From its beginnings in fourteenth- and fifteenth-century Italy, humanism aimed both to revolutionize learning practice and to create nations of educated men imbued with civic virtue. That optimistic program, however, had a fairly short reign. In England, a country that came late to the Renaissance, humanism was in its true ascendancy for less than a century. Arthur Kinney, in fact, dates humanism’s English preeminence only from 1512, when John Colet chartered St. Paul’s School in London on the principles of Christian humanist education, to 1605, when the publication of Francis Bacon’s *The Advancement of Learning* brought home to England—in a way that previous European breakthrough works such as those by Nicolaus Copernicus, Andreas Vesalius, and Conrad Gessner had not—the fact that the ancient writers so revered by humanists were subpar explicators of the natural world.¹

To be sure, Kinney’s chronological exactitude has some of the disputability (and also some of the irony) of Virginia Woolf’s declaration that “on or about December 1910 human character changed.” As Woolf herself immediately qualifies, “The change was not sudden and definite like that.”² The humanist curriculum thrived both in grammar schools and at Oxford and Cambridge well into the seventeenth century and even beyond, influencing writers and thinkers in every field from theater to history to natural and political philosophy, including writers and thinkers like Thomas Hobbes and John Locke who scorned humanism.³ “But”—to quote Woolf one last time—“a change there was, nevertheless.” Once English protoscientists like Bacon and William Gilbert began to echo, in their own way, Protestant suspicions that classical learning was not to be trusted, England began to share in what Brian Cummings calls the “crisis in studies” that ensued upon Protestantism’s vexed relation to humanism’s tenets.⁴
Demoting classical learning had the effect of undercutting three of the fundamental articles of humanistic faith. First, the idea that learning is founded on the mastery of rhetoric—most prominently, Ciceronian oratorical style. Second, the conviction that learning is furthered primarily by free access to written texts, by the skills to read and interpret those texts accurately, and by the ability to synthesize the wisdom of those texts—regardless of their origins—into a Christian knowledge base. And third, the belief that all these skills, both rhetorical and textual, should be put in the service of civic humanism: they equip the learned man with what he needs to improve himself and better his world. These principles had led an earlier generation of Tudor polemicists and schoolmasters to establish the *studia humanitatis*, including grammar, rhetoric, poetry, and moral philosophy, as the core—indeed, practically the entirety—of the grammar school curriculum. The idea was to train young men whose grounding in ancient wisdom would suit them for a civil society on a par with that of ancient Rome. In the post-Baconian seventeenth century, in contrast, general learning—and hence civic and moral virtue—would ultimately be founded on expertises other than the command of humane letters. The classics and the philological skill required to parse those classics were increasingly seen as accomplishments befitting scholars, not men of the world.

Humanism was undone, in the first instance, by a number of sixteenth-century sea changes in intellectual culture. Pyrrhonian skepticism, reintroduced to Europe in the 1560s with the publication in Latin of the works of Sextus Empiricus, joined other forms of skepticism already in circulation to remove, as Kinney puts it, “the possibility for precisely those absolute premises—such as the centrality and perfectibility of man, his educability and his transformation—upon which Tudor humanists erected an entire philosophy.” Efforts to reconcile skepticism with humanism did not allay the anxieties of educators like Philip Melanchthon, who worried that “Pyrrhonists or Academics, the destroyers of certitude” inculcate in impressionable young minds a “madness [that] annihilates the greatest gift of God, namely Truth, and overturns the arts, which preside over life.” Similarly, humanism’s syncretic ideal, in which any newly encountered mode or body of erudition may be safely integrated into a flexible but nonetheless stable Christian worldview, also came into question. The same free access to new texts and new ideas that earlier on had fueled humanist syncretic ambitions now threatened to become too many new texts and new ideas, too much free knowledge, too many possible positions. Melanchthon’s early sixteenth-century vision of
a union of truth and the arts gave way in the seventeenth century to what Frances Dolan calls a “crisis in evidence” in which any given reader might compile a version of events and their causation into a highly idiosyncratic, self-designed story that, though purporting to be a “true relation,” would bear no resemblance to someone else’s competing account.10

Perhaps most important of all the contributors to humanism’s decline was the fact that, generally speaking, humanism’s faith in instilling personal and national virtue by means of rhetorical and philological training proved inadequate to the religious, intellectual, and political challenges of the day. Even before Bacon classifies practically all of humanist practice—its reliance on classical authorities, its emphasis on rhetorical style, and its devotion to “eloquence and copia”—among the “distempers in learning” that bar humankind’s advancement in understanding the natural world, humanism’s fundamental tenets and customary procedures had been substantially undermined.11 No amount of philological expertise could resolve Reformation differences over interpreting the biblical text, differences that, in the end, came down to the individual reformer’s insistence that her interpretation was inspired by the Holy Spirit.12 Even more crucially, the most evangelical sorts of Protestantism—like the more fundamentalist sorts of Catholicism that took hold in post-Reformation Europe—equated the secular reading on which humanist thought was founded with moral degradation, just as John Milton’s Son of God does when he rebukes Satan’s offer of unlimited classical learning:

Who therefore seeks in these  
True wisdom, finds her not, or by delusion  
Far worse, her false resemblance only meets.13

While training in rhetoric continued to be crucial for participation in politics and government, many in the late sixteenth and seventeenth centuries, from Queen Elizabeth I to Hobbes, began to suspect that immersion in the texts of the Roman republic made the educated man and those who imitated him susceptible to sedition and insurrection. That suspicion was manifested most explicitly in the established church’s backlash against the value humanism placed on individual assertions of what the polis needed. It was not only in post-Tridentine Catholic Europe, as Margo Todd points out, that church and state hierarchy alike began to view humanistic training as undermining right order.14 If that were not enough, looking to ancient Rome as a model for the modern state began to feel less attractive in nations like England, which was
beginning to realize its history included humiliating vassalage to Roman conquerors.¹⁵

Thus Hiram Haydn memorably identifies the sixteenth and early seventeenth centuries as “the Counter-Renaissance,” a period in which thinkers from Martin Luther to Niccolò Machiavelli to Michel de Montaigne shared “an anti-intellectualistic, anti-moralistic, anti-synthetic, anti-authoritarian bias.”¹⁶ Prominent thinkers of all stripes, all of them humanistically trained, began to express serious doubts about the utility of humanism’s text-based learning system. Gilbert complains in the preface to his book on magnetism, published in 1600, that the “Ocean of Books by which the minds of studious men are troubled and fatigued” hinders “trustworthy experiments and . . . demonstrated arguments.”¹⁷ And even the truly learned King James I, after counseling his son Henry to be well read in scripture and in history, advises that “As for the studie of other liberal artes and sciences, I would have you reasonably versed into them, but not preassing to be a passe-master in any of them,” lest Henry be caught, “as Archimedes was,” engrossed in his studies while his enemies storm the gates.¹⁸

To counter humanism is not to replace it, however. The fact that this increasing sense of humanism’s intellectual, theological, and political shortcomings coexisted with the persistence of humanist education enabled a double vision for England’s learned classes: they acknowledged and articulated its problems but at the same time continued to employ it as if there were nothing problematic about it. The result is a habitually ironic stance on the subject of humanistic learning. As Jeff Dolven describes the situation of letters in the later sixteenth century, writers “cannot free their books . . . from a culture of teaching that they take to be compromised, even bankrupt.”¹⁹ It is possible to be skeptical about a system while still functioning wholly within it.

Humanism was undone not only by its well-known theoretical shortcomings but also by the accretive calcification that besets all grand schemes for educational and civic reform. As I detail in the first section of this chapter, humanism as a pedagogical program and as applied textual practice inevitably acquired cookie-cutter tendencies; it also acquired techniques for shortcutting, condensing, and deracinating the more controversial portions of challenging texts. These techniques abetted charges in the late sixteenth and early seventeenth centuries that humanism’s foundational attention to language—its dependence on rhetoric—amounted to a foundational commitment to fiction. A commitment, that is, not to discovering truth but rather to making things up.
Any body of knowledge developed along humanistic lines shares humanism’s fate. Alchemical study and practice, having adopted humanistic principles of producing knowledge out of linguistic skill, also—in an intensified version of what happens with humanism—acquire a reputation for shortcuts and fictions. At the same time, however, alchemical discourse commits itself so thoroughly to rhetoric that it embraces linguistic invention. The second section of this chapter describes the reputation alchemical discourse developed for rhetorical innovation, especially its talent for allegory. For authors seeking tropes for all kinds of knowledge practices, both scrupulous and slipshod, alchemical discourse thus offers an irresistible set of metaphors. Most obviously, alchemy serves as an all-purpose trope for learning that is attuned to fancy rather than fact.

But the use of alchemy as metaphor goes further than that. Alchemy comes to serve as a trope for learning models that, in the manner of late humanism, persist and even flourish even when their shortcomings are manifest and well known. In the third section of this chapter I gather some historical evidence, some likely causes, and some theoretical models for how alchemy comes to be associated with this kind of dedication to insufficient or diversionary learning, and I explain why a new term, disknowledge, is needed to denote a specific kind of knowledge practice, one that is a deliberate turn from something else that is known. Finally, in this chapter’s last section, I turn to the way that, in the protracted twilight of humanism, authors who see the advantages of retaining and developing alternative knowledge practices associated with fiction seize upon alchemy as a metaphor for the special case of learning that, insubstantial or outmoded though it may be, ought to be pursued nonetheless.

Alchemy and the Habits of Late Humanism

If humanism began its decline in England in the late sixteenth century, what replaced it? Traditionally, the answer has been science: text-based learning gave way to Baconian empiricism. This framework does not take into account, however, the long lag time between the predominance of one learning system and the ascendency of the next. This period, which some scholars of intellectual history have taught us to call “late humanism,” may be demarcated in any number of ways depending on whether one emphasizes religion, socioeconomics, or politics as the causative factor of humanism’s decline. But in terms of the
way the acquisition of knowledge was conceived, we may trace the span of late humanism roughly from the 1580s to the 1660s, or from the popularization of skepticism in Montaigne’s *Essays* to the founding of the Royal Society in London.  

As it happens, this same span of years marks the zenith of alchemy in England. While this coincidence is in some respects just that—coincidental—it is also the case that interest in alchemy spiked because it seemed to offer a solution to the problems besetting humanism’s most cherished ideals. Of course, alchemical learning since at least the late fifteenth century, like other protosciences, had mirrored, imitated, and indeed depended on the same shifts in education and scholarship that produced humanism in the first place. Marsilio Ficino’s and Giovanni Pico della Mirandola’s passions for reviving ancient texts did not discriminate between Plato and Hermes Trismegistus. But the affiliations between humanistic and alchemical thought became all the more urgent as humanism took serious blows to its foundations. Arguably, alchemy is what kept humanism going, even if in esoteric form. For some English thinkers, as Bruce Janacek has discussed, alchemy’s attractions had to do with its promise of turning schismatic and political rifts into a universal golden age; this alchemical goal may have breathed new life into humanism’s fading hopes for unity under the banner of civic virtue. Alchemy also rallied behind humanism’s ideal of syncretic knowledge. In an age of encroaching disciplinariness, seventeenth-century alchemy resuscitated Ficino’s and Pico’s fifteenth-century dreams of unifying all knowledge within one system and under one purpose. It is perhaps for this reason that humanistic educational schemes devised in the seventeenth century began to encourage an attraction to alchemy despite alchemy’s long-standing academic disrepute. For example, educational reformer Jan Amos Comenius, the man often credited with bringing Baconian posthumanist empiricism into late seventeenth-century educational practice, nonetheless professed a decidedly humanist “pansophism” that included alchemy within the fields of universal knowledge. A better answer, then, to the question of what replaced humanism is that it was replaced by alchemy. Alchemy became humanism by other means.

