretium nostros recognoscito. Divino enim ingenio tuo egregiis vatibus, mihique suffragaberis." Catullus, Tibullus, Propertius (Venice, 1502), BL 678.a.18. Initial pages not numbered. Avancius's language here imitates that in Catullus's dedication to Cornelius Nepos in Catullus I.3–7: "Corneli, tibi: namque tu solebas/ meas esse aliquid putare nugas/ iam tum, cum ausus es unus Italorum/ omne aeuum tribus explicare cartis/ doctis, Iuppiter, et laboriosis."
- 13. See C. A. Gordon, A Bibliography of Lucretius (London, 1962), 228-229.
- See W. B. Fleischmann, "Lucretius Carus, Titus," in Catalogus Translationum et Commentariorum: Medieval and Renaissance Latin Translations and Commentaries, Annotated Lists and Guides, ed. P.O. Kristeller, and F. Edward Cranz (Washington, D.C., 1960), 351-352.
- See Bailey, ed., Titi Lucreti Cari De rerum natura libri sex: Edited with Prolegomena, Critical Apparatus, Translation and Commentary by Cyril Bailey, 3 vols. (Oxford, 1986), 1:5.
- 16. For more on Candidus's use of Marullo and possibly of Poliziano's manuscript, see ibid., 1:5-10.
- 17. Much remains to be learned from more thorough examination the very heavily annotated copies, several of which merit independent studies. In addition to such well-known copies as Houghton Inc. 5271 (1495), with notes attributed to Avancius and Pius, and BL IA.23564 (1495), with the notes of Girolamo Borgia, I will mention Gifanius's personal copy of his 1565/1566 edition (Bodleian Byw. P 6.14), which contains extensive notes from his researches in preparation for the second edition; BAV R.I.IV.561 (1570) with notes attributed to Aldus Manutius the Younger; and several copies with extensive and interesting anonymous annotation, esp. British Library IB.30763 (1486) and Cambridge Kkk.607 (1565), as well as Oxford Auct. 2 R 4.50 (1500), Paris BN M-YC-1078 (1511), BAV Barber. K.II.24 (1512), BAV R.I.V. 1641 (1512), and BAV Barber. K. VI. 6 (1540).

- 18. (Bologna, 1511), BAV Chigi II 617, fols. CXXV^r-CXLII^r.
- 19. Ibid., Rome Naz. 6.9.N.25.
- 20. Ibid., BAV R.I.II 1991 marks I 958 (fol. XLVI'), I 1050 (XLIX'), and II 1006 (XX-IX'), while Rome Naz. 37.44.D.19 marks I 417 (*Corpus & Inane*; XXIII'); this is one of only two notes in the volume and may mark an error rather than the topic.
- 21. (Paris, 1514), Rome Naz. 6. 18.N.9.
- 22. (Florence, 1512), BAV Ferraioli V.6350.
- 23. Ibid., Bodl. Mason O 6. One note at I 485 reads, "Princ[ipia] sunt corpuscula solida ut Athomi[]."
- 24. (Venice, 1515), Ambros. S.Q#.I.VI.16, Ambros. V.P. 18563, and Paris BN PYC-342.
- 25. "Iampridem Alberte Decus Principum: Decus huius aetatis eruditorum, constitui omnes de philosophia libros, quotquot ex aedibus nostris exirent in manus studiosorum, tibi dedicare tum mea erga te singulari benevolentia: tum etiam, quia id genus libris praeter caeteros delectaris. Deus perdat perniciosa haec bella, quae te perturbant: quae te tandiu avertunt a sacris studiis literarum: nec sinunt, ut quiete, &, quod semper cupivisti, atque optasti: fruaris otio ad eas artes, quibus a puero deditus fuisti: celebrandas iam aliquem fructum dedisses studiorum tuorum, utilem sanem & nobis, & posteris. qua te privari re, ita moleste fers: ut nullam aliam ob causam credendum sit: nuper te Romae tam gravi morbo laborasse, ut de salute tua & timerent boni omnes, & angerentur." Ibid., fol. iv.
- 26. "Poeta, & philosophus quidem maximus vel antiquorum iudicio, sed plenus mendaciorum. nam multo aliter sensit de Deo, de creatione rerum, quàm Plato, quam caeteri Academici, quippe qui Epicuream sectam secutus est." Ibid.
- 27. "quamobrem sunt qui ne legendum quidem illum censent Christianis hominibus: qui verum Deum adorant: colunt: venerantur. Sed quoniam veritas, quanto magis inquiritur, tantò apparet illustrior, & venerabilior: qualis est fides catholica: quam IESUS Christus Deus Opt. Max. dum in humanis ageret: praedicavit hominibus: Lucretius, & qui Lucretio sunt simillimi: legendi quidem mihi videntur: sed ut falsi, & mendaces: ut certe sunt. Haec autem attigimus: ut siquis haec nostra legens, nesciat deliramenta Lucretii: id discat e nobis: . . ." Ibid., fols. iv-iir.
- 28. (Paris, 1540), BAV Barberini K. VI. 6.
- 29. For a list of other authors who imitated (though less extensively) Lucretius's imagery or cosmological and natural philosophical discussions in the 1500s, see Fleischmann, "Lucretius Carus, Titus," 354.
- 30. "Nam cum quidam, qui vulgo a Graecis athei dicti sunt, Deos nullos omnino esse crederent, atq[ue] ex ea re animorum mortalitatem firmissime asseverarent, adversus hos primo loco consistendum fuit." Palearius, De Immortalitate Animorum (Lyons, 1536), 10.
- 31. Basel, Öffentliche Bibliothek der Universität, CE I 5: 1.
- 32. Panormita's erotic *Hermaphroditus* (1425) was condemned, and Valla's public attacks on the authority of the *Vulgate* and the authenticity of numerous documents related to Church interests resulted in several close calls, especially during his visit to Rome in 1444; both scholars were protected by Alfonso V of Aragon.
- 33. See Gordon, Bibliography of Lucretius, 57–58.
- 34. See Chapter 4.

- 35. (Louvain, 1542), Cambridge Univ. Rel.c.54.2.
- 36. Ibid., Bodl. 4° Rawl. 53.
- 37. For example, Cambridge Kkk.607, a copy of Lambin's pocket volume of 1565, is black with notes cover to cover, largely derived from Lambin's commentary. Gordon, *Bibliography of Lucretius*, plate 9, shows the cover of one copy of the 1546 pocket edition worn almost to pieces by constant carrying.
- 38. Fleischmann, "Lucretius Carus, Titus," observes that Francesco Vimercato's Parisian lectures (published as *Aristotelis Meteorolicorum Commentarii* in 1556, and as *Principes de la Nature* in 1596) include Lucretian views on physics and particularly meteorology, a commonly annotated theme. See Fleischmann, "Lucretius Carus, Titus," 352.
- 39. (Paris, 1563), Rome Naz. 37.5.c.17. and Laur. 22.4.62, esp. 9-10.
- 40. (Paris, 1565), BL 1000.a.1 and Bodl. 8° L 34 Art. Seld.
- 41. (Antwerp, 1565–1566), BL 684.b.14., Bodl. Bywater P 6.13, BL G 9445 and Bergamo Civica Biblioteca Angelo Mai, Cinq. 2.1201. See Figures 21–22.
- 42. (Paris, 1570), Bodl. Bywater G.1.22 (this copy has notes only in bk. VI), Bodl. Antiq.d.F.1570 (this copy has only one note, on 393 at IV 1159), and BAV R.I.IV.561.
- 43. Popkin, The History of Scepticism from Savonarola to Bayle (Oxford, 2003), chap. 3.
- 44. The volume is Cambridge Univ. Montaigne. 1.4.4 (digitized online). See Screech, Montaigne's Annotated Copy of Lucretius (Geneva, 1998), 9–10. For another analysis of Montaigne's annotations and use of Lucretius and Lambin, see G. P. Passannante, The Lucretian Renaissance (Chicago, 2011), 104–119.
- 45. For a comprehensive index of the quotations, see Screech, *Montaigne's Annotated Copy*, chap. 4, 411–500.
- 46. Ibid., 9-10.
- 47. In at least one place Montaigne introduces an alternative otherwise known only in Gifanius's text, leading some to suggest that he also had the Gifanius edition; Screech, *Montaigne's Annotated Copy*, 34.
- 48. Flyleaf b, allusion to I 449 (1563, pp. 46-47); Screech, Montaigne's Annotated Copy, 54.
- 49. Screech colorfully describes the many poor planning decisions that make the edition's corrigenda particularly onerous to parse, and one can well understand Montaigne's decision to give up after transcribing only seven corrections; *Montaigne's Annotated Copy*, 196–197.
- 50. Ibid., 23.
- 51. Page 5, note on I 35-41, "Imitè par Vergile" with bracket; Screech, *Montaigne's Annotated Copy*, 37, 200-201.
- 52. Page 10, note on I 62, "repetiti versus/57/ 380/ 471/"; Screech, Montaigne's Annotated Copy, 205.
- 53. Page 18, note on I 117, often marked "Laus Ennii" in manuscripts, labeled by Montaigne as "louange d'ennius,"; Screech, *Montaigne's Annotated Copy*, 208.
- 54. Page 48, I 471-478; Screech, Montaigne's Annotated Copy, 223.
- 55. Page 147, note on II 600, "Cibele & le description de/ sa peinture"; Screech, Montaigne's Annotated Copy, 272.