Alchemy’s alliances with humanism were methodological as well as ideological. As Wouter Hanegraaff notes, while alchemical experimental practice gained tremendous sophistication during this period—even becoming, for some practitioners, a prototype for the scientific empiricism that would eventually predominate—theoretical alchemy remained largely text-based, retaining both humanism’s culture of books and humanism’s conviction that rhetoric...
and the play of language could effect positive, real-world change. Finally, alchemy began in this period to adopt humanism’s intense focus on having ancient textual sources for its wisdom. Alchemy had long claimed its origins lay in ancient Egypt and in the occult expertise of biblical patriarchs like Moses, but seventeenth-century authors were even more eager than their predecessors to claim alchemy as “traceable not just to Hermes [Trismegistus] but to the most distant and venerable past, to a body of knowledge known as the ‘original wisdom’ (prisca sapentia) revealed by God to the ancient patriarchs—in some versions to Adam himself.” Alchemical philology also embraced the humanistically derived ideal of syncretism. Charles Webster argues that it was, in fact, Comenius’s idea that “Perfect knowledge would be ratified by all sources” that led to Isaac Newton’s determination to study the ancient texts of alchemy—which, Newton marveled, “have a concurrence with Antiquity and Theology.” Thus Newton’s ultimate alchemical goal was not the philosopher’s stone, about which he seems to have been rather skeptical, but instead a comprehensive Index chemicus that would compile all alchemical wisdom, ancient and modern.

If alchemy absorbed and imitated humanism’s aims and practices, however, it also absorbed and imitated the bad habits humanism had developed and the increasingly tenuous reputation humanism had acquired by the late sixteenth and seventeenth centuries. Specifically, alchemy marks fissures and weaknesses in Renaissance humanism that expose this greatest period of intellectual expansion as also one of intellectual contraction. Stephanie Jed has discussed how humanism’s desire to recover ancient learning was always marked by equal and opposite impulses: on the one hand, to uncover and resuscitate as many new authorities and new strands of knowledge as possible and, on the other, to pare down the canon of texts so that the spurious, adulterated, and anachronistic are sheared away. Both of these impulses can contribute to scholarly excellence, but both can also contribute to defensive, poor, or even simply lazy scholarly behavior. Expanding the horizons of learning through infinitely expanding the library of predecessor texts can lead to a gullible or simply indolent acceptance of any kind of book—even a bad one—as legitimate. Conversely, the desire to maintain a suitably excised canon of texts can devolve, as Charles Nauert reminds us, into an educational practice that depends on a very limited set of texts deemed safe for students’ consumption. The early modern commonplace book, for example, often serves as the record of a practice of “snippetizing” acceptable content from which copious, but sanitized, arguments might then be built. In addition, late
sixteenth-century educational reforms such as those influenced by Peter Ramus encouraged the use of textbooks, rather than the humanists’ beloved ancient texts themselves, in both grammar school and university instruction.33

We can even see the impulse to excise and excerpt books as a humanist response to the equally humanist imperative to expand the horizons of learning through infinitely expanding the library of predecessor texts. While scholars have always complained about the length of their reading lists, the sixteenth and seventeenth centuries, as I mentioned in this book’s introduction, saw a notable backlash against the number of books one was now expected to have at one’s command. Ann Blair calls this backlash a response to early modern “information overload.”34 Andrew Martin, in contrast, suggests that cutting back on one’s reading was an ethical response to the fact that “the sheer proliferation and diversity of available texts degraded the ideal of a comprehensive intellectual synthesis to a merely eclectic juxtaposition of unreconciled manners and ideas.”35 Either way, the impulse was to read less. By 1685, French scholar Adrien Baillet was recommending simply “separating those books which we must throw [out] or leave in oblivion from those which one should save and within the latter between what is useful and what is not.”36 Immediately we spot the problem: in order to separate the keeper books from the discards and the useful from the useless, one must read them. Anyone who attempted Baillet’s winnowing process would no doubt give up long before all the books were read.

Both of these seemingly contradictory responses to the proliferation of books—feeling that there are simply too many books to read, and also neglecting to read enough of them to determine which are good and which are not—crop up in alchemical theory and practice. As Tara Nummedal describes it, whereas alchemists were told they should accept the procedure detailed in one alchemical book only if it was confirmed by another, following the philosophical principle of *liber librum explicat*, “the book explicates the book,” in practice many alchemists tended to rely on only a few books at most.37 No doubt the high price of books limited the size of most practicing alchemists’ libraries. And yet, a number of alchemical writers who were unconcerned with where the alchemist’s next book was coming from still shared late humanism’s notably ambivalent attitude toward the difficult work of reading, absorbing, and synthesizing a plethora of challenging texts.

As with late humanism, the problem of alchemical knowledge management is not merely one of the sheer volume of reading material. Rather, having taken on humanism’s project of Christian syncretism, alchemy also tussles
with the humanist dilemma of how to incorporate ideologically challenging texts—a dilemma that, as I have mentioned, looms larger as religious positions harden and splinter in the post-Reformation era. Humanism always comprises equal and opposing impulses: on the one hand, read everything, but on the other, compose and remember only what is congruent with Christian virtue. Humanistic editing and winnowing are intended to maintain not only philological standards and a reading list of a manageable size but also ideological comfort. Similarly, alchemical reading practice, while it maintains the ideal of syncretic learning with perhaps more ease than late humanism itself does, is as concerned with choosing which texts to excise as it is with which texts to assimilate.

For humanism as a whole, those opposing impulses of assimilation and excision are nicely summed up by the dual uses, bracketing the humanist era, of Horace’s epigram, “I have set out to pass through all the masters of philosophy, while swearing by none.” In the late fifteenth century, Pico took Horace’s remark as his motto for universal erudition. By the late seventeenth century, the very same epigram had become, for the Royal Society, what Anthony Grafton calls science’s “pledge to trust no book.” While the motto’s use by the Royal Society is now taken as signifying the triumph of scientific empiricism and the rehabilitation of curiosity about the natural world from a moral vice into an intellectual virtue, its repetition from the early days of humanism invites us to query what happened in the intervening years, between Pico and the Royal Society, to early humanism’s reverence for predecessor texts. One answer is that in some cases intellectuals tried to justify reading less. As textual precedent was losing its preeminent status but empirical data had not yet come to replace it, it proved quite possible to “trust no book” so far as to declare that very few books were worth reading. And hence—because books were still the source from which knowledge was derived—to declare that very few things were worth learning. Thus, some writers on alchemy, like their late-humanist fellows in other disciplines, handle this state of affairs by massaging humanism’s reverence for ancient sources into an explicit exhortation to read as little as possible.

Justifying reading less requires some finessing, however. It requires what Ian Hacking has labeled a “self-stabilizing technique”: that which allows a particular “style” of scientific (or pseudoscientific) reasoning to persist. Among the most effective self-stabilizing techniques of alchemical theory are its claims not only to antiquity but also to universality. Everything in existence, whether animal, vegetable, mineral, or spiritual, may be alchemically explained. That
style of universalizing can in turn make it possible for an alchemical thinker to justify never having to expand her intellectual horizons. When faced with a problem that seems to be outside the alchemical discipline, the alchemist has the option of denying that it is outside at all. As John Locke remarks in his posthumously published treatise *Of the Conduct of the Understanding*, “A metaphysician will bring ploughing and gardening immediately to abstract notions; the history of nature shall signify nothing to him. An alchemist, on the contrary, shall reduce divinity to the maxims of his laboratory, explain morality by sal, sulphur and mercury, and allegorise the Scripture itself and the sacred mysteries thereof into the philosopher’s stone.”

Just as alchemy’s sense of its own universality potentially transmutes into its conviction that there is nothing else besides alchemy to be studied, so can its attachment to predecessor texts transmute into claims of the primacy and sole authority of an exceptionally small corpus of antique learning. As an example let us turn to Robert Fludd, who in his *Philosophia Moysaica* (1638) not only excoriates ancient Greek philosophers’ inability to recognize a “sacred essence” common to all creatures but also, at some length, blames those same philosophers for failing to cite their original source, the books of Moses as preserved in the Old Testament: “they having had a view of Moses his labours, which were indited by the Spirit of God, did gather out, and confess the truth of his doctrine, touching the principles of all things, and yet would not in open terms acknowledge their Master, but altered the names of them.” Fludd has discerned that as Aristotle cribbed from Plato, so too did Plato crib from Moses. Only Hermes Trismegistus—author of the primary texts of alchemy and supposedly Moses’ Egyptian contemporary—is exempt from criticism because he acknowledges his source: “the excellent Philosopher Hermes, otherwise termed Mercurius Trismegistus, expresseth plainly, that he was not onely acquainted with Moses his books, but also was made partaker of his mysticall and secret practise.” Just as the divine essence is transmitted across all substances and creatures in heaven and earth (such that alchemy is merely a matter of refining a lump of stuff to get at what is already there), so too are true principles transmitted across scientific and philosophical authorities so effectively that the original text source remains primary even when the author himself claims to be inventing something new. Fludd allows his reader to leave off ancient philosophers and take up only the books of Moses and of Hermes.

The effect of this logic is to deny that there can ever be a new idea. As Fludd has it, alchemy’s constant, if often mysterious, references to ancient authority and past practice mark it as the paradigmatically conservative knowledge
system: it enforces a principle of continuous preservation. Thus, unlike Bacon’s new inductive science—which, as Mary Poovey has argued, invents itself as something that looks new only by occluding its continuities with the past (the same charge that Fludd levels against Plato and Aristotle, who fudge their dependence on Moses)—Fludd’s alchemy is proud of its staving off all that is new, defined as all writing that postdates Moses and his pupil Hermes. We can thus distinguish Fludd’s gesture of reverting to ancient learning from the same claim to intertextual lineage made by humanism in its most optimistic phase. Like a good humanist (or a good Protestant reformer), Fludd makes an attempt to pare away the accretions of ill-founded medievalism in order to return to the apex of an ancient past. But Fludd’s insistence that all classical learning derives from “the Mosaic philosophy” means that commerce with the classics will not lend itself to an advancement of learning. Discovery does not matter; indeed, discovery is undesirable.