- 56. Page 265–266, notes on III 1000–1050 roughly, he also writes "Dautres sont mors"; Screech, *Montaigne's Annotated Copy*, 323.
- 57. Screech, Montaigne's Annotated Copy, transcribes these on pp. 91-99.
- 58. The order of the annotation is outlined in ibid., 49-50.
- 59. Flyleaf j, referencing I 159, also marked in Laur. 35.32 (fol. 4^r); Screech, *Montaigne's Annotated Copy*, 91.
- Flyleaf j, referencing II 1-26, "Voluptas quae summum bonum in privatione doloris posita est 100."; Screech, Montaigne's Annotated Copy, 103.
- 61. Flyleaf j, referencing II 167–175 and V 416–433 "Nec quod totum hoc exquisito est constitutum ordine probat deos constituisse. 113. 400/"; Screech, *Montaigne's Annotated Copy*, 105.
- 62. Flyleaf j; Screech, Montaigne's Annotated Copy, 106.
- 63. Flyleaf k, "Dij nihil curant res nostras & otio fruuntur sempiterno. 151/.9/ 182/ 192/ 367/ Sacrificium 153/385/449/471/491/"; Screech, Montaigne's Annotated Copy, 111.
- 64. Flyleaf l; Screech, Montaigne's Annotated Copy, 118-119.
- 65. Flyleaves I & m; Screech, Montaigne's Annotated Copy, 120-133.
- Flyleaf n, "perlege totum librum nil est elegantius de vitae contemptu"; Screech, Montaigne's Annotated Copy, 24, 137.
- 67. See, for example, his indexing on flyleaf k; Screech, *Montaigne's Annotated Copy*, 112.
- 68. Flyleaves n & o; Screech, Montaigne's Annotated Copy, 137-151.
- Flyleaf a, allusion to Lambin's note on IV 738 (1563, p. 327); Screech, Montaigne's Annotated Copy, 80.
- 70. Page 292, IV 256–292, "Fertur imago nostri/corporis in speculum/speculi in nos sic/sunt duo motus aëris/sed cum imago illa/nostra nostros/oculos reiecta reuisit/nonne tertium/motum ciet"; Screech, Montaigne's Annotated Copy, 332.
- 71. Page 59, I 615-616; Screech, Montaigne's Annotated Copy, 230-231.
- 72. *DRN* IV 353-364.
- 73. Flyleaves a, d and e, allusions to IV 1172 and the following, "De amore longa & perelegans digressio"; Screech, *Montaigne's Annotated Copy*, 77, 158–160. The discussion of *labra* and *labia* is among the philological notes, and the latter among the substantive.
- 74. Flyleaves e & f; Screech, Montaigne's Annotated Copy, 161-173.
- 75. Flyleaf g; Screech, Montaigne's Annotated Copy, 174–181.
- 76. Flyleaf c; Screech, Montaigne's Annotated Copy, 184-192.
- 77. Flyleaf j verso and pp. 82–85 and 275, note on I 925–958, and IV 1–25, with "Digressio longa de suis versibus. 82/275/" on flyleaf j verso, "repetiti /275/" at I 926 and "Atomes infinis/ &le vide infini" by I 952.
- 78. At I 958 Montaigne includes a list of page numbers of pages treating infinity; Screech, Montaigne's Annotated Copy, 101, 242-243.
- 79. Page 18, I 136-145, "Difficulte d'escrire/ la philosofie en latin,"; Screech, Montaigne's Annotated Copy, 208.
- 80. He indexes fifty cross-references to treatments of atoms, indivisibility and substance formation on p. 66, I 675-689; Screech, *Montaigne's Annotated Copy*, 232-233.