Similarly, Michael Sendivogius’s Novum lumen chymicum (1604) urges the study of alchemy because it retreats from newfangled discoveries, reinforcing instead what one ought to have always known. Stick to the ancient writings on the philosopher’s stone, says Sendivogius, because those writers focused on only the essential matters: “although they were contented with the plaine way alone of nature, yet they found out those things, which we now imployed about divers things could not with all our wits conceive.” We misguided moderns, in contrast, “bend our wits not to things knowne, and familiar, but to such things, which not at all, or very hardly can be done. . . . And such is the disposition of mens natures, as to neglect those things they know, and to be alwaies seeking after other things.” Alchemy’s supposed antiquity morphs into its fundamentalism: it is not subject to addition or development. Alchemy thus comports with the tension that Hanegraaff finds in discussions of the origins of wisdom after the flush of early humanism had passed. Early humanism’s prisca theologia, “a historically/chronologically oriented narrative of ancient wisdom which held considerable revolutionary potential,” comes to be matched by an idea of philosophia perennis, “an essentially conservative doctrine which preaches the futility of change and development by emphasizing the transhistorical continuity and universality of absolute truth.” As with other kinds of fundamentalism that arose in the sixteenth century, the question for alchemy then becomes one of interpreting the originary text properly and not of reading or writing new ones.

The idea that there is no new idea can be reinforced by alchemy’s custom of declaring its precepts secret. Alchemical devotees urged to stick to the
ancient texts may well have found themselves puzzling over how to claim a past so ancient and so occult that no one had full access to it. In keeping with the medieval and early modern tradition of *libri secretorum*, “books of secrets,” many alchemical texts assert that full knowledge is available only to the man of ultimate knowledge and skill, the magus. In other words, available only to someone whose existence is always in doubt and whose knowledge is transmitted charitably, if at all. Recent historians including William Eamon, Allison Kavey, and Neil Kamil have quite rightly questioned the pose of secrecy in books of secrets and in alchemical artisanal circles, analyzing instead the role of secrets in developing the kind of experimentation that will play a part in the scientific revolution (Eamon), in popularizing such experimentation among diverse groups, including women and less elite sorts (Kavey), and in maintaining the identity of a minority religious community in both Europe and the New World (Kamil).46 Nevertheless, despite the utility of the posture of withholding secrets, such a pose of “not telling” blatantly challenges the ideal of the textual transmission of knowledge that was fundamental to humanism in its early phase.

When alchemy’s humanistic devotion to ancient learning morphs into a late-humanistic desire to learn less, the kind of systematic philological analysis of the nature of one’s debt to antiquity that was the hallmark of humanism in its prime also falls away. Although the scholar and master philologist Isaac Casaubon, in work published in 1614, debunked the attribution of the works of Hermes Trismegistus to ancient Egypt by making note of the *Corpus Hermeticum*’s extensive use of late-antique references, Casaubon’s correction was ignored or disputed throughout the seventeenth century by several prominent alchemists and occultists including both Robert Fludd and Athanasius Kircher.47 An air of profound continuity was so important to a certain strain of alchemical thinking that some scholars were willing to throw aside their humanist training to achieve it.

Alchemical Rhetoric: Beyond Humanism

Beyond a shared suspicion of too many books and unmanageable learning, beyond abandoning a commitment to all of antique learning and to the philology that would establish that learning as genuine, alchemy of the late sixteenth and seventeenth centuries shared one more thing with late humanism: the reputation for the excessive production of language.
From its beginnings, humanism famously saw the study and imitation of classical eloquence as intrinsic to the cultivation of personal and civic virtue. As Neil Rhodes puts Petrarch’s point of view, “There is little point in knowing what virtue is . . . if you cannot move men to strive toward it.”48 Rhetoric held real-world power. By the late sixteenth and early seventeenth centuries, however, elaborately designed rhetorical display came under suspicion by some as only so much frivolous ornament, old-fashioned in style and empty of meaning.49 This shift in opinion was not merely a shift in fashion from Ciceronian, euphuistic style to the newly popular “plain style”; it was also a reaction to a newly skeptical intellectual milieu in which, as Kinney puts it, “persuasion [could] take the place of truth.”50 By 1667, Thomas Sprat felt comfortable describing the Royal Society’s preference for “the language of Artizans, Country-men, and Merchants, before that, of Wits, or Scholars” as the only means of combating “the easie vanity of fine speaking” and the “beautiful deceipt” to which that fine speech led.51

It was not that late-humanist writers like Bacon disdained rhetoric entirely. Both practically speaking and as a result of their own humanist educations, they could hardly do so. As Brian Vickers has noted, it is important not to “take [late humanist] calls for the banishment of rhetoric as proof that this duly took place.”52 But Vickers himself commits the opposite error when he takes the fact that rhetoric continued to be praised and deployed in seventeenth-century education as evidence that humanism was not in decline. He forgets that something may be praised even when its faults are manifestly known.53 A more accurate description of the late humanist period is that many began to view rhetorical skill as merely a tool needed for fine writing rather than as the basis for the public oratory that inculcates the modern state with ancient civic virtue.54 Moreover, following Ramus, many began to reassign the foundations of good composition—proof and the arrangement of argument (inven-tio and disposi-tio)—from rhetoric, where Cicero and Quintilian had them, to logic.55 Some recent scholarship has sought to defend Ramus against charges of discarding all that was valuable about the humanistic study of letters, and it may also be true, as Mordechai Feingold has argued, that the Ramist emphasis on logic over rhetoric did not have as much influence on English thinkers as has been claimed.56 Nonetheless, in Ramus’s insistence that discourse is best when closest to human “natural reasoning”—by which he means the reasoning of the uneducated as well as the educated—we find the germ of Sprat’s Royal Society praise for the language of the artisan over the rhetoric of the humanist scholar.57
Just as alchemy followed early humanism in valuing a pedigree of ancient learning, so too did it follow early humanism in regarding language as productive of real-world change. Alchemy, however—like the occult sciences more generally—meant this change literally. Drawing not only from theurgic tradition but also from classical and humanist rhetoric’s mythos of ancient orators as “the first leaders to bind untamed humanity together with mystical eloquence,” magicians and occult philosophers, Ryan Stark argues, held the belief that “certain tropes, arranged properly and spoken forcefully by experts, had the spiritual energy to transmogrify both inanimate and animate objects alike.” Alchemy’s version of this belief depended on the tenet that all creatures and substances, both terrestrial and celestial, partook to some degree in a shared, divinely imparted essence. While most alchemical treatises were uninterested in the topic of how the alchemist’s power aligns with God’s, some Christianized theories of how alchemy works posited that the divine essence manifest both in God’s verbal creation of the world and in Christ’s incarnation as the Word made flesh may be invoked and controlled through the alchemist’s properly reverent use of language. In his introduction to a seventeenth-century English translation of the Pimander, a text among those attributed to Hermes Trismegistus himself, Paracelsian physician John French in fact puts Hermes in the place of the Ciceroian originary orator who civilized the world through a magical rhetoric. Crediting Hermes with the invention both of writing and of literature, French declares, rather heretically, “If God ever appeared in any man, he appeared in [Hermes].”

Given alchemy’s attentiveness to the power of language, not to mention the humanistic training of many sixteenth- and seventeenth-century authors of alchemical texts, it is not surprising that those texts should flourish their own rhetorical bona fides—to the extent, Lawrence Principe has argued, of attempting to lend alchemy a more legitimate air by dressing it up in Greco-Latin terminology, classical allusions, or even Latin verse form. But in an era in which humanism itself started to seem past its sell-by date, such a display of rhetorical skill risked backfiring, identifying alchemy not with current scientific theory and practice but with outmoded learning. And with a rather overdone version of it, at that. Principe describes how early modern alchemists’ increasing efforts to festoon their theory with antique supporting authorities led to their being ridiculed for finding alchemy in every biblical or classical story, from Jason’s golden fleece to the Israelites’ golden calf. If alchemy’s overblown claims of classical pedigree could seem absurd, so too could its overblown humanist-style claims of rhetorical power. Despite his interest in
the practical application of Paracelsian “chymistry,” physician and University of Wittenberg professor Daniel Sennert, in a strikingly antirhetorical comment, pooh-poohs the idea he finds in Paracelsus that words have a transformative effect. Paracelsus “said Characters would cure diseases otherwise uncurable. . . . [But] words do only declare the sense of the mind, and work no further.”62 Sennert’s objections are necessary only because alchemical discourse remained fully committed in the seventeenth century to the transformative capacities of language. By the lights of its devotion to rhetoric, we see alchemy not merely as influenced by humanism but as one of humanism’s last surviving outposts.

To take this point one step further, the explosion of alchemical texts in England in the late sixteenth and seventeenth centuries may be seen as a last-ditch effort at keeping humanistic rhetoric vital and imperative, alive in the discursive output of a discipline that claimed to touch upon all that is, in heaven and upon earth. Alchemical texts, as it turns out, are especially committed to certain kinds of humanist rhetorical techniques. What is interesting about these techniques is how they work very specifically to maintain the centrality of language to the alchemical enterprise in a way that mirrors and revives early humanism’s dream of linguistic power. In fact, alchemical discourse seems to double down on humanist rhetoric in a way that reinvents it. Alchemical texts not only routinely deploy rhetorical strategies that are congruent in character with the alchemical goal of physical and metaphysical transmutation but also suggest that part of alchemy’s mission extends to symbolic production, from the production of new words and new multisymbolic representational systems (such as diagrams) to the production of metaphor and allegory. The effect, in some instances, is not simply to reclaim invention, which had been reassigned by Ramus to the realm of logic, for rhetoric. It is also to establish a peculiarly alchemical form of rhetoric, one that freely cops to the charges that linguistic creations are merely a kind of fabrication but claims those linguistic creations’ importance nonetheless.

Practical alchemy was responsible for real invention, as I have mentioned. As Bruce Moran points out, even those who derided alchemy’s more far-fetched claims praised it for what Italian metallurgist Vanoccio Biringuccio called “that pleasing novelty which it shows to the experimenter in operation.”63 The novelty most obvious in theoretical alchemy, however, is the novelty of symbolic schemes: diagrams, tables, emblems, signs, and—above all—words. In some cases, the new symbology is designed to keep secret the alchemist’s most treasured processes.64 Usually, though, such new symbols, like new alchem-
ical terminology in general, were not a matter of privacy; rather, they prolif-
erated all the more in alchemy’s public productions, the printed tracts and
public demonstrations that created the public persona of the intellectual
alchemist. The second English printing of The Last Will and Testament of the
(probably fictional) alchemist Basilius Valentinus, for example, includes a help-
ful “Table of Chymicall & Philosophicall Characters with their significations
as they are usually found in Chymicall Authors both printed & manuscript.”
This table lists no fewer than a dozen symbols for gold and nearly as many for
lead, tin, copper, mercury, and silver—far more than the typical curious reader
could have known before picking up the book.65

Part of the attraction of alchemy to a larger audience thus lies in its
invention of new terminology, bright shiny new words that proliferate, in a
neologistically minded age, among a literate class attracted to and apt to use the
latest lingo. Nicholas Clulee points out that “Unlike the disciplines taught in
the universities and even astrology, there was in alchemy no fixed discourse
and vocabulary and no primers providing a ready introduction to the art.”66
Hence the field offered unlimited opportunities for concocting new vocabulary.
Writers who disdained alchemy found this habit easy to mock. As Reginald
Scot acerbically remarked, alchemists must be “learned and jollie fellowes”
because they “have in such readinesse so many mysticall termes of art.”67 Easy
to mock; but hard to resist. In Ben Jonson’s 1616 masque Mercury Vindicated
from the Alchemists at Court, Mercury himself—despite complaining about the
perverted uses to which court alchemists put him—cannot help parading the
irresistible lexicon that accompanied the alchemical process and that was start-
ing to transfer itself via metaphorical cross-reference to general English usage:
“I am their crude and their sublimate, their precipitate and their unctuous, their
male and their female, sometimes their hermaphrodite; what they list to stile
me.”68 In the same way, the con artists of Jonson’s The Alchemist deploy alchem-
ical terminology for all it’s worth. They do so not merely as part of the apparatus
by which they snow their customers but also among themselves, when the cha-
rade is not needed—as if those words were too good not to pull out of one’s
pocket whenever possible. Subtle uses the same terms as Jonson’s Mercury
when he angrily points out that he has alchemized his colleague from servant
Jeremy to “Captain” Face, from the basest of substances to the purest:

Thou vermin, have I ta’en thee, out of dung,

Sublimed thee, and exalted thee, and fixed thee
I’ the third region, called our state of grace? Wrought thee to spirit, to quintessence, with pains Would twice have won me the philosopher’s work [that is, the philosopher’s stone]? Then, as if to comment on the inextricable connection between alchemy and neologism, he also notes he has “Put [Face] in words, and fashion.”