- 81. Page 140, I 510-521; Screech, Montaigne's Annotated Copy, 266-268.
- 82. See, for example, pp. 96 and 212 (Screech, *Montaigne's Annotated Copy*, 292–293, 302–304); 193 treats suicide and 212 education, but both are surrounded by numerous notes on more material questions.
- 83. Page 120, II 240-254, "Mouuemant a coutier fort legier et ridicule que les atomes font" (spelling Montaigne's); Screech, *Montaigne's Annotated Copy*, 42, 259. This is similar to the note in Paris BN M YC 397. See Chapter 2.
- 84. This repeated legend and its related notes on Lucreitus's assaults on *religio*, are treated by Screech, *Montaigne's Annotated Copy*, 37–39. See also Alain Legros, "Montaigne, annotateur de Lucrèce: dix notes "contre la religion," in *La renaissance de Lucrèce*, Cahiers V. L. Saulnier, 27 (Paris, 2010), 141–156 and plate 4.
- 85. DRN II 167-175, 1090-1120, V 110-137.
- 86. DRN III 1-27, VI 43-70, 393-422.
- 87. Page 12, I 80; Screech, Montaigne's Annotated Copy, 206.
- 88. DRNVI 1-29, V 1-28, 62-90, 1161-1189.
- 89. Screech, Montaigne's Annotated Copy, 323-324, 498-499.
- 90. For a recent thorough treatment of Gassendi's philosophy, see Antonia LoLordo, *Pierre Gassendi and the Birth of Early Modern Philosophy* (Cambridge, 2007).
- 91. Popkin, History of Scepticism from Savonarola to Bayle, 119.
- 92. Ibid., chap. 7.
- 93. Lolordo, *Pierre Gassendi*, chap. 3, esp. 60. Even Lolordo does not list Lucretius among Gassendi's sources on classical skepticism.
- 94. Popkin, History of Scepticism from Savonarola to Bayle, chap. 7.
- La Vérité des Sciences (1625), in Descartes' Meditations: Background Source Materials, ed. Roger Ariew, John Cottingham, and Tom Sorell (Cambridge, 1998), 163–164.
- 96. L'Impiété des deistes (1624), in ibid., 142-151.
- 97. See Chapter 2.
- 98. La Vérité des Sciences, 163.
- 99. Ibid., 163-165.
- 100. The very interesting English translation by Lucy Hutchinson, undertaken in the 1650s, has recently been printed in an edition overseen by David Norbrook (Oxford: Oxford University Press, 2011); on the French translation of Michel de Marolles, see Line Cottegnies, "Michel de Marolles's 1650 French Translation of Lucretius and its Reception in England," in Lucretius and the Early Modern, ed. David Norbrook, Stephen Harrison, and Philip Hardie (Oxford: Oxford University Press, forthcoming).
- 101. The 1647 Florentine Nardi plain text edition and a pocket version in Naples in 1693.
- 102. For more on Marchetti's translation, see Gordon, Bibliography of Lucretius, 194-195.
- 103. Ibid.; see in particular Leibniz's discussion of Marchetti, atomism, Bayle, and other issues connected to atheism and related beliefs in his *Theodicy*, "Preliminary Dissertation on the Conformity of Faith with Reason" (La Salle, Ill., 1985), 321. On Lucretius's impact on Holbach, who owned the Marchetti and a stagger-