Alchemical terminology need not even be seriously posed to put people in words as Subtle does Face. Erasmus’s skeptical colloquy “Alcumistica” details how a con man alchemist gulls a scholar—and not just any scholar, a rhetorician. The learned Balbinus is taken in by an alchemist who comes to him seeking his advice on a better method for transforming matter. The alchemist professes to be puzzled about how to leave off the *longatio* method of alchemy in favor of *curtatio*: “One is shorter but a little more risky; the other takes longer but is safer. . . . [U]p to now I’ve toiled in this latter path, which does not please me, and I’ve been unable to find anyone willing to show me the other path that I’m dying to find.” The joke is that Erasmus has made up *longatio* and *curtatio* out of thin air, so convincingly that he eventually dupes even Reginald Scot, who employs Erasmus’s new words in the *Discoverie of Witchcraft* in their English forms, “longation” and “curtation,” as if they were authentic alchemical terms. Erasmus’s joke is on the educated reader who, like Reginald Scot, takes the fabricated words for real just as Balbinus takes the alchemist’s bogus schemes for real. In the end, though, the crucial aspect of made-up words like *longatio* and *curtatio* is not whether we are or are not in the know about their fabricated status. What is important is that they are so innovative and seemingly authoritative that we may want to use them, legitimate or not.

The appeal of new alchemical words is connected to the appeal of alchemical emblems, diagrams, and illustrations. Facilitated by the proliferation of print and the increasing sophistication of illustration technique for printed books, these verbal-visual hybrids had the practical function of helping new symbolic associations reach a nonspecialist public. Often, however, they also seem to be included for more than simply illustrative purposes. When George Ripley’s late fifteenth-century *Compound of Alchemy*, first printed in 1591, appears in Elias Ashmole’s *Theatrum chemicum Britannicum* (1652), it features a diagram that promises to be “the Figure conteyning all the secrets of the Treatise both great & small.” But this diagram displays what Benedek Láng calls the general tendency of diagrams in magic texts to have “lost their links
to the texts that explained their functioning”: it has both less and more than Ripley’s text. On the one hand, whereas the text describes twelve successive “gates” or steps in the alchemical process, from calcination to projection, the diagram has only eleven concentric circles corresponding (in some fashion) to those steps. On the other hand, almost all of the circles in the diagram, though they supposedly correspond to those progressive steps, seem to refer to the alchemical end’s already having been achieved. Either way, the diagram establishes itself as an alternative maker of meaning. It is alchemy’s adoption of new signifying systems such as the diagram or the emblem that leads Thomas Greene to group “hermetic correspondences” with the late sixteenth century’s other semiotic innovations, a newly stocked “storehouse of signifying capacities” that included everything from Protestant exegetical discourse to the nascent public theater.

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Alchemy discourse, in other words, is appealing not simply because it provides a new array of conventionally referential words or symbols. Rather, alchemical discourse posits a new mode of creating meaning, through aesthetic design so overabundant that it likely exceeds the text’s discursive needs or the reader’s capacity to comprehend. Alchemical discourse thus both confirms and tests Hacking’s sense that rhetoric shapes reasoning to such an extent that any chasm between old science and new science may be explained as much by a shift in rhetorical style as by a shift in paradigm (per Thomas Kuhn) or by a shift from one concept to another, incommensurable concept (per Paul Feyera-bend). In alchemy’s case, new rhetoric indicates new thinking, but it is not thinking that we would now call “the new science.” Rather, we might think of it as “the new old rhetoric,” one that confutes the late sixteenth-century chasm that, for some, had developed between words and truth. Contrary to the opinion of those who associated Ciceronian rhetoric with mere ornament, alchemy’s new words and new pictorial schemes truly craft something original: inventio, not just copia.

In this way alchemical discourse establishes a third position, one that is neither the early humanist insistence that rhetoric shapes the world nor the later, Baconian plain-style implication that rhetoric is at best descriptive and at worst an extravagant flight of fancy. Alchemical discourse and alchemical diagram knowingly generate extravagant flights of fancy that nonetheless shape the world. Alchemy’s revision of late-humanist rhetoric into a productively decorative, rather than merely decorative, system puts it in the company of other kinds of innovation in natural philosophy in the period of late humanism. If, as Marco Beretta argues, the alchemical mania for symbology was
first developed as a way of sidestepping the habits of Aristotelian dispute that occupied the medieval university—so that “alchemists used pictograms, symbols, emblems etc. instead of disputing the philological origins of words and their precise definition”—then intellectual evasion proves the mother of alchemical invention. Alchemy gives us an inventive symbology—as Beretta drily puts it, “a large number of symbols for a very small number of substances”—that comes to stand on its own, its own new heaven, new earth.

In using new terms to create new horizons of symbolic possibility, alchemy also follows a trail blazed by early humanism but widened by late humanism, one that has only recently drawn the attention of scholars: not merely the quest for pure ancient languages cleansed of their medieval accretions but also the search for a new ancient language—one that, as it turns out, can be made up practically out of whole cloth. As Umberto Eco has detailed, “the search for the perfect language” often meant the invention of a language never found in nature or, for that matter, in libraries. Pico, for example, crafted his syncretic humanism partly under the influence of Flavius Mithridates, the Jewish linguist whom Pico engaged to help translate Kabbalah into Latin but who proceeded to teach Pico to write what Alastair Hamilton calls “a bizarre mixture of Hebrew and Aramaic in Ethiopic characters.” Later experiments in producing a universal language were more systematic and also more original. In his geometrically and mathematically derived *Monas hieroglyphica* (1564), John Dee concocted his very own hieroglyphics, kabbalistically derived but consisting of new symbols rather than Hebrew, that could generate all the truths in the universe and all other human languages besides. The “hieroglyphical monad” of the title of Dee’s treatise, a symbol amalgamating various astrological signs (Mercury, Aries, Taurus, the sun, and the moon), is said to be capable of generating entirely new fields of knowledge, including a purified and ideally productive alchemy. For Dee, in other words, language inspired in part by alchemy was not merely invented but inventive.

Thus, even while it absorbs humanism’s commitment to rhetoric as foundational, alchemy also abandons early humanism’s assumption that language, properly used, was firmly anchored to political, philosophical, and moral truth. Rather, in its rhetorical inventiveness, alchemy commits itself to a particular view of language as infinitely malleable. It is not simply the case that alchemical language is highly figurative—though it certainly is, as even those invested in alchemy sometimes bemoan. It is also the case that alchemical language seems to be singularly devoted to examining figuration as a process
rather than just a rhetorical fillip. In this regard, alchemy is not just rhetorical; it is metarhetorical. As Lee Patterson puts it, “There really is a deconstructive point lurking in alchemical treatises, which is the idea that language can not unveil a pregiven truth that exists outside itself but can only provide an endlessly expanding list of synonyms, a ‘chain of signifiers’ that defers the signified or referent.” In the eighteenth century, when the new discipline of chemistry felt obliged to turn to the sets of symbols that had become familiar through alchemy as the foundation of its own symbology, chemical theorists worried, in fact, that they were partaking of a representational system that was so complex as to defer meaning endlessly. Echoing Robert Boyle’s frustration in The Sceptical Chymist (1661) about how alchemists “do so abuse the termes they employ, that as they will now and then give divers things, one name; so they will oftentimes give one thing, many names,” French chemist Pierre Joseph Macquer complained in 1749 that alchemy’s “expressions were all tropes and figures, its phrases metaphorical, and its axioms so many enigmas.”

If, as is familiar from histories of the scientific revolution, alchemy shares premodern science’s “doctrines of resemblance and similitude” explaining how all creatures and all substances are linked, then it is not surprising that tropes that assert likeness or shared qualities—that is, simile or metonymy—should be habitual in alchemical discourse. But alchemy, fittingly enough, traffics adeptly in tropes not just of likeness but of substitution and shape-shifting. Which is to say that alchemy traffics in metaphor, or the trope of substitution. Indeed, the Oxford English Dictionary’s first citation of the word metaphor is from an alchemical poem, Thomas Norton’s late fifteenth-century Ordinal of Alchemy, which compares its own “playne & comon speche” to the “clowdy” writing of scholarly authorities on alchemy such as Hermes Trismegistus, Roger Bacon, and Raymond Lull:

Thei made theire bokis to many men ful derk,  
In poyses, parabols, & in metaphoris alle-so,  
which to scolers causith peyne and wo.

The possibility that the word metaphor enters into English by way of alchemy suggests that alchemy’s devotion to metaphor is more than a stylistic habit—more than just a way of burying professional secrets in obscure language, and more than just a convenient shorthand for portraying alchemical processes and ingredients (in which, for example, a reference to “the King” indicates sulfur
and “the Queen” mercury). Rather, as Patterson suggests in discerning a deconstructive point in alchemical treatises, alchemical discourse is metaphorical by nature.

To be “metaphorical by nature,” however, suggests that alchemy partakes in an “epistemology of metaphor” that, as Paul de Man describes it, threatens to extend the substitutive power of tropes to the very texture of reality. For example, the Hieroglyphical Figures, an early seventeenth-century alchemical text purporting to be by reputed fifteenth-century alchemist Nicolas Flamel, meditates upon alternative names one may attach to the stage of blackness that is one desired step in the heated mixture of mercury and sulfur:

And this dissolution is by the envious Philosophers called Death, Destruction, and Perdition, because that the natures change their forme, and from hence are proceeded so many Allegories of dead men, tombes and sepulchres. . . . Others have called it Xir, or Iris, Putrefaction, Corruption, Cymmerian darknesse, a gulfe, Hell, Dragons, Generation, Ingression, Submersion, Completion, Conjunction, and Impregnation, because that the matter is black & waterish, and that the natures are perfectly mingled, and hold one of another. . . . A while after, the water beginneth to thicken and coagulate somewhat more, growing very blacke, like unto pitch, and finally comes the Body and earth, which the envious have called Terra foetida, that is, stinking earth: for then because of the perfect putrefaction, which is as naturall as any other can be; this earth stincks, and gives a smell like the odour of graves filled with rottennesse.

This passage demonstrates how alchemy’s attachment to inventive language cannot be dismissed as “mere” language. We begin here with an explication of how alchemical metaphor comes about. Because the substance obtained in this stage of the experiment is black, its color encourages “Allegories of dead men, tombes, and sepulchres” in the same way that its wateriness and its blended texture encourage the use of terms like “a gulfe” and “Conjunction.” Straightforward enough. Yet by the end of the passage, the metaphor of death is no mere metaphor: it has been naturalized. The very stink of rotting bodies imbues the alchemical laboratory, permeating it with “a smell like the odour of graves.” The effect is entirely contrary to Carl Jung’s suggestion that alchemy was invented as a way of shaping an indifferent physical world into a projected version of the human psyche. Rather, the metaphorical substitutions that
Flamel employs bind with reality to retroject a newly formed and newly terrifying physical world back into our minds, the minds that made the words.89

As Flamel’s casual reference to the “Allegories” to which alchemical language is liable implies, alchemical discourse’s affinities with metaphor often lead to its use of allegory, the master metaphor. Treatises on alchemical theory often proceed as obscure allegorical narratives—maybe baffling or boring ones (or both), but allegories nonetheless. Alchemy’s comfort with allegorical structures is another way in which alchemy unabashedly refashions its own belatedness as something uniquely innovative in an age of oncoming new science. Just as Edmund Spenser writes his allegorical epic The Faerie Queene in the 1590s in order to declare medieval forms not only not dead but somehow a new mode of English literature, just as Milton places the allegorical figures of Sin and Death both at both the beginning and in the anticipated future of Satan’s career of tempting humans in Paradise Lost, so too does alchemy preserve and revive allegorical form in an effort both to claim a literary and bibli- cal hermeneutic heritage and to make the decoding of allegorical mysteries seem urgent and of the moment.

The reader will be happy to hear that, in bringing up alchemical allegory, I do not intend to undertake an explication of these rather muddy allegorical alchemical texts. Rather, I wish to consider what the ubiquitous association between alchemy and allegory might offer for nonalchemist early modern authors who adopt alchemical metaphors and frameworks within their own literary works. Alchemy’s allegorical habits signify, for these authors, certain habits of thought having to do with covering up, setting aside, or merely turning away from that which is allegorized. These habits of thought repurpose language from its humanist aim of effecting civic and moral change to a very different aim: sidestepping a particular construction of truth. Alchemical allegory thus comes to signify a kind of epistemic choice.

In recent years we have moved from a more deconstructive view of allegory—such as that of Maureen Quilligan, who in the late 1970s described allegory as a genre that draws attention to the reader making sense of an elaborate system of signs—to an examination of the ethical stakes of this peculiar literary structure.90 Through the work of Gordon Teskey we have come to understand that allegory’s overlay of an elaborate metaphorical scheme on a substrate of something less organized and univocal can act to repress the history of violence that characterizes relations between dominant and subordinate groups of persons.91 The first step in creating allegory through violence, says Teskey, is to convert living beings into abstractions. The next is to
characterize those beings, in their abstract form, as meriting violent sub-
ordination. The last step, however, is to forget that this violent project of
abstraction has ever needed to be undertaken at all. The resulting fiction
suggests that the allegorical network of abstract signifiers has always, seam-
lessly, been this way, occluding the trail of injustice and obliteration that led
to this literary state.

Judith Anderson’s dead-on description of allegory as “a process of think-
ing” comes into play here, since Teskey’s argument attributes epistemological
maneuvers to allegory—knowing what needs to be repressed, then forgetting
the act of repression—that are suggestively reminiscent of alchemical dis-
course.92 For example, theoretical alchemy’s account of its textual history, as
I described above, requires the effacement of how that history was crafted:
the alchemical text can claim that there are no significant interim texts be-
 tween it and Hermes Trismegistus or between it and Moses. But more interest-
ing is the way that literary authors tend to associate alchemy with a kind of
“allegory lite”: an allegory for which the stakes of those epistemological ma-
neuvers are not as high as the ones Teskey describes and whose results are seem-
ingly more benign. Rather than undertaking the violent repression of classes
of persons, alchemical allegory, as these authors deploy it, thinks its way into
the conscious evasion of certain venues of learning or certain modes of knowl-
edge. This conscious evasion mirrors and models a kind of knowledge prac-
tice that is both fundamental to and larger than the practices of alchemical
allegory itself.

George Puttenham’s account of allegory in *The Art of English Poesy* (1589)
helps clarify how a certain mode of allegory may be associated both with an
appearance of benignity and with a kind of fiction that openly acknowledges
its fictiveness. Allegory is the “chief ringleader and captain of all other fig-
ures,” says Puttenham, one “which for his duplicity we call the Figure of False
Semblant or Dissimulation.”93 While Puttenham’s calling allegory a liar may
be a bit disconcerting for those accustomed to thinking of it as conveying
higher truths, he seems to confirm Teskey’s sense that allegory can perform a
massive, violent cover-up of that which was violently repressed in the service
of constructing that “truth.” In the course of the same description, however,
Puttenham also points to allegory as constructing an alternative to the usual
opposition between truth and falsehood. Allegory’s fundamental “duplicity” makes it, as Angus Fletcher points out, an inherently ironic literary mode
in a way that distinguishes its “False Semblant” from straightforwardly inten-
Puttenham shrewdly notes that the allegorist dissembles—speaks other than she thinks, or speaks ironically—whether she lies or not: “And ye shall know that we may dissemble, I mean speak otherwise than we think, in earnest as well as in sport; under covert and dark terms, and in learned and apparent [that is, clear] speeches; in short sentences, and by long ambage and circumstance of words, and finally, as well when we lie as when we tell truth.” This commitment to “other-speak” regardless of whether it speaks the truth or lies makes Puttenham’s allegory bear a relation to the unusual type of speech act that has recently, and memorably, been classified by philosopher Harry Frankfurt as “bullshit.” Because the bullshitter’s primary consideration is to convince his audience, Frankfurt argues, his speech may not be classified as either honest or dishonest. For the bullshitter, the question of truth is immaterial: “His eye is not on the facts at all, as the eyes of the honest man and of the liar are, except insofar as they may be pertinent to his interest in getting away with what he says. He does not care whether the things he says describe reality correctly. He just picks them out, or makes them up, to suit his purpose.” The bullshitter may at times tell the truth, but that does not make his position anything other than bullshit nonetheless. An allegory that, in Puttenham’s terms, dissembles whether it speaks honestly or lies—one that, in Frankfurt’s terms, is bullshit—thus meliorates the violence effect that Teskey describes. While seeking to impose meaning on the chaos that is reality, as any allegory does, an allegory that conforms to the technical qualities of Frankfurtian bullshit need not hold dear the notion that its structure convey a singular truth. Multiplicity and inconsistency may be valued instead.

This multiplicity and inconsistency are the hallmarks of alchemical allegory, which tends to feature underdeveloped, contradictory, and/or mutually exclusive multiple narratives, sometimes all acting at the same time. Because alchemy enjoys a protean symbology, any inconsistency in its narrative is almost a virtue because it provides an opportunity for another aspect of the language to be invented that will bridge any gaps. Together, these characteristics tend to give alchemical allegory a crucial air of mobility. Alchemical allegory calls attention to the possible alternatives for its own troping: X might be figured as Y, but it might equally be figured as Z, and to some degree it does not matter whether we choose Y or Z. As with the flexible speech of the bullshitter, the truth or falsehood of Y or Z is immaterial. What counts is that there is a choice. In this way, alchemical allegory confirms Anderson’s sense that
allegory is a narrative construction, one always in motion. Alchemical allegory demonstrates how to engage in the motion of figuration without having to settle on or commit to a final image.

Alchemy as Disknowledge

Its emphasis on allegorical mobility, I believe, is what makes alchemy so attractive to nonalchemist authors as a figurative scheme. As the chapters that follow will explore in detail, such authors frequently, indeed obsessively, bring the allegorical apparatus of alchemy to bear on situations that have little or nothing to do with trying to transmute baser substances into purer ones. As a literary critic, I am thus moved to ask: Why this set of metaphors, why this allegory? Why choose alchemy as a model rather than some other substitutive system? The answer, I suspect, is threefold. First, as I have suggested, the style of alchemical discourse suggests an activity for which the act of substitution is far more important than the coherence of the framework that is thereby created. Second, as I have described above, alchemical discourse often claims a mode of reality that exists on the level of metaphorical creation, and this reality is independent of its truth or falsehood. Third, alchemical discourse’s rhetorical alliances with the style of late humanism can suggest an activity that is being carried on even though it is suspected of being no longer useful. That is to say, alchemy may be associated with the act of choosing an intellectual pursuit or direction even when—or even because—that pursuit employs faulty reading and learning practices. The sum of these associations? Alchemy suggests a fantastically creative, tremendously learned, metaphorically plausible, and rhetorically elaborate scheme for purposefully choosing the wrong way to go about knowing things. For the authors I discuss in the pages that follow, alchemy thus stands equally for a productive knowledge system and for the evasion of knowledge. Alchemy thus stands for a new sort of learning, one marked by a movement away from the empirically provable and a movement toward—always toward—the pleasures of the fictive.

Alchemy can convey this complex of associations because it had always been contradictorily associated both with deep, exciting erudition and with sheer impossibility. From the time that alchemy entered Europe in the eleventh century, it was a magnet for scholars interested in natural philosophy. At the same time, however, alchemy’s fortunes were always accompanied by skepticism, a skepticism that intensified as the study of alchemy sought accep-
tance within the medieval university and failed to find it. Beginning with Avicenna, in a text that was translated into Latin in the early thirteenth century and was taken for Aristotle’s, a number of medieval thinkers rejected alchemy on the fundamental grounds that they considered it simply impossible to transform one type of matter into another by artificial means. The thirteenth-century debate over alchemy’s efficacy, which involved such heavy hitters as Thomas Aquinas and Roger Bacon, culminated in Pope John XXII’s bull of 1317, *Spondent quas non exhibent* (They promise that which they do not produce). Although mostly concerned with foiling counterfeiters, this papal edict, as William Newman notes, also says “that the alchemists feign ‘that which is not in the nature of things,’ indicating that John did not believe alchemical transmutation to be physically possible.” Skepticism similarly punctuated the phases of enthusiasm for alchemy that marked the early modern era. In *Of the Vanity and Uncertainty of Arts and Sciences*, first published in 1530 and reprinted in multiple editions and translations throughout Europe in the sixteenth and seventeenth centuries, Heinrich Cornelius Agrippa repudiates his own devotion to alchemy, echoing the fourteenth-century papal position. Whether it is a legitimate science, an out-and-out con game, or a mode of *techne*, alchemy, says Agrippa, is false: “Alcumie then whether it ought to be termed an Arte, or a counterfaite colouringe, or a pursuite of nature, is doubtlesse a notable and a suffered deceipte, the vanitee whereof is easely perceaved in this, that it promiseth the thinges whiche nature in nowise can abide, nor attaine.”