- ing eleven other editions of the *De rerum natura*, see *Epicureans and Atheists*, the third volume of Alan C. Kors's *Atheism in France*.
- 104. My thanks to Nicholas Davidson for these observations on Marchetti.
- 105. The edition contains only selections from Pius. See Gordon, Bibliography of Lucretius, 243. The first version of Lefevre's annotated edition was printed in Saumur in 1662. Creech's English translation with commentary was first printed in Oxford, 1682.
- 106. "Nella quale si disamina la dottrina di Epicuro, & si mostra in che sia conforme col vero, & von gl'insegnamenti d'Aristotile; & in che differente."
- 107. The *Lucretio* entry in Frachetta's *Breve Spositione* runs from fols. $\dagger\dagger\dagger^{r-v}$, and the *Errori di Lucretio*, fols. $\dagger\dagger\dagger^{v}$ to $\dagger\dagger\dagger^{r}$.
- 108. Frachetta, *Breve Spositione*, fols. a2^{r-v}. "Et è uno ravvivatore della dottrina di già per poco dimenticata, grande Epicuro, à cui sono apposte à torto molte bugie."
- 109. Ibid., fols. A1°, 2. "La natura delle cose, ò le cose naturali . . . soggetto della filosofia naturale d'Aristotile."
- 110. Ibid. "Le cui opinioni in quest'opera studiò di ridurrea a luce."
- 111. Ibid., fols. A2^r-A3^v, 4-5.
- 112. Occasional corrections are not uncommon in printed versions, just not nearly as common as in manuscripts. Serious scholars in particular, like Montaigne, continue to make substantial philological annotations.
- 113. A treatment of the new strategies employed by editors and translators as they continued to justify printing Lucretius in the seventeenth and eighteenth centuries, especially in translation, appears in the first chapter of *Epicureans and Atheists*, volume 3 of Alan C. Kors's *Atheism in France*.

Conclusion

- DRN II 991-992. Montaigne observed the inauthenticity of this interpretation, commenting in his notes that Lambin and Lactantius read the line in an un-Epicurean way; M. A. Screech, Montaigne's Annotated Copy of Lucretius: A Transcription and Study of the Manuscript, Notes and Pen-Marks (Geneva, 1998), 28.
- For the continuation of this story after 1600, see the beautiful treatment of Epicureanism and Lucretius in the seventeenth and eighteenth centuries provided by Epicureans and Atheists, the third volume of Alan C. Kors's Atheism in France.

Appendix A: Lucretius Manuscripts

- 1. Common abbreviations used by Reeve and others: A=Vat. Lat. 3276; B=Vat. Barb. Lat. 154; b=Basel Univ. F VIII 14; C=Cambridge U. L. Nn 2 40; F=Laur. 35.31; L=Laur. 35.30; M=Venice Marc. Lat. XII 69 (3949); N=Naples Naz. IV E 51; P=Paris B. N. Lat. 10306.
- 2. On Noyanus/Noianus, a possible annotator of the lost common source of the Cambridge manuscript and Laur. 35.31, see the work of David Butterfield.