Agrippa’s position, however, is more complicated than a simple recantation of former alchemical beliefs, and the complexity of his situation helps explain how alchemy signifies a knowledge practice that is also knowledge’s evasion. A talented scholar contemporary with Thomas More and Erasmus, Agrippa seems to have undergone a crisis in belief over humanistic practice that anticipated the later sixteenth century’s widespread loss of faith in humanism. For Agrippa that crisis arose because of the difficulty of syncretizing Christianity with the Hermetic, kabbalistic, Neoplatonic, and other kinds of occult texts that so occupied and fascinated him and that were the basis of his massive and massively influential *Occult Philosophy* (*De occulta philosophia*), a work he first composed in 1509–10 and circulated in manuscript. In *The Vanity and Uncertainty of Arts and Sciences*, Agrippa in 1530 blames humanism’s emphasis on rhetoric and its reclamation of ancient texts for Christianity’s early sixteenth-century troubles: “nowe . . . that the skilfulness of the tongues, eloquence, and the number of authoureis come to theire olde state againe, and sciences grewe in use, the quietnes of the Churche is troubled, and newe
Heresies arise.” He therefore spectacularly renounces his scholarly dependence on books and reading in favor of the illumination of faith.

But why, then—having renounced not only his magic but the humanistic learning apparatus required to compose it—did Agrippa go on in 1531 and 1533 to publish editions of his *Occult Philosophy* rather than leaving it in manuscript or destroying it altogether? And why, contrarily, did its first published edition end with a long extract from *The Vanity and Uncertainty of Arts and Sciences*? A number of explanations have been proffered for Agrippa’s vacillation between endorsing occult sciences and renouncing them: perhaps he was a charlatan, perhaps he needed the renunciation as a cover for his occult activities, perhaps he was merely composing in the specialized Renaissance genre of the paradox. Michael Keefer gets closest to the mark, however, when he calls Agrippa “a man lodged between two legends, both of which he takes for truth.” His two books’ publishing history implies Agrippa’s alternating between two knowledge bases—a magic that relies on humanism and a Christianity that renounces humanism—as if it were simply a matter of moving between one and the other, depending on which is appealing at the moment. To choose occult science and its humanistic scaffolding is, in terms of Agrippa’s Christian scheme, to choose wrongly, but it is a choice that is nonetheless reasonable. In this way—and quite unlike authors who merely differentiate useful, “true” alchemy (that is, the alchemy they themselves practice) from the charlatanry of “false” alchemy—Agrippa establishes alchemy, even if it is a false “deceit,” as a redoubt of humanistic reading and interpretive practice to which one may resort at will. The effect is the intellectual version of the ambivalence voiced by Geoffrey Chaucer’s Canon’s Yeoman, who in the course of his prologue and tale tells two stories debunking alchemical practice as a con game, but declares that the pursuit must continue nonetheless: “Yet is it fals, but ay we han good hope / It for to doon, and after it we grope.”

In the annals of “historical epistemology” as described in the introduction to this book, the kind of knowledge procedure I am describing has an unusual place and thus requires a new name: *disknowledge*. By this I mean the conscious act of choosing one system, body, or mode of knowledge over another, even if the one chosen is manifestly retrograde, ill informed, poorly supported, sloppily organized, or even simply wrong. Disknowledge is, in other words, a specialized means of defining what falls within the boundary of “the known”—and, concomitantly, of defining what counts as “not known,” “not knowable,” or “not worth knowing.” With disknowledge, the knower may pick
the fanciful over the empirical, the obfuscatory over the explanatory, and the outdated over the innovative.

Although it is a new term, disknowledge shares qualities with a number of twentieth- and twenty-first-century theories of the acquisition, comprehension, and management of knowledge, and it is worth explaining how the operation of disknowledge as I am describing it may be partly, if not fully, illuminated by those theories. My concept of disknowledge is indebted to recent sociological, historical, and literary-critical accounts of how and why humans, at different historical moments and in different social situations, go about not knowing things. Beginning in the mid-twentieth century, sociologists began to describe ignorance not as the absence of knowledge but as a constituent factor in knowledge production. “Ignorance studies” (or, as Robert Proctor has coined it, “agnotology”), a flourishing sociological subfield, has primarily been interested in understanding, in Foucauldian fashion, the cultural forces that draw the boundaries between what may be known and what may not be known—boundaries that distinguish practical knowledge from nonpractical, accessible knowledge from forbidden, or informed participants from the uninformed. This work addresses the specific social constructions of what Eve Kosofsky Sedgwick, in regard to the way forms of sexual knowledge also require sexual ignorance, more generally refers to as “unknowing.” For Sedgwick, as for sociologists of nonknowledge, ignorance is never simply the precursor and the blank of the knowledge that it precedes and to which it gives way. Rather, particular forms of knowledge require their concomitant ignorances, “ignorances . . . [that] are produced by and correspond to particular knowledges and circulate as part of particular regimes of truth.” Avital Ronell characterizes this particular form of ignorance as “stupidity,” which for Ronell is more than just being dimwitted; it involves inventing an alternate system of counterknowledge that serves “as a replica of absolute knowledge.”

In addition to studying ignorance as a Foucauldian disciplinary structure, however, sociologists have also studied how it may be a tremendously useful, consciously deployed tool. The sociology of science, in particular, offers powerful explanations for deliberate ignorance that take into account how human beings—though influenced, to be sure, by preexisting networks and organizations and traditions—make deliberate choices as to what knowledge propositions are plausible and may be pursued. The sociologist most insistent upon holding individuals and groups responsible for these discriminations is Bruno Latour, whose actor-network theory postulates that the “social” is
constituted by all the elements that act upon one another, both human and nonhuman, rather than by “social forces.” Though they are not interested in describing nonhuman actors in the way Latour directs, Barry Barnes, David Bloor, and John Henry similarly include the scientist’s own will—her “goals and interests”—among the many factors that shape how moment-to-moment scientific decisions are made, and that hence bring about a “change in knowledge.” Such a change also requires the demarcation of nonknowledge. In scientific work, for example, conscious ignorance facilitates experimentation, either as an element of the double-blind study or as the precondition for addressing a research topic in the first place. Conscious nonknowledge is just as crucial outside the lab. In corporations, “strategic ignorance” (as some sociologists have termed it) can create an aura of plausible deniability around issues of misconduct or malfeasance. Michael Taussig has even argued that a sort of strategic ignorance lies at the nexus of power and knowledge that, in Michel Foucault’s terms, sustains all ideology and all social structures. “Knowing what not to know”—a category that Taussig says includes “the public secret, which . . . can be defined as that which is generally known, but cannot be articulated”—drives individual actions that, as an aggregate, create and sustain everything from state power to the numinousness of the sacred.

Disknowledge, as I define it, is a subspecies of strategic ignorance. Rather than simply marking out what is and what is not known (“I don’t know that”), disknowledge articulates the choice of what is known over what is not (“I know this rather than that”) or the choice of one method of knowing over another (“I know in this fashion rather than in that fashion”). In this manner, disknowledge engages in the kind of exclusionary work familiar to us from scholarship on the development of the disciplines. To cite two of the most influential such studies: Latour, following upon Steven Shapin and Simon Schaffer’s *Leviathan and the Air-Pump*, describes the strategic ignorances involved in disciplinary formation when he argues that Robert Boyle and Thomas Hobbes were respectively able to invent chemistry and political science only through a reciprocal exclusion from each discourse of the other’s domain of knowledge. Similarly, Mary Poovey stresses that when bookkeeping replaced rhetoric as the primary technique by which to establish facts, language—its rhetorical figures doomed to opacity and imprecision in comparison to numerical figures’ seeming transparency and exactitude—was both displaced and denigrated.

One signal difference between disknowledge and the typical process of discipline formation, though, is the issue of precedent. In the emergence of a
discipline, the new field sees itself as shunting aside the old field and in the process dropping its discourse practices. One of the exclusionary efforts of disknowledge, in contrast, can be not to carve out the new, more “accurate” science but to reinstatiate and even develop the old. Descriptions of alchemy thus force us to reexamine the way that we think of scientific displacement. Whereas chemistry shoulders aside alchemy, bookkeeping replaces rhetoric, and the new anatomy causes physicians finally to forget their Galen, in the case of alchemy, in contrast, an antique system retains surprising strength in the face of new intellectual systems. This is not an unusual circumstance, of course: the history of natural philosophy in the sixteenth and seventeenth centuries is marked by many such examples of hanging on to accustomed theories and practices despite the emergence of new explanations. Aristotle’s idea of gravity and Galen’s idea of human reproduction retain considerable traction even after Newton and Fallopius. But when we move to alchemy, especially as it is characterized by its skeptics and detractors, we come to a different case. Unlike other long-standing theories and practices, alchemy had always been under suspicion for being wrong. We thus now add a third quality to the operations of disknowledge: it is not only a deliberate choice of one kind of learning over another, and it is not only a deliberate choice of the old body of learning over the new. It is also often the deliberate choice of the reputedly false over the reputedly true.

This concatenation of qualities requires us to theorize disknowledge carefully, cherry-picking among the twentieth century’s many and marvelous theories of intellectual displacement for analogues and explanations of disknowledge’s characteristic maneuvers. The conscious (rather than unconscious or overdetermined) choice of an inapt knowledge system is not readily explained, for example, by Karl Marx’s idea of a naive ideological consciousness, which Marx boils down to the phrase “Sie wissen das nicht, aber sie tun es” (“They do not know it, but they are doing it”). Peter Sloterdijk’s concept of an “enlightened false consciousness” holds more explanatory power. In a state of enlightened false consciousness, as Slavoj Žižek explicates Sloterdijk’s formulation, “They know very well what they are doing, but still, they are doing it.” Žižek, who is interested in this cynically enlightened false consciousness’s psychoanalytic underpinnings or what he calls “ideological fantasy,” in turn extends Sloterdijk’s revision of Marx into “They know very well how things really are, but still they are doing it as if they did not know.”

Revising Marx in the direction of cynical ideology potentially puts disknowledge in the vicinity of several other theorists who posit the conscious
denial of knowledge as the condition of modern humanity. We often forget that Sigmund Freud, the twentieth century’s foremost theorist of denial, characterizes those instances of denial that take place in the course of psychoanalysis as conscious, rather than unconscious, rejection. In Freud’s first type of such denial, the intellective “no” of negation (Verneinung), the conscious mind furthers the work of repression by denying that an unpleasant and hence repressed thought was ever thought at all. Freud’s second and far more famous type of conscious denial, disavowal (Verleugnung), performs the same intellective maneuver in response to unpleasant news received from external reality. We consciously know that this news is so, and thus, splitting our ego into the part that knows and the part that refuses to know, our “disavowal is always supplemented by an acknowledgement.” Such a split allows us to “unknow” our knowledge even while we continue to know it.

It is important to note, however, that consciousness for Freud does not exactly imply volition or choice, and thus does not imply what we would usually think of as an action taken in a full state of knowledge. Despite the conscious nature of the negating or the disavowing thought process, the need to negate or disavow, in Freud’s terms, is so overwhelming that we simply cannot help but accede to it. Friedrich Nietzsche’s contention that self-deception is the true condition of humanity and especially of philosophy, and that “a renunciation of false judgments would be a renunciation of life, a negation of life,” is much the same: it rests on the assumption that “the greater part of conscious thought must still be attributed to instinctive activity, and this is even the case for philosophical thought.” The same is true with Jacques Lacan’s symbolic order, Louis Althusser’s ideology, and Pierre Bourdieu’s habitus: none of these admit of an “outside” from which one could examine, acknowledge, and understand one’s choice of what is essentially a falsehood (or an imaginary). Among Sloterdijk’s and Žižek’s predecessors, only Jean-Paul Sartre insists upon the wholly—if paradoxically—conscious nature of the self-deception that is “bad faith”: even when lying to ourselves we are aware that we are doing so. For Sartre, the splitting of the self into the liar and the lied-to does not, unlike with Freud, minimize the consciousness’s active collusion in self-deception: “That which affects itself with bad faith must be conscious (of) its bad faith.” Sartre’s influence perhaps underlies Žižek’s sense that the demystification of disavowed knowledge, its being brought to our consciousness, does not prevent us from adhering to the structures of what has been demystified.
Sartre, it must be noted, defines consciousness as a prereflective state—which is not to say it is prethought, merely that consciousness does not have to take itself as an object of higher-order examination in order to exist.126 (Hubert Dreyfus calls this state of prereflective consciousness in which one is thinking only in the moment, not self-reflectively, “absorbed coping.”127) For my purposes, however, I must ramp up the degree to which consciousness in particular settings and situations may be self-reflective as well as prereflective, for I intend this discussion of disknowledge as conscious denial not only to distinguish my readings of various early modern authors' alchemical imagery from the realm of Jungian archetype in which studies of alchemy long languished, but also to hold those authors responsible for the way they evidence the pursuit of certain avenues of learning at the expense of other avenues.128 The authors I discuss in this book are, naturally, as subject to the same ideological blindnesses and psychoanalytic disavowals as anyone. But in illustrating the operations of disknowledge, their work tends to reveal, to explain, and to justify—or, sometimes, critique—the founding assumptions and the choices that go into disknowledge's postulations and evidentiary claims. Here, too, alchemy proves the perfect vehicle for figuring this kind of knowledge operation. Karen Pinkus's insight that alchemy is remarkably open to revealing both its own ambivalences and the very structure of ambivalence itself suggests that alchemy is not only a field of discourse ripe for reading what has been disavowed, but also a field of discourse that expresses its willingness that those disavowals be recognized.129 Alchemy, then, can be used to illustrate the kind of “knowledge of [its] own ambivalence” that Paul de Man attributes to Jean-Jacques Rousseau—who, says de Man, anticipates Jacques Derrida's deconstruction of his blindnesses by directing an awareness of blindness against itself.130

If alchemy as a field of discourse tends to reveal its ambivalences to an unusual degree, then the use of alchemical discourse to exemplify both disknowledge and its revelation takes on several salient characteristics. First of all, alchemical disknowledge may be deployed to designate situations of ethical tension and trial.131 As Amélie Rorty puts it, the irony of conscious self-deception is that anyone who has owned up to the fact that it is the self who is doing the deceiving is at least not going to blame anyone else.132 The second salient feature of disknowledge also involves its customarily ironic stance: it is often associated with a certain savoir faire or even pleasure. We tend to forget that Sartre's depiction of the person acting in bad faith is hardly a grim one,
as ironic as that person’s position may be. One of Sartre’s best examples of bad faith is a woman on a first date who accepts her male companion’s compliments even while understanding that they are signs not of his high-minded admiration but of his sexual desire for her. She manages to keep both of those possibilities, the true one and the false but preferred one, in play—his pure randiness, on the one hand, and his genuine esteem, on the other—by flirting with him. In this state of flirting, her deliberate turn from cold, hard truth to flattering fiction engages her erotic pleasure, even if only by delaying his. Furthermore, her act of bad faith brings her satisfaction in the sense that it gives her a continuing mode of self-aware, ongoing, active accomplishment.133

Self-awareness, ethical perspicuity, pleasure. Such qualities make a willfully alternative knowledge practice quite intriguing. Alchemy’s associations with these qualities of disknowledge help explain those startling moments in which early modern intellectuals who believe alchemists to be generally either fools or charlatans declare the study of alchemy nonetheless useful, perhaps even crucial. Not because they believe alchemy works, but because they believe that alchemy as an intellectual system models how other disciplinary arenas might go about their business. Martin Luther, who elsewhere scorns alchemists as frauds, muses in his Table Talk that alchemy “liketh mee very well . . . not onely for the profite sake which it bringeth in melting of the Metalls. . . . But also, I like it for the sake of the Allegorie and secret signification, which is surpassing fair; namely, touching the Resurrection of the dead at the last daie.”134 Francis Bacon is perhaps the bluntest on this count. Although his Advancement of Learning joins others of his works in deriding alchemy as one of a set of emblematic errors in learning (“So have the Alchymists made a Philosophie out of a few experiments of the Furnace”), elsewhere Bacon suggests that, error-ridden as it is, we ought to study alchemy nonetheless.135 After noting that there are three sciences—astrology, natural magic, and alchemy—“which have had better intelligence and confederacie with the imagination of man, than with his reason,” Bacon offers the opinion that “neverthelesse the ends or pretences [of all three] are noble. For Astrologie pretendeth to discover that correspondence or concatenation, which is betwene the superiour Globe and the inferiour. Naturall Magicke pretendeth to cal & reduce natural Philosophie from variety of speculations to the magnitude of works; And Alcumy pretendeth to make separation of all the unlike parts of bodies, which in mixtures of nature are incorporate.”136 The linguistic ambiguity of “pretend” in the early seventeenth century—alchemy fakes the puri-
plication of mixed substances into their pure, constituent parts, but it also intends that purification—suspects Bacon’s opinion of alchemy between condemning it as chicanery and praising it for having a correct aim in mind.

Finally, Bacon turns in this passage toward a potent but brilliantly unreadable parable that indicates the fascination that alchemy continues to hold even for this inventor of the scientific method. Repeating first his opinion that “the derivations and prosecutions to these ends [that is, astrology, natural magic, and alchemy], both in the theories, and in the practises are full of Errour and vanitie,” Bacon then adds a significant but enigmatic caveat, noting,

and yet surely to Alcumy this right is due, that it may be compared to the Husband man whereof Aesope makes the Fable; that when he died, told his Sonnes, that he had left unto them gold, buried under ground in his Vineyard; and they digged over all the ground, and gold they found none, but by reason of their stirring and digging the mold about, the rootes of their Vines, they had a great Vintage the yeare following: so assuredly the search and stirre to make gold hath brought to light a great number of good and fruitfull inventions and experiments, as well for the disclosing of Nature; as for the use of mans life.137

At first the analogy seems simple. Just as the sons’ seemingly fruitless digging in the vineyard nonetheless produces gold, although it is not the gold they expect, so too does the fruitless pursuit of alchemy produce “gold” in the form of “good and fruitfull inventions and experiments.” The by-products of alchemy are valuable even when its end (the production of gold or of the philosopher’s stone) is never achieved. Yet the “inventions and experiments” that Bacon praises are suspiciously parallel, both rhetorically and substantially, to the “derivations and prosecutions” of alchemical ends that he has just derided as being “full of Errour and vanity.” What gold does the pursuit of alchemy produce? It produces gold in the form of inventions and experiments, derivations and prosecutions, error and vanity. Bacon’s parallelism among all these phrases insinuates that what is golden about alchemy is the activity of alchemy. Despite the fact that it produces error, one practices alchemy for the sake of its practice, even though—or, rather, because—alchemy is wrongheaded. Alchemy, in other words, crystallizes for Bacon the possibility that the pursuit of learning is worthwhile even when it is not the pursuit of truth. What
Bacon calls “the search and stirre” of alchemy—by which he simply means its customary practices and motions, or what I have been calling its knowledge practices—is its virtue. Bacon wants to retain the study of alchemy because, for him, alchemy models a kind of knowledge, a way of thinking, that has its uses even if it is likely wrong. Even Bacon wants to watch disknowledge in action.

The Work of Disknowledge: Forgetting, Skimming, Avoiding, Fictionalizing

Its associations with the intellectual habit of disknowledge, the practice of willfully turning from one knowledge template to another, set up alchemy—a discourse already given, as I have argued, to the trope or turn—as a potentially magnificent trove of metaphors for authors who want to signify how knowledge is a motion, not a body, an activity, not an acquisition. But alchemy’s affiliations with humanism, a senescent movement still lingeringly embraced by many, also make it a potentially magnificent metaphor for how every epistemic motion toward is also a motion away. Because of its reputation for being attached, like late humanism, to antiquity at all costs, alchemy can be a supple trope for demonstrating how one’s chosen way of knowing fends off, evades, or waives others that are newly in place or on the horizon. In this way, alchemy may be used to figure a strange and canny conscientious objection to developing early modern teleologies of all kinds, including the teleology of scientific advancement. Whereas modern-day epistemologists speak of natural science as developing a quest for “truthlikeness”—the quality of a theory that, while necessarily falling short of the full plenitude of Truth (with a capital T), nonetheless displays acceptable verisimilitude to the truth given the current state of knowledge—alchemy may be depicted as happily secure in its convictions regardless of their provability. Alchemy, in other words, can be a figure for how a theory forges “truthlikeness” for what early twenty-first century American comedian Stephen Colbert has taught us to call “truthiness,” defined by the American Dialect Society as “the quality of preferring concepts or facts one wishes were true, rather than concepts or facts known to be true.”

In the chapters that follow I explore how authors use alchemical discourse and alchemical imagery to flesh out and nuance the microdecisions that constitute epistemic choice. For them alchemy is made to signify, as Peggy Knapp puts it, a certain kind of work, a conceptual structuring and maneuvering that
gets the thinker to where she wants to go.\textsuperscript{140} Seeking to uncover the roots of modernity in the least likely places, many of the best recent studies of the use of alchemy in literature have argued that it is put to the work of bringing modern social, intellectual, and economic structures into being in a metaphoric register. Lee Patterson, for example, argues that the alchemy of Chaucer’s \textit{Can-
on’s Yeoman’s Tale} presages the early modern individual’s new capacity to undertake her own improvement, independent of the salvific agency of the church.\textsuperscript{141} Other critics, including Peggy Knapp, William Sherman, and David Hawkes, have argued that alchemy as it appears in the literature of the late Middle Ages and early Renaissance ushers in the conceptual structure of capitalism, with its mystical conversion of one substance into another—lead into gold, labor into capital, material into symbol.\textsuperscript{142} While I appreciate and agree with arguments that alchemy shares with early modernity a developing metaphorics, in their attention to the development of the modern such arguments neglect the equally interesting ramifications of alchemy’s associations with outmodedness. My analysis of the work alchemy is put to in the texts I discuss has less in common with theories of progress and more in common with the important theories of Wiebe Bijker, who in studying sociotechnological change has pointed out that the delayed, dead-end, or wrongheaded technological development is as crucial an object of study as the prescient one—precisely because, in its own age and under its own terms, the laggard idea has tremendous utility.\textsuperscript{143} In the texts that are of interest to me, alchemy is frequently put to the work of not going forward.