- Alison Brown, The Return of Lucretius to Renaissance Florence (Cambridge, Mass., 2010), 116; Michael D. Reeve, "The Italian Tradition of Lucretius," Italia Medioevale e Umanistica 23 (1980): 45.
- 4. Aurispa's authorship is attested by P. de Nolhac, La Bibliothèque de Fulvio Orsini (Paris, 1887), 218. It has been challenged in Reeve, "Italian Tradition of Lucretius," 32 n. 2, and Reeve, "Enrico Flores (ed.), Titus Lucretius Carus: De Rerum Natura. Volume primo (Libri I-III)" (review), Gnomon 77 (2005): 157.
- 5. See Ángel Traver Vera, "Lucrecio en España" (PhD thesis, University of Extremadura, Cáceres), 1:247–253. For this recent addition and many other contributions, I am indebted to Michael Reeve.
- 6. Both O and Q have been reproduced in facsimile by Chatelain (1908-1913).
- 7. G, V, and likely U belong to the same manuscript.

Appendix B: Capitula

- Fragments GVU also contain the capitula; the *Quadratus* is not rubricated, so contains them only in the indexes of IV-VI, on which basis a later hand has added them in bk. IV.
- 2. On their history and evolution, see David Butterfield, "The Early Textual History of Lucretius' *De Rerum Natura*" (PhD thesis, University of Cambridge, 2010), chap. 3. On the Greek capitula, see Michael Herren, "The Graeca in the Tituli of Lucretius: What They Tell Us about the Archetype," *Wiener Studien* 125 (2012): 107–124.
- The Greek phrase is taken from Epicurus's letter to Herodotus: Diogenes Laertius, X 139.
- 4. In the Codex Oblongus, line I 411 of the poem is written as if it were a capitulum.
- 5. Ibid., X 43.
- 6. This is in fact not numbered in the lists of numbered capitula but is often written in after I 704, sometimes as a capitulum and sometimes as an inserted line. It is absent from the *Oblongus*.
- 7. Often "Contra Anaxagoran."
- 8. Ibid., X 41.
- 9. This Greek phrase does not have any traceable source. It is extremely variable in different mannuscripts, but it is given in the *Oblongus* as "Istomeson ephora."
- Variations on this phrase appear in Plutarch, Galen, Aulus Gellius, and other sources; ibid.
- 11. II 43-44 sometimes appear corrupted into a capitulum, as is the case in the *Oblongus*. The corrupted form often reads "Subsidiis magnis epicuri constabilitas ornatas armis statuas pariterque animatas"; see the Munro 1864 edition, 85.
- 12. This phrase, though sometimes absent or separated, is present in the Oblongus.
- 13. II 94 appears as a capitulum in the Oblongus.
- 14. I 502 and 508 appear as capitula in the Oblongus.
- 15. This is corrupt and often omitted.
- 16. Diogenes Laertius, X 139. Unlike the other Greek phrases, which appear in Roman transliteration in the *Oblongus*, these three words appear in Greek capitals.

Notes to Pages 252-256 ≈ 333

- 17. II 710 is written as a capitulum in the *Oblongus*.
- 18. II 815 is written as a capitulum in the Oblongus.
- 19. II 887, 962, and 1012 are written as capitula in the Oblongus.
- 20. II 1112 is written as a capitulum in the Oblongus.
- 21. This capitulum is often omitted in the Renaissance, and it does not appear in the *Oblongus*.
- 22. This line is a fragment of III 677-678, missing the first three words, "quae fuit ante," i.e., "What was before has perished, and what is now has been created now."
- 23. Lines III 759, 805, 905 and 949 appear as headings in the Oblongus.
- 24. Frequently written "De Rebus Veneris."
- 25. Throughout bk. V in particular, in both the *Oblongus* and Renaissance manuscripts, there are many inconsistencies between the capitula that appear between lines of the poem and the lists of capitula that appear between the books in the same manuscripts. Capitula are present in the lists that are absent in-line and vice versa. This Appendix lists those capitula that appear in-line.
- 26. The Oblongus omits this capitulum, but has a gap where it should be.

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