In what remains of this chapter, I briefly classify four ways of not going forward with which alchemy comes to be affiliated, each of which will be discussed more extensively in the chapters that follow. Each of these modes of disknowledge has a slightly different flavor, depending on the attitude demonstrated toward the field of knowledge from which disknowledge turns. Each involves volitional maneuvers and micromaneuvers that are revealed only under the lens of close literary analysis. These modes of disknowledge are the work of forgetting; the work of skimming; the work of avoiding; and the work of fiction.

Disknowledge’s turn from one mode of knowing to another can take the form, first of all, of the “open secret” of conscious \textit{forgetting}. Choosing to forget what was once known sounds impossible; it involves mastering the very “\textit{ars oblivionalis}” that Umberto Eco has posited as impossible.\textsuperscript{144} Countering Eco, however, Sybille Krämer has argued that memory and forgetting are complementary partners in the art of memory, and David Lowenthal has
emphasized forgetting as a conscious, deliberate social act. As I have already discussed, both alchemy and humanistic learning are founded on the strenuous work of forgetting: reviving ancient wisdom requires erasing the extent to which one’s scholarship and practice depend on many intervening centuries of medieval intellectual effort. Perhaps for that reason, alchemy may be used to signify an inattention to one’s own intellectual history so willed and so profound that it makes that history disappear.

A remarkable example of alchemy’s being used to serve this purpose appears in Thomas Browne’s delightful study of wrongheaded learning, *Pseudodoxia Epidemica*, first published in 1646. Browne begins with the postulate of Francis Bacon, one of Browne’s heroes and models, that the ideal sort of scholarship involves starting fresh, sweeping away misconceptions so that one may depend only on what is truly known. He finds Bacon’s argument so powerful that *Pseudodoxia Epidemica* shadows *The Advancement of Learning* at every turn, so much so that Browne’s book begins with the same echo of Plato that Bacon’s book does. Browne’s Plato, though, comes with a difference—a difference in knowledge operations. And it is a difference that is signaled by alchemy. Whereas Bacon cites approvingly Plato’s opinion that “all knowledge is but remembrance,” Browne insists in his epistle “To the Reader” that, no matter what Plato says, we must not just discard but also forget that which we think we know: “Would Truth Dispense, we could be content, with Plato, that knowledge were but Remembrance; that Intellectual acquisition were but Reminiscentiall evocation, and new impressions but the colourishing of old stamps which stood pale in the soul before. For, what is worse, knowledge is made by oblivion; and to purchase a clear and warrantable body of Truth, we must forget and part with much wee know.” This emphasis on knowledge as forgetting eventually comes to fruition in the way that alchemy brings forth a special kind of epistemic action for Browne, one that Bacon never imagined.

Despite otherwise tracking *The Advancement of Learning* closely on what constitutes pseudodoxy, Browne, quite unlike Bacon, astonishingly omits alchemy from his catalog of the many false and ridiculous pseudodoxies that must be discarded. He thus grants alchemy a privileged and indeed catalytic status. Browne seems to have adopted, though in somewhat perverse fashion, alchemy’s aim of refining matter so that nothing base remains. It is as if his reading of Bacon acts in the manner of an alchemical refinement: distilling away and reserving what is pure (including alchemy itself), and leaving for the matter of Browne’s own discussion only the dross of false learning.
How to Sustain Humanism

Browne thus not only portrays alchemy as part of what does not need to be forgotten but also employs it as a model for the process by which any discipline’s prior associations with what he calls “credulity and supinity”—two of the primary promulgators of pseudodoxy—may be consigned to oblivion.\(^{148}\) He is perfectly aware of Bacon’s disdain for alchemy as acceptable learning, and yet he also forgets it. In Chapter 2 we shall see this kind of epistemic maneuver associated with alchemy in regard to the way that early modern matter theory has prior associations with the Roman Catholic doctrine of transubstantiation. For those late sixteenth- and early seventeenth-century authors who care about what the stuff of the world is made of, cutting off ties to Catholicism requires forgetting where one’s matter theory came from, and that difficult undertaking of obliviscence finds alchemy a profoundly useful model.

The second and third varieties of disknowledge that I discuss in this book have to do specifically with the way scholars make use of their books. As I have described above, late humanism found itself in something of a bind in regard to its ideal of syncretizing all knowledge—an ideal that, with the early modern age’s increasing proliferation of texts and increasing global circulation of ideas, became ever more difficult to uphold. Thus, the dark side of late humanistic syncretism is its tendency, even while claiming to incorporate alternative knowledge systems, to tacitly jettison facts and beliefs that for whatever reason do not comfortably fit with its own. Theoretical alchemy’s reputation for selective, even sloppy reading, combined with its habit of reading all biblical and classical texts alchemically and its proclaimed aim of refining all the world into desirable gist and discardable remainder, make it an ideal metaphor for how even well-meaning scholars volitionally take shortcuts or hold fast to their ignorances. In this version of portraying disknowledge, alchemy is used to exemplify an active learning that is also an active not learning of other, more knotty or ideologically thorny disciplines.

Skimming texts, while a practice neutral in itself, can serve scholarly disknowledge in this fashion. As I discuss in Chapter 3, alchemists—lumped in with other masters of the occult arts—may be used to emblematize the kind of reader who, using scholarly skimming, picks and chooses what to learn so as not to be responsible for learning the whole. Avoiding texts, the form of disknowledge discussed in Chapter 4, requires more work. To avoid texts is to implement the kind of strategic ignorance that I noted above, where one knows a fact or body of knowledge but carries on as if that knowledge were immaterial. In order to be seen as reasonable, the scholar who refuses to admit alternative...
theories must know full well what those theories are. To be sure, the simultaneous knowledge of a theory and refusal to admit it is a standard operation of academic polemic—as when Cambridge Platonist Henry More, attempting in the 1660s to rebut what he saw as the atheistic materialism of Hobbes and Descartes, begged the question of divine causation by asserting that “Philosophick theorems” could be employed only if they were already “solid and rational in themselves, nor really repugnant to the word of God.”149 The type of ignorance I have in mind is even more wholesale than this, however. As an enterprise with the reputation of having an explanation for everything, alchemy and its pansophic claims easily stand in for the bad scholarly habit of sticking to one’s familiar intellectual field by means of categorically rejecting all others. Alchemy can represent the intellectual and scholarly maneuvers required to stave off conceptual schemes that are more challenging, more revolutionary than the schemes one holds most dear.

The fourth mode of disknowledge discussed in this book is quite different in that, rather than proposing an old and creaky knowledge system as pansophic, it seeks to retrofit that old system into something both more up to date and more delimited. That mode of disknowledge is fiction. Here humanism’s conviction that language shapes a world may be safely indulged because that world is restricted within narrative bounds. I earlier proposed that alchemy, in many ways, is late humanism in another form. When late sixteenth- and early seventeenth-century writers associate alchemy with fictiveness, the habits of humanism are given play in a delimited sphere. The result is a display of a new kind of disciplinarity: alchemy refines its allegiance from humanism in general to literature in specific.

As it happens, alchemy and literature were linked more in England than they were elsewhere. The English seem to have had a particular mania for alchemical poetry, producing more than any other European country.150 Robert Schuler has found that among the many medieval English poems that were essentially scientific treatises put into verse, “more were written on alchemy than on all other scientific subjects combined.” These medieval works founded what Schuler calls a “native tradition” of alchemy in English verse: they were cited, copied, and printed extensively in the sixteenth and seventeenth centuries, when many more poems in this genre were produced—to the point of tediousness.151 As Joshua Poole complains in his poetry-writing manual The English Parnassus (1657), “for some centuries of years, the greatest part of English Poetry [has been] spent on those barren and indeed abstruse subjects of Chymistry, and the Philosophers stone.”152
The existence of this tradition perhaps contributes to early modern English literature’s frequent association of alchemy with literariness itself. That association between alchemy and the very nature of fiction also has to do, however, with the allegorical propensities of alchemical discourse that I have already discussed. As I have outlined above, theoretical alchemy often substitutes an ostentatiously crafted explanatory scheme (sometimes even one composed of its own invented terminology) for the physical processes it claims to depict. The heightened irony inherent in this especially far-flung relationship between the allegorical representation and its substrate means that alchemical discourse institutes a kind of second-order allegory. Rather than simply weaving a net of terms and postulates that serve as a linguistic representation of what they can only approximate, alchemy thrives on inventing yet another set of representations that in turn approximate that net of terms and postulates—as, for example, in George Starkey’s ironically entitled treatise Secrets Reveal’d, which encourages the reader to understand the composition of the “Mercury Sophical” by learning “what Diana’s Doves are, which do vanquish the Lion by asswaging him,” a process that will first require her, however, to understand the “lion” as “the Babylonian Dragon,” and so on, ad infinitum. When we add this infinitely receding horizon of linguistic substitution to alchemical discourse’s habitual stance of secrecy, its express intent to speak without ever exactly telling the truth about the object of discourse, we have irony that is more than structural. It is literary. Layers of tropes plus the evasion of truth (or, to put it another way, metaphor plus bullshit) equals fiction.

The inherent literariness of alchemy goes a long way toward explaining why, exactly, alchemy is such a rich source of reference for the literature that I discuss in this book. It is not simply that alchemy, in its fondness for allegorical symbology, employs a literary technique. Rather, literature recognizes its own underpinnings in the modes by which alchemical theory operates. In turn, literature’s recognition of its commonalities with alchemy leads to its using alchemical tropes to designate a new place for itself in the seventeenth century, one unimagined and unimaginable by early humanism: fiction existing in a world of its own, not answerable to the requirements of the civitas.

Indeed, my sense of the literary works discussed in the chapters to come is that they are interested in alchemy not because they want to expose the distance between alchemical aims and alchemical ends but because they hope to exploit the ironies of alchemical disknowledge: revel in them, critique them, make them new. In these texts, alchemy is incorporated into the literary
project as if it enabled and perhaps even helped constitute imaginative literature itself—as if alchemy were a productive approach to fiction. In the works I discuss in the ensuing chapters, alchemy’s status as an adjuvant to fiction helps explain all its other uses in what I have been calling “the work of alchemy.” Forgetting, skimming, avoiding: while these are somewhat shady epistemic motives and habits, they are also motives and habits that shadow all our more sober and upright reasons for losing ourselves in fictional narrative. Literature frequently asks that we forget, skim, and avoid reality in order to read and to write. Literature makes alchemists of us all.